

Calaveras Council of Governments

Safe Routes to School Toolkit



WALK-BIKE
CALAVERAS





1 What is Safe Routes to School?

Safe Routes to School (SRTS) is a program in Calaveras County that seeks to help more children to walk and bike safely to school. It envisions active kids using safe streets, helped by engaged teachers, parents, and police officers, and surrounded by responsible drivers.

Safe Routes to School programs use a variety of strategies to make it easy, fun and safe for children to walk and bike to school. These strategies are often called the “Five Es.”

- **Education:** programs designed to teach children about traffic safety, bicycle and pedestrian skills, and traffic decision-making.
- **Encouragement:** programs that make it fun for kids to walk and bike. These programs may be challenges, incentive programs, regular events (e.g. “Walk and Bike Wednesdays”) or classroom activities.
- **Engineering:** physical projects that are built to improve walking and bicycling conditions.
- **Enforcement:** law enforcement strategies to improve driver behavior near schools.
- **Evaluation:** Evaluation strategies seek to understand and document the effects of Safe Routes to School programs on travel behavior, parent and student attitudes, and a school’s physical surroundings.

This toolkit includes the strategies outlined to the right.



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1.1 Who is This Toolkit For?

This Toolkit serves as a resource for any adult who wishes to improve traffic safety and air quality near schools in Calaveras County, help children be more physically active and “ready to learn” and strengthen the community.

Whether you are a parent, a teacher, a school administrator, a neighbor, a public health professional, City staff, or a City official, this Toolbox will provide you with facts and figures, as well as ideas, inspiration and proven techniques.



1.2 History of the Safe Routes to School Movement

Based on the success of programs in New York, Marin and Florida, Safe Routes to School became a nationwide effort in 2005, when Congress included a national SR2S program in the reauthorization of Federal highway legislation. The program distributed \$612 million in dedicated SR2S funds around the nation. As a result, every state has a SR2S coordinator and a grant program.

The movement developed from a staggering decline over time in the proportion of schoolchildren walking and bicycling to school. In 1969, over 40% of schoolchildren walked or bicycled to school. Today, that number has dropped to 13%, and it continues to decline¹. As fewer kids biked and walked, more were bused and, increasingly, driven to school. As a result, children suffer from a variety of problems related to physical inactivity, and over 25% of morning rush-hour traffic is parents driving children to school. Traffic safety and air quality have declined near schools.

In the 1970s and 1980s, numerous European and British communities began to notice that children were no longer walking and bicycling to school. The first Safe Routes to School programs in Europe inspired similar programs in Australia, Canada and the United States. In the US, the first SR2S programs were implemented in New York City, Florida state, Marin County (CA) and Arlington (MA).

¹ McDonald, N. (2007). *Active Transportation to School: Trends Among U.S. Schoolchildren, 1969-2001*. *American Journal of Preventative Medicine*. 32(6) 509-516.



1.3 Benefits of Walking and Bicycling to School

Active kids are healthy kids, and walking or bicycling to school are easy ways to make sure that children get daily physical activity. Benefits to children include:

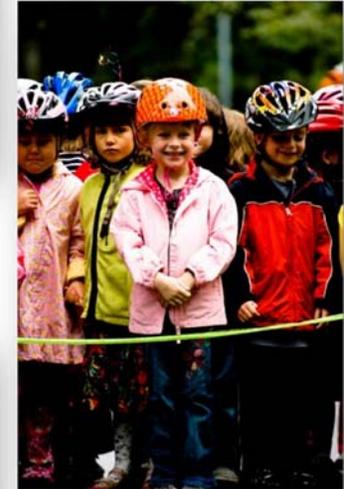
- Increased physical fitness and cardiovascular health
- Increased ability to focus on school
- A sense of independence and confidence about their transportation and their neighborhood

SR2S also benefits neighborhoods:

- Improved air quality as fewer children are driven to school
- Fewer crashes and decreased congestion as fewer children are driven to school
- More community involvement as parents, teachers and neighbors get involved and put “eyes on the street”

Schools also benefit:

- Fewer discipline problems because children arrive “ready to learn”
- Fewer private cars arriving to drop off and pick up children
- Opportunities to integrate walking, bicycling and transportation topics into curriculum (e.g. “Walk & Bike Across America,” mapping lessons, graphs and charts of distance walked or biked)



2 Engineering Tools

The environment near the school is often a deciding factor when a parent or guardian decides whether or not to let their child walk or bicycle to school. There are many engineering improvements that help improve pedestrian and bicyclist safety and comfort near schools. The engineering improvements help slow cars, increase the visibility of students walking and biking and make it easier for students to cross the street. While some engineering efforts can be costly, many (such as posting signs and striping crosswalks) are relatively inexpensive.

2.1 Where Do I Start?

When considering whether the engineering tools described in this toolkit are appropriate, it is recommended you work closely with the City, County or Caltrans – depending on where the area of concern is located.

In Calaveras County, streets and highways may fall under the jurisdiction of one or more agencies. If you are hoping to improve or add bicycle and pedestrian facilities on a street in Calaveras County, the following guidance will help you identify the agencies and departments you will likely need to work with for each of the following scenarios. Some projects may require coordination with more than one agency.

If the project is on a State Highway—4, 12, 26, or 49: State highways in California are under the jurisdiction of the California Department of Transportation (Caltrans). Calaveras County is in Caltrans District 10.

If the project is in the City of Angels Camp: Local streets—that are not highways—within the city limits of Angels Camp are under the jurisdiction of the city. Community Development oversees planning of bicycle and pedestrian facilities, while Public Works constructs and maintains the roadways.

If the project is in unincorporated areas of Calaveras County: With the exception of those in City of Angels Camp, all other local roads in Calaveras County are under the county’s jurisdiction. Within the County’s Public Works department, Transportation Planning would develop plans for bicycle and pedestrian facilities and Roads and Bridges would construct them.

The Calaveras Council of Governments may also coordinate bicycle and pedestrian projects by facilitating regional collaboration, administering funding, and developing regional plans.



2.2 School Area Signs

Signs inform street users about what to expect from the street surroundings. School Zone signs notify motorists that they are entering an environment where there are vulnerable road users. The County is required to follow guidelines listed in the California Manual on Uniform Traffic Control Devices when installing signs. Key signs include the School Warning, School Crosswalk Warning, School Speed Limit and School Advance Warning. One way of increasing the visibility of school area signage is through the use of fluorescent yellow-green signs.

<p>School Advance Warning Assembly</p>  <p>S1-1</p> <p>AHEAD W16-9p</p> <p>OR</p> <p>200 FT W16-2a</p> <p>OR</p> <p>200 FEET W16-2</p>	<p>School Crosswalk Warning Assembly</p>  <p>S1-1</p>  <p>W16-7p</p>	<p>School Speed Limit Assembly</p>  <p>S4-3 R2-1 S4-1</p> <p>OR</p>  <p>S4-2</p> <p>OR</p>  <p>S4-4</p> <p>OR</p>  <p>S4-6</p>
 <p>S3-1</p>	 <p>S4-5</p>	 <p>S4-5a</p>
		

2.3 Crosswalks

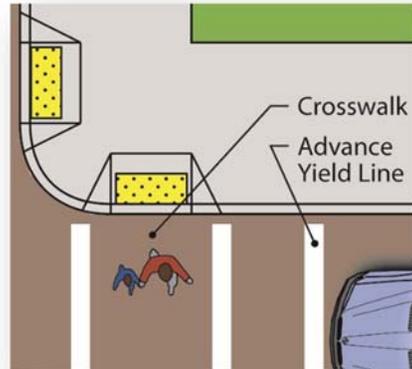
High-visibility striping makes crosswalks more noticeable to motorists. Crosswalks located on roads within a certain distance of a school may be painted yellow. Several different crosswalk striping patterns can be used – the most common types of crosswalk striping patterns are shown in the diagram on this page. The standard crosswalk striping pattern consists of two parallel lines, called the “transverse” pattern. A number of “high-visibility” patterns are also in use, such as the ladder, zebra and continental patterns, which add bars for increased visibility. High-visibility markings should be considered for high-volume crossings near schools, and where conditions warrant an increased visibility marking (e.g. a mid-block location).



Yellow high visibility crosswalks near schools provide safe crossings for students

2.4 Stop Bars and Yield Lines

Stop bars and yield lines promote better visibility between pedestrians and drivers by directing drivers to stop further back from the crosswalk. Stop bars are located in advance of crosswalks, informing drivers that they are required to stop at a controlled intersection. Yield lines, or “sharks teeth,” are used to inform drivers where they must stop to yield to pedestrians at uncontrolled crossings.



Yield lines in direct drivers to stop before the crosswalk

2.5 Crosswalk Signs

Assembly B signage is used to indicate to drivers the presence of crosswalks near schools. These signs should be accompanied by down arrows. In-Street Yield to Pedestrian signs are flexible plastic signs installed in the median to enhance a crosswalk at crossing locations that do not have a signal. These signs usually say ‘State Law: Yield to Pedestrians’. At school crosswalks, these signs are sometimes installed on a portable base and brought out in the morning and back in at the end of each day by school staff, which may reduce the chance that the sign will become invisible to motorists by being left out all the time. For permanently-installed signs, maintenance can be an issue as the signs may be run over by vehicles and need to be replaced occasionally. Installing the signs in a raised median can help extend their lifetime.

School Crosswalk Warning Assembly B



*An in-street yield to pedestrian sign in front of San Andreas Elementary School
Reprinted with permission from Public Health Services*



2.6 Sidewalks

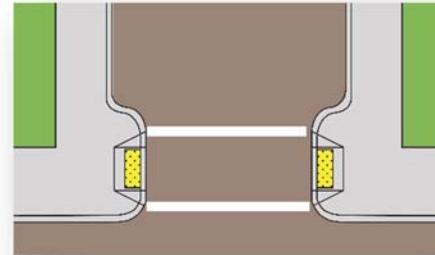
Sidewalks create a designated space for pedestrians. A complete sidewalk network is an important component of the transportation system for students. An incomplete sidewalk network or sidewalks in disrepair create a hazard for students walking and biking and may force students to walk in the roadway.



Sidewalk on High School Street near Calaveras High School

2.7 Curb Extensions

Curb extensions have many benefits for pedestrians. They shorten the street crossing distance, provide additional space at corners, allow pedestrians to see and be seen before entering the crosswalk, and simplify the placement of curb ramps.



Curb extensions shorten crossing distance



2.8 Pedestrian Countdown Signals

Pedestrian countdown signals give pedestrians information about how much time left they have to cross the street. Young pedestrians are still learning the skills needed to be a safe pedestrian. Without proper information, a flashing hand can confuse some child pedestrians and lead to running in the crosswalk in order to complete the crossing before the signal changes. Countdown signals help children make good decisions about whether or not to enter the crosswalk by telling them how much time they left have to cross the street.



Pedestrian countdown signal in San Diego, CA

2.9 Beacons

Pedestrian beacons alert motorists to pedestrians crossing the road, and may be used with overhead school crosswalk signs. Beacons may be used at midblock crossings or uncontrolled intersections, and draw extra attention to crosswalks at controlled intersections. The beacons can be activated by pedestrians using an automated detector or push button, or set with a timer to flash only during high volume crossing times, such as before and after school.

Rectangular Rapid Flashing Beacons (RRFBs) are installed at uncontrolled crossings with pedestrian signage. RRFBs remain dark until they are activated by pedestrians crossing.

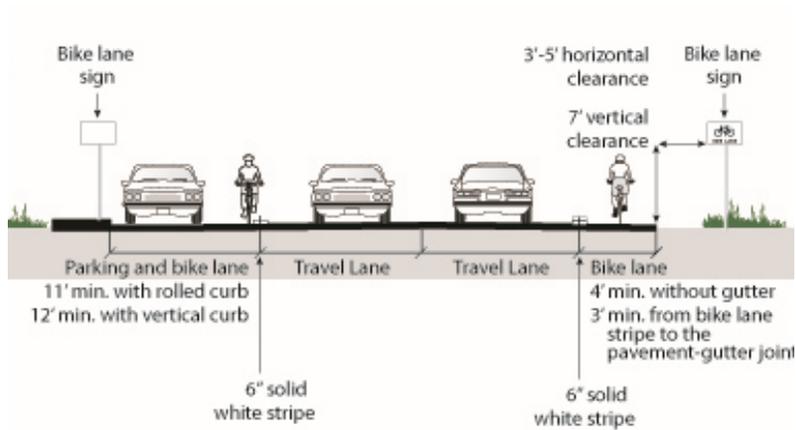


RRFB at a midblock crossing in Los Angeles, CA



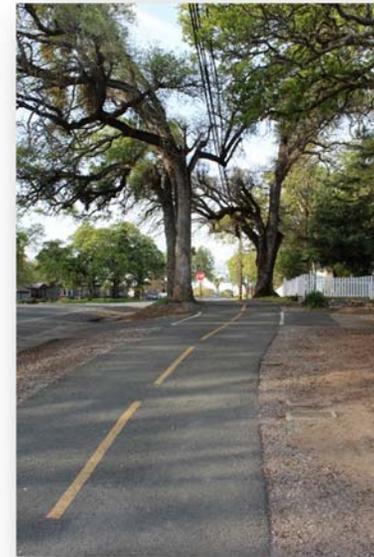
2.10 Bike Lanes

Bike lanes are a striped portion of the road that forms an area specifically for bicycles. Bike lanes increase the visibility of bicycles to motorists by giving them designated space on the road. Bike lanes are better suited for older and more experienced children who have learned the skills needed for bicycle handling, avoiding road hazards and following the rules of the road. Bike lanes can be striped on any street that meets the width requirements and has the characteristics of a good bicycle route.



2.11 Paths and Trails

Trails can also serve an important function as walking and bicycling corridors to school. Wider than a standard sidewalk, multi-use pathways serve both bicyclists and pedestrians. Pathways may be constructed adjacent to roads, through parks or open space areas, along creeks, or along linear corridors, such as abandoned railroad lines.



Path in Valley Springs connecting to Valley Springs Elementary School



3 Education

Safe Routes to School refers to a variety of multi-disciplinary programs aimed at increasing the number of students walking and bicycling to school. Education programs are an essential component of a Safe Routes to School program. Education programs generally include outreach to students, parents and guardians, and motorists. Students are taught bicycle, pedestrian and traffic safety skills. Parents and motorists receive information on transportation options and driving safely near schools.



*Calaveras High School Students cross Highway 49 in San Andreas
Reprinted with permission from Public Health Services*

3.1 Where Do I Start?

Education efforts often call for collaboration between schools, local governments, and law enforcement. Calaveras County has five school districts.

Bret Harte Union High School District includes three high schools: Bret Hart High School- Vallecito High School and John Vierra High School, all are in Angels Camp.

Calaveras Unified School District includes Jenny Lind Elementary and Toyon Middle School in Valley Springs; Mokelumne Hill Elementary in Mokelumne Hill; Rail Road Flat Elementary in Rail Road Flat; West Point Elementary in West Point; and San Andreas Elementary, Sierra Hills Education Center, Transition/Community Day School, and Oakendell Community School in San Andreas. These schools are all located in the County.

Calaveras County Office of Education schools include Calaveras River Academy and Oakendell Community School, both located in San Andreas and under County jurisdiction.

Mark Twain Union Elementary School District includes Mark Twain Elementary in Angels Camp and Copperopolis Elementary in Copperopolis. Education efforts at Mark Twain Elementary would coordinate with the City of Angels Camp, while efforts at Copperopolis Elementary would coordinate with the County.

Vallecito Union School District includes Albert Michelson Elementary in Murphys; Avery Middle School in Avery; and Hazel Fischer Elementary in Arnold. These schools are all located in the County.

In addition to coordinating with the school district and local government, successful programs often identify a ‘champion’ at each school who is instrumental in leading the effort, networking with parents and faculty, and providing insight into the school community. This could be the parent of a child currently attending the school, or a teacher on staff.



3.2 Student Bicycle and Pedestrian Traffic Safety Education Classes

Student education programs are an essential component of a Safe Routes to School effort. Students are taught traffic safety skills that help students understand basic traffic laws and safety rules. Potential pedestrian education curriculum elements include traffic sign identification and how to use a crosswalk.

Typical school-based bicycle education programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of biking. Education programs can be part of a Safe Routes to School program..

Sample programs:

- California Pedestrian and Bicycle Safety Curriculum for Grades 4 and 5: <http://www.californiahealthykids.org/product/9718>
- Marin County Safe Routes to Schools Curriculum: <http://www.saferoutestoschools.org/curriculum.html>
- Alameda County Walk and Roll K-5 Educator Guide: <http://www.alamedacountysr2s.org/programs/education-safety/>



Student bicycle education classes teach bicycle traffic safety and rules of the road

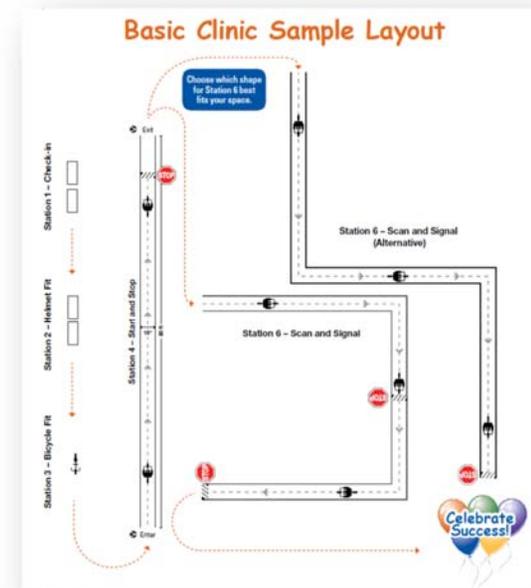


3.3 Student Bike Rodeos

Bike rodeos often include a bicycle safety check, helmet giveaway and fit check, and hands-on instruction for pulling out of driveways, bicycling in traffic, safe turning, and identifying and managing hazardous situations.

There are many widely available bike rodeo resources available including one from the National Highway Traffic Safety Administration Cycling Skills Clinic:

<http://www.nhtsa.gov/Driving+Safety/Bicycles/CyclingSkillsClinic>



NHTSA Sample Rodeo Layout

4 Encouragement

Encouragement programs focus on the bringing the fun back to walking and bicycling while increasing public awareness of the benefits of walking and biking to school. Encouragement events and activities help increase the number of students walking and biking to school. The activities often include a variety of special events and contests, outreach campaigns and presentations to school and community groups. Encouragement programs can be used to educate parents, school personnel, students and the community about the health and safety benefits of a successful Safe Routes to School program.

Encouragement programs do not need much funding, but their success depends on a school champion or group of volunteers for sustained support.



*Banner on Highway 49 in San Andreas
Reprinted with permission from Public Health Services*

4.1 Where Do I Start?

As with Education efforts, Encouragement programs at local schools will require coordination with the school district as well as the City or County. See Section 3.1 for more information on Calaveras County schools.

Encouragement programs in the broader community can be undertaken by independent groups, but coordination with the City or County can often bring in additional resources and outreach that can increase the impact of an event.



4.2 Walk and Bike to School Day/Week/Month

Walk and Bike to School Day/Week/Month are special events encouraging students to try walking or bicycle to school. The most well-known of these is International Walk to School Day, a major annual event that attracts millions of participants in over 30 countries in October.

Walk and bike to school days can be held yearly, monthly, or even weekly, depending on the level of support and participation from students, parents and school and local officials. Some schools organize more frequent days – such as weekly Walking/Wheeling Wednesdays or Walk and Roll Fridays – to give people an opportunity to enjoy the event on a regular basis. Parents and other volunteers accompany the students and staging areas can be designated along the route to school where groups can gather and walk or bike together. These events can be promoted through press releases, articles in school newsletters and posters and flyers for students to take home and circulate around the community.

International Walk to School Day Website: <http://www.walktoschool-usa.org/>

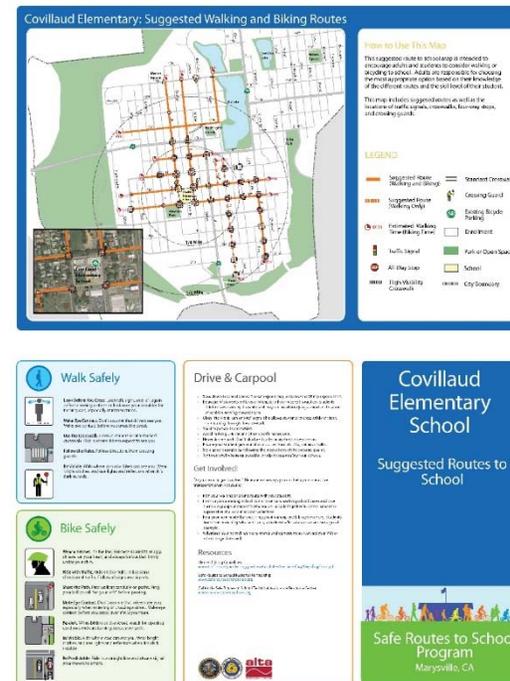


Walk and Bike to School Day in Santa Clarita, CA

4.3 Suggested Routes to School Maps

Suggested Route to School maps show stop signs, signals, crosswalks, sidewalks, trails, overcrossings, and crossing guard locations around a school. These can be used by families to identify the best way to walk or bike to school.

Liability concerns are sometimes cited by cities or school districts as reasons not to publish walking route maps. While no walking route will ever be completely free of pedestrian safety concerns, a well-defined walking route should provide the greatest physical separation between walking students and traffic, expose students to the lowest traffic speeds and have the fewest roadway crossings.



Suggested Routes to School Map example from Covillaud Elementary School in Marysville, CA



4.4 Friendly Walking/Biking Competitions

Contests and incentive programs reward students by tracking the number of times they walk, bike, carpool or take transit to school. Contests can be individual, classroom competition or interschool competitions. Local businesses may be willing to provide incentive prizes for these activities. Students and classrooms with the highest percentage of students walking, biking or carpooling compete for prizes and “bragging rights.” Small incentives, such as shoelaces, stickers and bike helmets, can be used to increase participation. It can also be effective to allow different grades and schools (high school vs. grade school vs. middle school) to compete against each other in a mobility challenge.

Each of the examples of programs below can be modified for students who live too far away from school to walk or bike. Modification can include walking or biking at lunch time or gym class. Also, students can count the miles walked or biked with parents and guardians outside of the school day.

Examples of Walking and Biking Competitions are described on the following pages.

On-campus walking clubs (mileage clubs) - Children are issued tally cards to keep track of “points” for the each time they walk, bike, bus or carpool to or from school. When they earn a specified number of points they get a small prize and are entered in a raffle for a larger prize. At the end of the school year, there is a drawing for major prizes.

SAFE ROUTES TO SCHOOLS
MARIN COUNTY
saferoutestoschools.org

P.O. Box 201, Forest Knolls, CA 94933 • 415.488.4101
A program funded by the Bay Area's Quality Transportation Bureau and administered by the Marin County Office of Transportation Planning, in partnership with the County Office of Transportation Planning and the County Office of Transportation Planning.

Name _____
Grade _____
Phone _____
Parent's signature _____

How to Play Frequent Rider Miles

1. Write the date at the beginning of each week.
2. Every day you walk or bike to or from school put a / in the box for that day of the week.
3. Every day you walk, bike, carpool* or take the bus put a slash / in the box for that day of the week.
4. Thus if you walk, bike, carpool, or take the bus both ways you'll put an X in the box for that day of the week.
5. When you have 20 points, have your card checked for your reward and get your name in the raffle to win a new Trek bicycle and other prizes.
6. Continue to use your card, follow steps 1-5 again for more rewards and chances to win valuable prizes.
7. Keep filling in your card until the end of the contest.
8. Be sure to have your parent's signature on your card.

*A carpool is two or more families sharing a ride to school

Frequent Rider Miles
20 points to win!

= 1 point traveling to school
 = 1 point traveling from school = 2 points traveling both ways

Start Date M T W Th F

I (circle one or more) walk, bike, carpool, or take the bus to school.

TOTAL POINTS _____
Frequent Rider Miles sponsored by **TREK** BICYCLES

Example of a Frequent Rider Miles sheet



Pollution Punch Card - This year-round program is designed to encourage school children and their families to consider other options for getting to school, such as biking, walking, carpooling and public transportation. Every time a student walks, bikes or carools to school, a parent volunteer or school representative stamps the card. Then students receive a reward when the punch card is complete.



Example of a Pollution Punch Card

Walk and Bike Challenge Week/Month - This month-long encouragement event is generally held in conjunction with National Bike Month in May. Students are asked to record the number of times they walk and bike during the program. The results are tallied and competing school or classrooms compare results. Students who are unable to walk or bike to school can participate by either walking during a lunch or gym period or getting dropped off further away from the school and walking with their parents the last several blocks.

Golden Sneaker Award - Each class keeps track of the number of times the students walk, bike, carpool or take the bus to school and compiles these figures monthly. The class that has the most participation gets the Golden Sneaker Award. (The award can be created by taking a sneaker, mounting it to a board like a trophy, and spray painting it gold.)

Walk Across America/California/Pacific Crest Trail/to Yosemite - This is a year-round program and is designed to encourage school children to track the number of miles they walk throughout the year. Students will be taught how to track their own mileage through learning about how many steps or blocks are in a mile and will also learn about places in the United States on their way. Some students in Calaveras County may discover that they could have walked to Yosemite in one semester! Teacher or volunteer support is required.

Each of these programs can use incentives to increase participation and reward the students for their efforts. Examples of incentives include:

- Shoelaces
- Dog tags
- Pedometers
- Reflective zipper pulls
- Bicycle helmets
- Raffle tickets for a bicycle from a local bike shop
- Early dismissal
- Extra recess time
- Pizza parties



4.5 Back to School Blitz

Families set transportation habits during the first few weeks of the school year and many families are not aware of the many transportation options available to them. Because of this, most families will develop the habit of driving to school. A “Back to School Blitz” can be used at the beginning of the school year to promote bus, carpool, walking and bicycling as school transportation options.

The “Back to School Blitz” includes many of the other programs in this Toolkit, including Suggested Route Maps, articles in school newsletters and enforcement activity. Additional elements include:

A packet given to each family containing information about school transportation options, including:

- Cover letter signed by the principal encouraging parents to create transportation habits with students that promote physical activity, reduce congestion, increase school safety and improve air quality
- School transportation maps or suggested routes to school maps that include bicycling and walking routes, transit and school bus stops, drop-off and parking areas and bike parking locations
- Transit schedules
- Pledge forms about reducing the number of times that families drive to school; entries go in raffle for a prize donated by local businesses

In addition to the packet, the following strategies can be included:

- Table at back-to-school night with materials and trained volunteers who can answer questions about transportation issues
- Article in first school newsletter about transportation options and resources
- Enforcement activities, such as school zone speed and crosswalk enforcement
- Strict enforcement of parking policies during first month of school (and throughout the year if possible)



Students in Orinda, CA walk to school after being dropped off a few blocks away



4.6 Walking School Buses

Parents and guardians often cite distrust of strangers and the dangers of traffic as reasons why they do not allow their students to walk to school. Walking School Buses are a way to make sure that children have adult supervision as they walk to school. Walking School Buses are formed when a group of children walk together to school and are accompanied by one or two adults (usually parents or guardians of the children on the "bus"). As the walking school bus continues on the route to school they pick up students at designated meeting locations.

Walking school buses can be informal arrangements between neighbors with children attending the same school or official school-wide endeavours with trained volunteers and structured meeting points with a pick-up timetable.



Walking School Bus in Columbia, MO

4.7 Bike Train

A bicycle train is very similar to a walking school bus; groups of students accompanied by adults bicycle together on a pre-planned route to school. Routes can originate from a particular neighborhood or, in order to include children who live too far to bicycle, begin from a park, parking lot or other meeting place. They may operate daily, weekly or monthly. Bike trains help address parents' concerns about traffic and personal safety while providing a chance for parents and children to socialize and be active.

Bike trains are best suited for older students that have undergone bicycle safety training. Also, helmets and parent waivers should be required before participating in a bike train.



Students in Durham, NC participate in a bike train



4.8 Locally-Sponsored Bicycle and Walking Events

Community groups within the region may host events that encourage residents to get outside and be active. Such events include group rides and walks. Schools may structure their encouragement activities around such special events. For example, over the course of a week, students could walk the distance a half marathon as part of Walking Across California program.



*San Andreas Community Health Walk
Reprinted with permission from Public Health Services*



*Turner Park Community Health Walk
Reprinted with permission from Public Health Services*



5 Enforcement Tools

Enforcement tools are aimed at ensuring compliance with traffic and parking laws in school zones. Enforcement activities help to reduce common poor driving behavior, such as speeding, failing to yield to pedestrians, turning illegally, parking illegally and other violations. Enforcement strategies, in conjunction with education efforts, are intended to clearly demonstrate what is expected of drivers of motor vehicles and to hold them accountable for the consequences of their actions. While most enforcement is the responsibility of police and other law enforcement, there are numerous complementary strategies that can be undertaken by school officials, crossing guards, parents and volunteers.



5.1 Where Do I Start?

In the City of Angels Camp, enforcement is the responsibility of the Angels Camp Police Department. The unincorporated areas of the county are served by the Calaveras County Sheriff's Office. The Sheriff's Office also has a Volunteer Unit that provides support to the community.



5.2 School Safety Patrols and Crossing Guards

School safety patrols are trained student volunteers responsible for enforcing drop-off and pick-up procedures. Student safety patrols may also assist with street crossing; they do not stop vehicular traffic, but rather look for openings and then direct students to cross. According to the National Safe Routes Clearinghouse, "student safety patrols... [increase] safety for students and traffic flow efficiency for parents. Having a student safety patrol program at a school requires approval by the school and a committed teacher or parent volunteer to coordinate the student trainings and patrols."

Crossing guards are trained adults, paid or volunteer, who are legally empowered to stop traffic to assist students with crossing the street.

San Andreas High School has a program in which students provide crossing assistance at San Andreas Elementary School. There is no official County crossing guard program.



Crossing guards in Santa Clarita, CA

5.3 Crosswalk Sting

In a crosswalk sting operation, the local police department targets motorists who fail to yield to pedestrians in school crosswalks. A plain-clothes “decoy” police officer ventures into a crosswalk or crossing guard-monitored location, and motorists who do not yield are given a citation by a second officer stationed nearby. The police department or school district may alert the media to crosswalk stings to increase public awareness of the issue of crosswalk safety, and news cameras may accompany the police officers to report on the sting.

5.4 School Parking Lot “Citations”

If on-site parking problems exist at a school, such as parents leaving vehicles unattended in loading zones, school staff may issue parking lot “citations” to educate parents about appropriate parking locations. These “citations” are actually warnings designed to look like actual police tickets, intended to educate parents about how parking in improper zones can create safety hazards or disrupt traffic flow for other parents during the pick-up/drop-off period.

Other informal enforcement programs include posting “cell free zone” signs in the school parking lot during drop-off and pick-up, and sending drop-off and pick-up procedures home with students at the beginning of the year and after returning from school vacations.

5.5 Radar Trailer and Speed Feedback Signs

Speed feedback signs and trailers can be used to reduce speeds and enforce speed limit violations in known speeding problem areas. Both the signs and trailers display the speed of approaching motorists along with a speed limit sign.

These can be used as both an educational and enforcement tool. By itself, it serves as effective education to motorists about their current speed compared to the speed limit. Because speed feedback trailers can be easily removed, they are often deployed on streets where local residents have reported speeding problems.



Radar trailer in Marin County



6 Evaluation

Evaluation of the Safe Routes to School program is important to understand the effectiveness of the program, identify improvements that are needed and ensure that the program can continue in the long-term. Evaluation can measure shift in travel behavior, changes in attitudes toward biking and walking, awareness of the Safe Routes to School program, grant money received and projects completed.

6.1 Where Do I Start?

Evaluation can be done by community organizations, schools, or government agencies. If the evaluation is undertaken by a community organization, coordinating with the school or local government can lend credibility to the process and ensure the evaluation captures information that will be useful in planning further improvements for walking and bicycling.

See Section 2.1 for information on government agencies with jurisdiction in Calaveras County, and Section 3.1 for a list of schools and school districts.

6.2 School Site Audit

A school site audit, sometimes called a walking audit or walkabout, is an evaluation of the pedestrian and bicycling conditions around the school environment. Typically school site audits are conducted by the local school group or task force on foot by walking the routes that the students use to get to school. A site audit may also be conducted on bicycle in order to better evaluate bicycling conditions.

The goal of a site audit is to document conditions that may discourage walking and bicycling to school, and to identify solutions to improve those conditions. The audit should involve an assessment of the built environment around a school (for example, streets, sidewalks, pathways, crosswalks and intersections, bike routes, traffic controls), drop-off and pick-up operations (e.g. presence of designated loading areas), as well as behaviors of students, parents, and motorists that could contribute to unsafe conditions for bicyclists or pedestrians (e.g. speeding, jaywalking, failure to yield to pedestrians).

A School Site Audit checklist form has been provided at the end of this Toolkit that asks for detailed information related to: 1) Student Drop-Off and Pick-Up Areas; 2) Bus Loading Zones; 3) Sidewalks and Bicycle Routes; 4) Intersections Near the School Property; 5) Sight Distance; and 6) Traffic Signs, Speed Controls and Pavement Markings. The local school task force can use the School Site Audit checklist as a basis for conducting their walkabout.

Along with the checklist, an aerial map of the school area is helpful for the site audit. Aerial photos can be marked up with identified issues and suggested improvements.



6.3 Program Evaluation

There are many different education, encouragement, and enforcement programs that can be implemented in a school environment to help increase the number of students walking and biking to school. Not every program is the correct fit for every school. It is important to evaluate programs in the context of the school environment prior to deciding what would be a good choice for your school. Once the programs have been implemented it is necessary to determine whether or not it was a good choice for your school and what about the program worked and what did not work quite as well. Below are some suggested steps for proceeding with the program evaluation process.

Program evaluation can be administered by following these steps:

- Survey local traffic conditions and issues (much of this information can be found from the school site audit)
- Determine the goals of the program
- Identify methods to implement programs
- Determine success benchmarks to evaluate the effectiveness of the program efforts
- Interview program administrators (teachers, volunteers) and participants (students) to discuss what worked and what did not

6.4 Annual Hand Tallies and Parent Surveys

Since 2005, the federal Safe Routes to School program has set aside federal funding to help states, cities, towns and schools increase the number of students walking and biking to school. One requirement of receiving this money is that schools must perform annual hand tally and parent surveys so that the national program can track the effectiveness of the various programs across the country.

The National Center for Safe Routes to School has developed a recommended methodology, survey and count forms and reporting forms. A teacher administers the hand tally survey to the students in their classroom. The parent surveys are either mailed or sent home to parents or guardians. If you receive a parent survey, please fill it out and help your school district comply with current and future funding requirements.



6.5 School Site Audit Checklist

School Name: _____

School District: _____

Instructions

The following site audit should be conducted to help determine walking and bicycling conditions on/adjacent to school property. This audit will help the school to discover potential areas for design improvements and increased safety. Members of the School SR2S Task Force, the School Principal, and a traffic engineer from the local jurisdiction should observe conditions during the drop-off and pick-up periods, and fill out the following audit form in order to see how students get to and from school. Audits should be conducted during periods of good weather if possible. Please take a map of school neighborhood with you on the audit for orientation and note taking. Aerial photo maps can be helpful for identifying specific detailed locations, and can be downloaded from internet sources such as Google Earth (<http://earth.google.com>). Please take digital photos of any identified problem areas to accompany your notes.

Audit Date: _____

Day: _____

Time: _____

Weather Conditions: _____

Additional notes about audit conditions:



Safe Routes to School Toolkit

1. Student Drop-off and Pick-Up Areas

	Yes	No	N/A
a. Is an on-site parent drop-off/pick-up area provided?			
b. If the drop-off/pick-up area is on-site, is this loading area separated from the rest of the school parking lot?			
c. If drop-off/pick up occurs on-street, is a marked loading zone provided along the curb?			
d. Do drop-off/pick-up areas, either on-site or on-street, provide sufficient space for vehicles to line up?			
e. Is a school staff person or other monitor present and visible during the drop-off/pick-up period to assist with loading/unloading?			
f. Does morning drop-off traffic move in an orderly fashion without congestion and backup?			
g. Does the afternoon pick-up line form in an orderly fashion, with vehicles waiting in designated areas, not double-parking, not blocking nearby residential driveways, etc.?			
h. Are drop-off/pick-up areas situated so that students exiting or entering cars have a designated pathway to/from school buildings (e.g. do not walk between parked vehicles)?			
i. Does drop-off/pick up occur along a raised curb, so that pedestrians unload onto a sidewalk or walkway separate from vehicle traffic?			
j. Are there accessible curb ramps for wheelchair access?			
k. Are there posted signs (e.g. "No Parking", "Bus Only", etc)?			
l. Is the area adequately lighted?			
m. Is there excessive idling of vehicles and buses while they wait to pick up children?			

n. Please describe additional problems within the student drop-off area in the space provided to the right. Remember to take photos.



2. Bus Loading Zone

	Yes	No	N/A
a. Are bus driveways physically separated from pedestrian and bicycling routes by raised curbs or bollards?			
b. Are bus driveways physically separated from parent pick-up/drop-off areas?			
c. Are measures taken for safety of students needing to cross in front or behind the bus?			
d. Is traffic in the bus loading zone one-way?			
e. Does the bus zone meet the minimum width of 24' for drop-off/pull-out lanes?			
f. Is there a continuous curb and sidewalk adjacent to the drop-off/loading area leading into the school site?			
g. Is the bus loading/unloading zone lighted?			

h. Please describe additional problem areas regarding the bus loading zone in the space provided below. Please remember to take photos.

3. Sidewalk and Bicycle Routes

	Yes	No	N/A
a. Are current pedestrian and bicycle routes separated from motor vehicles by the use of sidewalks or separated pathways?			
b. Are the bicycle routes designated by signage?			
c. Are marked bicycle lanes present?			
d. Is the bicycle lane network continuous and without gaps?			
e. Are children wearing bicycle helmets?			
f. Are sidewalks and bicycle paths regularly maintained (free of debris, cracks and holes)?			
g. Are the sidewalks continuous and without gaps?			
h. Are there accessible ramps for wheelchair access?			
i. Do the ramps have tactile warning strips or textured concrete?			
j. Are the sidewalks lit?			
k. Are the sidewalks used regularly?			

l. Please describe additional problems regarding the school's sidewalk system and existing bicycle routes in the space provided below. Remember to take photos.



4. Adjacent Intersections (intersections near school property)

	Yes	No	N/A
a. Are there high volumes of automobile traffic?			
b. Are there high volumes of pedestrian traffic?			
c. Are there painted crosswalks for all crossing directions?			
d. Are there curb ramps located at all adjacent intersections?			
e. Is there appropriate vehicle signage?			
f. Is there traffic control, such as a stoplight or stop signs?			
g. Are there pedestrian walk signals?			
h. For midblock crossing locations, are there adequate gaps in traffic to allow pedestrians to cross?			
i. Are pedestrians crossing in marked crosswalks, or are they using unmarked locations or jaywalking?			

j. Please describe additional problems regarding these intersections in the space provided below. Please identify specific intersections, and any problems associated with each. Remember to take photos.

5. Sight Distance

	Yes	No	N/A
a. Are desirable sight distances (visibility is free of obstructions) provided at all intersections within the walking zone?			
b. Do cars park or wait, blocking the vision of other motorists, bicyclists and pedestrians?			
c. Have the placement of fences, walls, dumpsters and the location of parking areas for service vehicles been carefully considered in view of sight distance requirements on the school site?			
d. Are there any barriers present that block the viewing of pedestrians and bicyclists (i.e. dumpsters, utility boxes, parking areas, ground mounted signage, building walls)?			
e. Is landscaping and vegetation trimmed clear of sidewalks and pathways, and not obstructing sight distance?			

f. Please describe additional problem areas that have sight distance obstructions in the space provided below. Remember to take photos.



6. Traffic Signs, Speed Control, Signals and Pavement Markings

	Yes	No	N/A
a. Are there School Zone signs, School Crossing signs, School Speed Limit signs, flashing beacons, and No Parking or No Standing Signs?			
b. Are any high visibility (fluorescent yellow-green) signs used in the school zone?			
c. Is there an effective school targeted program of traffic enforcement?			
d. Are there any school pavement markings located on roadways adjacent to or in the vicinity of the school grounds (e.g. "SLOW SCHOOL XING")?			
e. Are there currently traffic/speed control measures used in the area, such as speed humps?			

f. Please describe additional information regarding adjacent traffic signs, speed control, signals and pavement markings in the space provided below. Remember to take photos.

7. Other Barriers to Walking and Bicycling

Please use the space below to describe any additional problems or issues not identified in the checklist above. These may include policy barriers as well as infrastructure barriers. Be as specific as possible when describing a particular issue or location



