

# San Mateo County Safe Routes to School



**Program Guide**  
*Fall 2011*



# Preface

*The San Mateo County Safe Routes to School (SR2S) Program is a new countywide initiative, begun in 2010, to help develop and implement priority projects and programs that will enable school children and families to walk, bicycle, and carpool more often to school. The overall goal is to make San Mateo County a healthier, safer, more sustainable and environmentally sound community with improved air quality and less traffic congestion by reducing the number of school-related automobile trips.*

*Early development of the program has included staff input from multiple agencies throughout the education, public health, and transportation fields, and assistance from local jurisdictions and law enforcement. The San Mateo County Office of Education (SMCOE) is designated to serve as the lead agency for implementation of SR2S projects and programs. The City/County Association of Governments of San Mateo County (C/CAG) is the fiscal agent responsible for administering funds for the SR2S Program.*

*The intent of the San Mateo County Safe Routes to School Program Guide is to provide a menu of programs and activities that have proven successful in other Safe Routes programs, and informational resources to begin implementation throughout the County. The Guide will help inform leaders in schools and agencies; motivate and encourage participation by parents, caregivers, and other school champions; and generate ideas and discussion for applying countywide program and project funds to local school needs and conditions.*

*This Guide is designed around five major themes: Education, Encouragement, Enforcement, Engineering, and Evaluation. A summary of benefits and priority strategies are provided under each theme, as well as links to additional online resources. Standardized survey materials for evaluating and improving the Safe Routes to School program are also provided in an appendix.*

**San Mateo County Safe Routes to School program website:**

**[www.smcoe.k12.ca.us/SR2S](http://www.smcoe.k12.ca.us/SR2S)**

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# 1. Introduction

## What is Safe Routes to School?

Safe Routes to School (SR2S) is a program that promotes walking and bicycling to school, and improving traffic safety around school areas through education, incentives, law enforcement, and engineering measures.

Among the goals of SR2S programs are improved child safety, integration of physical activity into the everyday routine of children, and decreased traffic and air pollution associated with school drop-offs and pick-ups. A multi-disciplinary effort that requires strong partnerships between municipalities, school districts, parents and law enforcement agencies, the most successful Safe Routes to School programs are a combination of active volunteerism and ongoing funding.

## San Mateo County's SR2S Program

The San Mateo County Safe Routes to School (SR2S) program is a new countywide effort initiated by the City/County Association of Governments of San Mateo County (C/CAG), the County's congestion management agency. Funding is provided primarily through the Metropolitan Transportation Commission (MTC)'s Climate Initiatives Program and includes \$1.4 million for non-infrastructure

(i.e., non-capital outlay) activities. Additional funding is also provided by Measure M, the \$10 vehicle registration fee approved by the voters of San Mateo County in November 2010 for congestion and pollution mitigation. To ensure close coordination with school districts and school staff, the San Mateo County Office of Education (SMCOE) has been designated by C/CAG to serve as the lead agency for administering the new Safe Routes program.

The San Mateo County program will complement and help expand a number of local SR2S efforts and partnerships that are already in place. The Menlo Park City School District has run SR2S programs in its elementary schools for many years, and numerous other cities have been able to receive funding for capital improvements from the state SR2S program, including over \$1.25 million for the City of East Palo Alto. The '[Get Healthy San Mateo County](#)' school wellness initiative has been engaging school districts on how to promote physical activity, while a unique partnership between Redwood City 2020 ([www.rwc2020.org](http://www.rwc2020.org)), the Sequoia Healthcare District, and the Redwood City School District recently implemented a walking school bus program at the Fair Oaks Elementary School,



with hopes for expansion to other schools soon. Nearly one-third of all school districts in the county are already participating in “International Walk to School Day,” which takes place every fall.

## History

The first Safe Routes to School programs were developed in Europe during the 1970s and 1980s as communities began to notice that children were no longer walking and bicycling to school. These early efforts inspired similar programs in Australia, New Zealand and Canada, while in the United States “pilot” SR2S programs began in the late 1990s in New York City, Arlington (MA), and Marin County (CA). California developed its own statewide program in 1999, and in 2005 Congress included a national Safe Routes to School (SRTS)<sup>1</sup> program as part of the reauthorization of federal highway legislation. In the first five years of the federal program, over \$612 million of SRTS funds complemented local and state efforts, such that now all fifty states have a Safe Routes to School coordinator and grant program.

<sup>1</sup> Note: The acronym “SRTS” is specific to the federal Safe Routes to School program, as opposed to “SR2S” which is used by the State of California, Bay Area, and San Mateo County programs. This difference is generally not important except when applying for potential grant assistance (where various federal and/or state and local eligibility rules and requirements may apply).

## Why Safe Routes?

To understand the many potential benefits of a successful Safe Routes to School program, it is helpful to review the conditions that led to the programs’ development in the first place.

Consider these facts:

- *Within the span of a single generation, the number of children walking and bicycling to school has dramatically declined. In 1969, nearly half of all children walked or biked to school, including 87% of those living within a mile of their school. Today, fewer than 15% of children nationwide walk or bike to school. (Centers for Disease Control and Prevention - CDCP)*
- *One-quarter of children aged 9-13 lead a sedentary lifestyle, and nearly two-thirds do not participate in any organized physical activity (CDCP)*
- *Rates of severe childhood obesity are three times higher than they were 30 years ago, putting children at higher risk of premature death and several chronic diseases (CDCP)*
- *Despite relatively low levels of non-motorized activity, bicycle collisions are the 5th leading cause of hospitalized injuries for kids aged 5-12 in California. Pedestrian collisions are the 4th leading cause of injuries and the 3rd leading cause of fatalities for the same group (California Injury Prevention Network)*

As the numbers indicate, there is a health epidemic among U.S. children. This epidemic poses both chronic (disease) and acute (injury) risks, and while composed of various and complex factors is clearly linked to reduced physical activity. The rise of Safe Routes to School programs is one indication that things may be changing for the better.

Converting more school trips to walking and biking is also a cost-effective way to reduce peak period congestion and improve local air quality. As much as 20% to 30% of morning rush hour traffic can be attributed to parents driving their children to school in many communities. When many of these same vehicles sit idling for minutes during pick-up and drop-off periods, school children and employees are

exposed to higher levels of pollutants associated with increased asthma rates and other respiratory problems. Small children are particularly vulnerable to air pollution since their lungs are still developing and they breathe more frequently relative to older adults.

Beyond traffic safety and public health, there are a number of other equally significant (if difficult to measure) benefits of successful Safe Routes to School programs. Several studies, including a comprehensive study of California students, indicate that there is a strong positive relationship between physical fitness and academic achievement – which is supported by scientific brain research. Also, since SR2S efforts tend to deepen relationships among neighbors and between parents and law enforcement officials, benefits can often extend beyond the school commute into issues such as greater public safety and neighborhood cohesiveness. Lastly, a Safe Routes planning process that engages community stakeholders and builds consensus around priorities can ensure that specific traffic, pedestrian, and bicycle improvements are eligible for state, federal and other grant funding sources that may otherwise not be available (and as funding for school bus service may be dwindling or cut due to ever-tightening local budgets).

### **Purpose of the Guide**

This guide has been developed as a resource for local parents, teachers, school administrators, public health professionals, city staff, and others looking to develop or expand a Safe Routes to School program or project in San Mateo County. The document provides a menu of strategies and activities to implement various non-infrastructure components of a SR2S program and resources to identify and plan for engineering improvements in order to make walking and bicycling to school a safe and easy choice. The document is organized according to the Five E's of transportation planning - Education, Encouragement, Enforcement, Engineering (and Operations), and Evaluation - all of which are necessary to develop and sustain a successful program. A short summary description of each 'E' is provided at the beginning of the relevant section.



### **Let's Start Walking & Rolling!**

If you are reading this guide it is because you care about the safety and health of students, families and communities in San Mateo County. Thank you for your interest and participation in this important and exciting program!

More information about current Safe Routes to School activities and resources is available at the San Mateo County Office of Education's program website ([www.smcoe.k12.ca.us/SR2S](http://www.smcoe.k12.ca.us/SR2S)) or by contacting Peter Burchyns at [pburchyns@smcoe.k12.ca.us](mailto:pburchyns@smcoe.k12.ca.us) or (650) 802-5563.

A person with short, curly hair, wearing a dark blue long-sleeved shirt, is pointing their right index finger upwards. They are standing in a room with a light-colored brick wall on the left and a dark, vertically-slatted wall on the right. The floor is a light-colored tile. The overall scene is overlaid with a semi-transparent blue filter.

## 2. Education

Education programs are an essential component of a Safe Routes to School effort. They generally include outreach to students, parents and guardians, and motorists. Students are taught bicycle, pedestrian and traffic safety skills both in and out of the classroom. Adults receive information on transportation options and driving safely near schools.

Pedestrian and bicycle safety education helps each child understand basic traffic laws and safety rules, such as sign identification and when and how to use a crosswalk appropriately. Curriculum-based lessons can also help students understand the benefits of non-motorized transportation and be a fun way to apply information learned through health or science lessons.

Bicycle safety training is normally appropriate beginning in or after the third grade and helps children understand how to properly fit and maintain their bike along with riding safely in a variety of traffic situations. These trainings also stress that bicyclists have the same responsibilities as motorists to obey traffic laws.

The following educational activities are “staples” of successful Safe Routes programs and provide a foundation for all future Safe Routes activities and programs.

## Overview

A variety of existing in-classroom lessons and skills training activities are available to help teach students about walking, bicycling, health and traffic safety. These can include lessons given by law enforcement officers or other trained professionals, or lessons delivered by teachers. Example topic lessons are: Safe Street Crossing, Helmet Safety, Rules of the Road for Bicycles, and Health and Environmental Benefits of Walking and Biking.

## Benefits

- One of the quickest and easiest ways to ensure all children receive important information on the safety basics and benefits of walking and bicycling
- Flexible activities can accommodate a variety of time/ space constraints and grade levels
- Helps institutionalize pedestrian and bicycle safety as a priority life skill (similar to home economics or driver education)
- Complements environmental lessons and physical fitness/health activities with information and training on the importance of good travel habits

## Steps to Take

### Assemblies

When incorporating safety education during the school day, there are options. An assembly can provide information to the whole school at once; the challenge is to meet the interest and skill levels of every grade. ***If you choose to use assemblies, splitting the grades into K-2 and 3-5 is recommended.*** Including funny characters and students to play helpful roles can often make assemblies more engaging and memorable. Sample characters include “Chipper” the California Highway Patrol mascot, ASIMO “the world’s most advanced humanoid walking robot,” and Zozo, a Jim Henson-inspired character who teaches sustainable transportation habits.



School assemblies are one way to relay important information about safe walking and bicycling habits, and rules of the road. These events often require imaginative props and special characters to keep the program interesting to students.

### In-Classroom Lessons

Lessons offered at different grade levels during class time provide a comprehensive approach to delivering SR2S curriculum. Ideally, safety education builds from year to year, beginning each year with a review of previously covered lessons. Limiting messages to one or two issues keeps them clear and concise. Schools with limited time can focus on one or two grades, such as 2nd and 4th grade in elementary school and 6th grade in middle school.

Classroom educational materials should be presented in a variety of formats (safety videos, printed materials, classroom activities, and hands-on drills and practice), and should be continually updated to make use of the most recent educational tools available. Classroom education programs should also be expanded to promote the health and environmental benefits of bicycling and walking.

## Classroom Curriculum & Skills Training...Continued

### Applied "On-Street" Skills Training

The most important education program aimed at students is applied training in pedestrian and bicycle safety. This training, sometimes called "driver's ed for biking/walking" is common in European countries, but is often overlooked in the United States. Walking and biking safety training provides students with skills and confidence they can apply immediately. Training also provides students with an understanding of bicycle and pedestrian behavior that may help them eventually become better drivers. Students also remind their parents about rules and good behavior, reminding parents that their children are observing and imitating their behavior.

When teaching children applied safety lessons, remember that they experience their surroundings differently than adults. The following list includes things to consider when teaching children under ten years of age:

- They do not have full peripheral vision
- They do not accurately judge speed and distance
- They have not developed a full sense of where sounds originate
- They have not developed an accurate sense of danger

Specific pedestrian safety topics may include:

- Where and when to cross a street
- Crossing at intersections
- Sign identification
- Understanding traffic signals
- Crossing the street with an adult
- Crossing around school buses
- Crossing streets around parked cars
- Walking at night
- Using sidewalks
- Walking where no sidewalks exist
- How to walk near driveways and cars backing up

For more detailed information on bicycle safety topics, see the *Bicycle Rodeos* summary on the following page.



A comprehensive approach to bicycle and pedestrian safety curriculum includes both in-classroom lessons and "real life" skills training.

### Resources

- SR2S Lesson Plans (Marin County)  
<http://www.saferoutestoschools.org/lessonplans.shtml>
- National SRTS Toolkit: Classroom Activities  
<http://www.nhtsa.gov/people/injury/pedbimot/bike/Safe-Routes-2002/classact.html>
- Meet Zozo (StreetEducation, OpenPlans project)  
<http://streetseducation.org/zozo/>
- Pedestrian Safety Education Curriculum  
<http://www.walknbike.org/pedestrian-safety/>
- Bicycle Safety Education Curriculum  
<http://www.walknbike.org/bike-safety/>
- Get Healthy San Mateo School Curricula  
<http://www.gethealthysmc.org/96-Curricula.aspx>

## Overview

Bicycle Rodeos are family-friendly events that incorporate a bicycle safety check, helmet fitting, instruction about the rules of the road and an obstacle course. Often preceded by in-class safety lessons or followed by neighborhood rides, bicycle rodeos offer a natural progression for reinforcing key safety practices and building confidence among young bicyclists. Adult volunteers can administer rodeos, they may be led through the local police department, and/or rodeos can be taught by certified League of American Bicyclists (LAB) instructors or members of a bicycle advocacy group (such as the Silicon Valley Bicycle Coalition).

Bicycle rodeos can be incorporated into health fairs, back to school events and Walk and Bike to School days. Depending on the school, they can be customized to initiate first-time riders or act as refresher courses for older, more experienced students.

## Benefits

- Teaches and reinforces the basics of bicycle safety, from helmet use to hand signals
- Provides active learning that engages youth outside the classroom setting and with real-world equipment
- Helps build young riders' confidence/experience within a safe and predictable setting
- Offers a fun activity that can complement numerous other SR2S programs and activities

## Steps to Take

The first steps in organizing a bicycle rodeo are to determine when it will take place and if it will be part of a larger school event or program. For example, Oak Knoll Elementary in the Menlo Park City School District schedules a bicycle rodeo as part of a larger Bicycle Safety Education Week program at the beginning of the school year. Bicycle rodeos typically require about an hour or more to complete, depending on school size and participation.

With a date and format in mind, organizers should contract with one or more instructors and work with those individuals to select an appropriate site for the rodeo and identify additional materials (cones, white chalk, whistles,



etc.) that may be needed. Large fields or parking lots are often the best locations, and gymnasiums can be a good back-up in case of inclement weather. The level of effort and responsibilities for organizing a bicycle rodeo largely depend on the expertise of the instructor(s).

While actual bicycle rodeo formats can vary, most include a series of "stations" such as:

- Registration/Sign Up
- Bicycle Inspection (Air, Brakes, Chain, Frame Fit)
- Helmet Check
- Rules of the Road
- Test Course (usually divided into specific movements)

Organizers should consider whether prizes, certificates, and/or any refreshments will be offered upon completion of the course. In many cases these items can be donated or subsidized by local businesses such as bicycle shops or area food establishments.

## Resources

- Organizer's Guide to Bicycle Rodeos (Cornell University)  
[http://www.bike.cornell.edu/pdfs/Bike\\_Rodeo\\_404.2.pdf](http://www.bike.cornell.edu/pdfs/Bike_Rodeo_404.2.pdf)
- Organizing a Bicycle Skills Rodeo (Cascade Bicycle Club)  
[http://www.cbcef.org/pdf/bike\\_rodeo06.pdf](http://www.cbcef.org/pdf/bike_rodeo06.pdf)
- Safe Routes to School Rodeo Manual (Marin County)  
<http://www.saferoutestoschools.org/pdfs/lessonplans/RodeoManualJune2006.pdf>

## Overview

A School Traffic Safety Campaign encourages adult awareness of students walking and bicycling to school and the importance of safe driving behavior. A safety campaign is an effective way to reach the general public and encourage drivers to slow down, and can highlight specific locations where students are walking and biking to school.

## Benefits

- Extends beyond school families and students to educate the general public
- Can be targeted (e.g. with banners or lawn signs) at specific “hot spot” safety locations and reinforce school zone speed limits
- Helps develop good travel behavior and habits among students, parents, faculty and staff - including those who live too far away to walk or bike to school
- Can be funded through traffic safety grants within or outside Safe Routes to School programs

## Street Smarts

Several Bay Area communities - including Marin County, Alameda County, and the City of San Jose - have instituted a “Street Smarts” campaign that includes educational brochures and videos, roadside banners and outdoor media, classroom discussions, and much more. These programs share high quality outreach materials and have been effective at reaching a large cross-section of the public in and around participating schools.

## Resources

- “Every Step Counts” Marketing Resources (SRTS)  
[http://www.saferoutesinfo.org/resources/marketing\\_every\\_step\\_counts\\_materials.cfm](http://www.saferoutesinfo.org/resources/marketing_every_step_counts_materials.cfm)
- Street Smarts Campaign (San Jose)  
<http://www.getstreetsmarts.org/>
- Safe Kids USA  
<http://www.usa.safekids.org/>



### Si Vas Caminando A La Escuela:

- A los padres: Escoja la mejor ruta para llegar a la escuela y acompañe a sus hijos.
- Camina con un grupo, con un padre/madre—o con un compañero. Evita caminar solo.
- Obedece las señales de tránsito, los avisos y las marcas en el asfalto, tales como las que señalan el área de cruce para peatones.
- Obedece las direcciones de los Guardias de Cruce y las Patrullas Escolares para la Seguridad.
- Mira en todas direcciones antes de cruzar la calle (izquierda, derecha, al frente y hacia atrás).
- Cruza solamente en la esquina de la calle o en una área marcada para cruce. ¡No cruces en la mitad de la calle!
- Mantente alerta en todo momento – sobre todo cuando hay mal clima.



### Si Vas En Bicicleta A La Escuela:

- ¡Usa siempre el casco!
- Pídele a tus padres que te ayuden a escoger la mejor ruta para viajar en bicicleta.
- Obedece todas las señales de tránsito, avisos y marcas en el asfalto.
- Cuando vayas en bicicleta por las calles, maneja al lado derecho de la calle.
- Maneja en la misma dirección del tránsito; no manejes dando la cara al tránsito.
- Los niños menores de 10 años deben manejar sobre la acera.
- Cuando vayas en bicicleta por la acera, maneja despacio y pon atención a los peatones.
- También ten cuidado con autos entrando y saliendo de sus garajes.
- Cruza la calle en la esquina, o usa las zonas de cruce para peatones.
- Cuando cruces sobre un cruce para peatones, hazlo caminando—y lleva al lado tu bicicleta.



### Si Vas En Autobus A La Escuela:

- Alejate de la calle, y no juegues alrededor de la parada de autobús
- Al llegar a la parada donde te bajas, espera por tus padres—no cruces la calle solo.
- Sigue las instrucciones del conductor del autobús.
- Mantente en tu asiento en todo momento y asegúrate que tus pertenencias no obstruyan el pasillo del autobús.
- Mantén la cabeza, brazos y manos dentro del autobús.



### Si Vas A La Escuela En Automovil:

- Usa el cinturón de seguridad durante todo el trayecto, aún cuando el viaje sea corto.
- Los niños pequeños (menores de 4 años, o que pesan menos de 40 libras) deben ir en su asiento especial para bebés.
- Niños menores de 6 años o que pesan menos de 60 libras de peso deben ir en un asiento elevado.
- El sitio más seguro para los niños cuando viajan en automóvil, es en el asiento trasero.
- Es contra la ley viajar en la parte trasera de una camioneta pick-up, a menos que tenga una cubierta de acampar (camper).
- Asegúrese que los niños entren y salgan del vehículo por el lado del pasajero, y por el lado de la acera.
- Estacione el auto a una o dos cuadras de la escuela, y camine el resto del trayecto para evitar congestión de tráfico.
- ¡OBEDEZCA TODAS LAS LEYES DE ESTACIONAMIENTO, PEATONALES Y DE VIALIDAD: son para su seguridad y la de sus hijos!
- Este otoño, el Departamento de Policía de San José estará supervisando el cumplimiento de las leyes peatonales y de vialidad para la mayor seguridad de nuestros niños.

City of San José  
[www.GetStreetSmarts.org](http://www.GetStreetSmarts.org)



# 3. Encouragement

Encouragement programs focus on bringing the fun back to walking and bicycling, thereby increasing public awareness, and increasing the number of students walking, biking, carpooling, and taking transit to school. The activities often include a variety of special events and contests, outreach campaigns, and presentations to school and community groups. Encouragement programs do not need much funding, but their success depends on a school champion or group of volunteers for sustained support.

This guide describes in detail several categories/concepts that typically fall under “Encouragement,” including:

- Walking School Bus/Bike Train
- School Pool
- Competitions and Incentives
- Back to School Blitz
- Walk and Bike to School Day/Week/Month (including Int’l Walk to School Day in October)
- Park + Walk
- School Route Walking Maps

The list is by no means exhaustive and will likely require local input and customization to be as successful as possible.

## Encouragement

## WALKING SCHOOL BUS / BIKE TRAIN

**Overview**

A walking school bus involves a group of children walking to school with one or more adults. The “bus” follows the same route every time and picks up children from their homes at designated times. Children like the walking school bus because it gives them active social time before the school day begins (or, as one participating child put it, “it’s like recess before school!”). Adults like the walking school bus because they feel more comfortable when there are trained, trustworthy adults escorting their children to school. Teachers and principals like the walking school bus because it helps kids arrive ready to concentrate on school.

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. They may operate daily, weekly or monthly. Bike trains also help address parents’ concerns about traffic and personal safety while providing students a chance to socialize, be active, and develop/test riding skills while under adult supervision.

**Benefits**

- Directly addresses two of the most common parental fears regarding walking or bicycling to school: stranger danger and traffic safety
- Highly convenient for parents and fun for students
- Scalable program that can increase in frequency and/or coverage as participation grows
- Helps develop bonds among classmates and neighbors, which can extend beyond the school day

**Steps to Take***Finding a Coordinator*

A walking school bus can be an informal effort begun by a few parents in one neighborhood. For a school-wide program, however, it is important to designate a coordinator. In some cases a dedicated volunteer coordinator can be successful, but schools may want this to be a paid position to ensure consistency and reliability.

The walking school bus coordinator can begin by assessing both resources (such as parent volunteers) and interest. A



Walking School Bus kickoff event, Fair Oaks Community School in Redwood City  
(image from [www.rwc2020.org](http://www.rwc2020.org))

school-wide survey (paper and/or electronic) distributed to parents can help to identify interested households and volunteers.

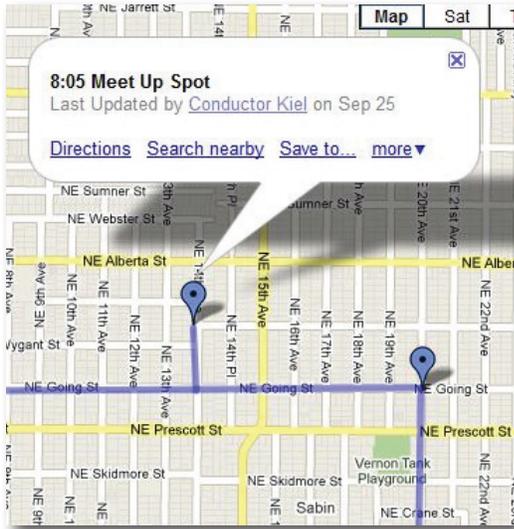
*Timing/Frequency*

Ideally, a walking school bus or bike train program should run every day so families can count on it. However, it is possible to start small by selecting one or two days per week, and/or by targeting specific neighborhoods (e.g. a housing development close to the school) as a way to begin developing the program. You might even start with a special one-time walking school bus, such as for International Walk (and Roll) to School day in October. Some programs operate in the morning only, since children have after-school programs or go somewhere other than their home after school, or may not have a parent waiting for them at home.

*Designating Routes and Stops*

Walking routes should be sited on streets with complete pedestrian facilities, prioritizing safe crossings and lower traffic speeds and volumes, as well as low crime streets. In many cases, these streets will also provide the best route for bicycle trains, although coordinators should also identify dedicated bicycle facilities that may lead to the school. Stops may either be at each child’s house (which is more convenient for parents but may take longer) or at gathering points (e.g. one meeting place per block, as well as gathering spaces at parks). Including at least one

## Walking School Bus / Bike Train...continued



Online mapping tools, such as Google Maps, are increasingly used to establish walking school bus/bike train routes and stops. This method can help make a program more accessible to new or newly interested parents, facilitate multiple walking or biking routes, and can communicate real-time modifications, such as for construction projects and inclement weather.

“stop” with parking facilities is also a good way to increase participation for families who may live far from the school but can drop off children to join the walk. Finalized routes and stop locations should be mapped out for parent and volunteer reference.

### Finding bus “drivers” and train “conductors”

Once the routes and number of participating children have been determined, the coordinator should decide how many adults will be needed for each route. Experts recommend one adult per three children for children aged 4-6 and one adult for six children for older elementary children aged 7-9.

Bus “drivers” (A.K.A. route leaders) are usually volunteers, but it is important to make sure that the volunteers are dedicated, responsible, and well-supported. Interested parents are natural volunteers. Some communities have also had outstanding success recruiting from a local college or university, where students can receive college credit in exchange for their commitment to the program. An active senior group may also be a good partner organization to find volunteers who are available during the day. It is also an option to pay route leaders a small stipend (as some crossing guard programs do). The school

coordinator should screen each potential volunteer through an interview and criminal background check.

### Training

All route leaders must also attend a detailed training covering:

- The goals and outline of the walking bus program
- Expectations for route leaders
- Traffic safety and group management techniques
- Emergency procedures (e.g., injury protocol and what to do if a route leader cannot serve on a given day)
- Alternate school schedule and inclement weather policy
- Late arrival policies and child “code of conduct”
- Any tracking protocols that should be followed (such as a daily attendance worksheet)

The coordinator should also provide first aid kits and safety vests to each volunteer, along with the route map and parent contact information for each participating family.

### Promotion

Outreach typically begins two weeks after the start of school. Strategies to promote the program include:

- Sending home information with school orientation materials
- Reaching out to/through the PTAs
- Hosting a booth at back to school night
- Creating an easy-to-use website (or page within the school website) where families can sign up online

### Liability

Organizers should work closely with the school district to address liability concerns. If the program cannot be covered under an existing policy, partnerships with a third party (such as the PTA or the City) may provide an alternative. Parents should also sign permission slips and liability waivers (the exact language should be determined by the risk manager) as well as provide emergency contact information.

## Resources

- International Walk (and Roll) to School Day  
<http://www.walktoschool.org/>
- The Walking School Bus Guide: Combining Safety, Fun, and the Walk to School (SafeRoutesInfo.org)  
[http://guide.saferoutesinfo.org/walking\\_school\\_bus/index.cfm](http://guide.saferoutesinfo.org/walking_school_bus/index.cfm)

## Encouragement

## SCHOOL POOL

**Overview**

SchoolPool is a transportation ride matching service that encourages groups of parents to carpool to school.

**Benefits**

- Helps families save time and money
- Particularly useful for families with multiple children at different schools
- Provides a transportation alternative for after school activities
- Reduces traffic congestion and improves air quality around the school's pick-up and drop-off areas

It's cool to pool to school!



[www.SchoolPool.511.org](http://www.SchoolPool.511.org) has promotional flyers available in several languages

**[www.schoolpool.511.org](http://www.schoolpool.511.org)**

The Metropolitan Transportation Commission (MTC) operates the 511 Traveler Information program, which provides free traffic, transit, rideshare and bicycling information including a free service called SchoolPool. Regardless of whether you drive, bike, or walk your children to school, SchoolPool can help you share these responsibilities with other parents and save you time. The key to SchoolPool is participation - the more schools and families sign up, the easier it is to use.

After registering with [www.schoolpool.511.org](http://www.schoolpool.511.org), parents get a "matchlist" with contact information for other potential carpoolers with similar needs. The participants then e-mail or call to arrange shared rides to school. MTC's 511 does not disclose your child's name, only the parent contact information you provide. A flyer with information about the program can be downloaded from the website and is available in English, Spanish, or Chinese.



School pools can be included as part of a "Back to School Blitz" campaign. In Marin County, the SchoolPool is also part of a "Green Trip Challenge" that calculates reductions in greenhouse gas (GHG) emissions from walking, biking, transit, and carpooling and awards prizes to the winning schools.

**[www.commute.org](http://www.commute.org) (carpool incentives)**

The Peninsula Traffic Congestion Relief Alliance has a commuter information website that includes carpool incentives. Parents who agree to carpool to school with another family at least 2 days per week for 4 weeks can receive a \$25 gas card as a one-time incentive. More information is available by clicking "Carpool Incentive Program" from the dropdown list under "Programs" at the top of the main webpage.

**Steps to Take**

- Ensure that each family in your carpool has an up-to-date and comprehensive list of contact information
- Let your child know exactly who is picking him/her up
- Set expectations for the time to meet, the location, and departure times
- Consider riding with your child's carpool a couple of times to get your child comfortable and to see if the SchoolPool arrangements are working for everyone

**Resources**

- MTC's Bay Area SchoolPool website  
<http://www.schoolpool.511.org>
- Peninsula Traffic Congestion Relief Alliance  
<http://www.commute.org>

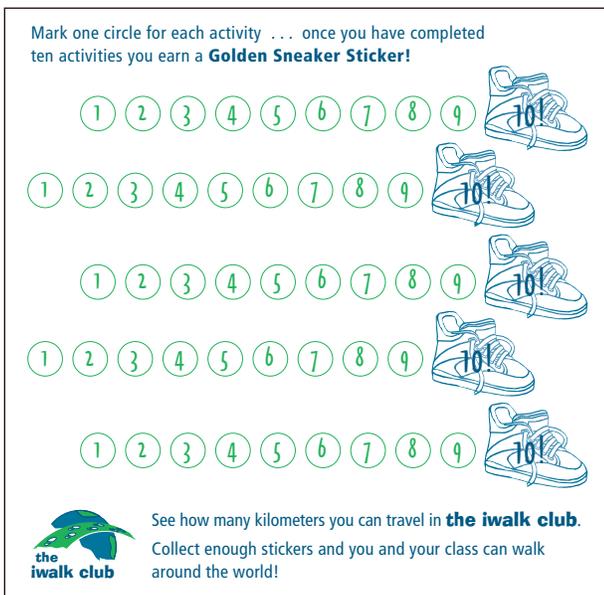
### Overview

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, school-wide 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 recognition. 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.

### Types of Competitions

#### Pollution Punchcard / Mileage Club

These year-round programs are 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 carpools to school, a school representative or student records the activity on a card or tally sheet. After a certain number of points are reached or the card is “complete” the student receives a prize or incentive.



Sample mileage club card with various levels of incentives (Safe Routes to School Canada - [www.saferoutestoschool.ca](http://www.saferoutestoschool.ca))

#### Commute Challenge Week/Month

This week or 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 schools 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. More recent examples have included online mapping/tracking and other technology lessons as part of this activity.

#### 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 highest level of 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

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 or California on their way. Teacher or volunteer support is required.

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

- Shoelaces, pedometers, reflective zipper pulls
- Bicycle helmets, lights, or priority bike parking spots
- Raffle tickets for a bicycle from a local bike shop
- Early dismissal, extra recess time, or pizza parties
- School-to-school or staff challenges

### Resources

- Golden Sneaker Award Guidebook (Marin County) <http://www.tam.ca.gov/Modules/ShowDocument.aspx?documentid=494>
- Mileage Clubs and Contests Guide (SafeRoutesInfo.org) [http://www.saferoutesinfo.org/guide/encouragement/mileage\\_clubs\\_and\\_contests.cfm](http://www.saferoutesinfo.org/guide/encouragement/mileage_clubs_and_contests.cfm)

## Encouragement

## BACK TO SCHOOL 'BLITZ'

## Overview

Families set transportation habits during the first few weeks of the school year and are often not aware of the multiple transportation options available to them. Because of this, many 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" can include many of the elements described in this guide, including suggested walking route maps, safety education materials, important contact and volunteer opportunity information, a calendar of events, and traffic safety enforcement notices.

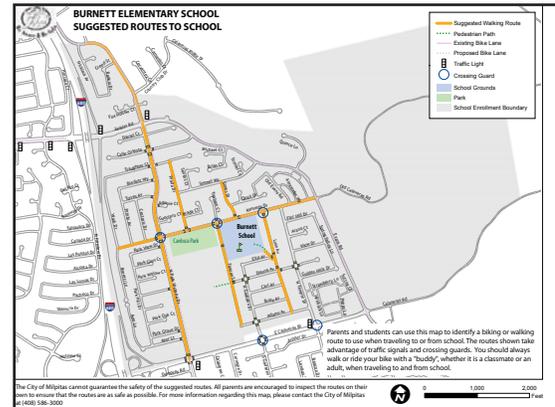
## Benefits

- Influences parent driving behavior at beginning of school year before habits and routines are set
- Sets expectations for safe drop-offs and pick-ups by communicating preferred routes by which drivers should access school, parking/no parking policies, and loading/unloading procedures
- Establishes baseline outreach for education and encouragement programs that can build momentum and excitement for activities to occur later in school year
- Leverages and promotes all existing SR2S activities

## Steps to Take

At the beginning of the year, the school can distribute to all students a packet of information with a 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. The packet could include:

- School transportation maps that include bicycle facilities and suggested walking routes, transit and school bus stops, drop-off and parking area procedures, and existing bike parking locations
- Transit schedules and available carpool information
- Pledge forms about reducing the number of times that families drive to school (entries can be entered in a raffle for a prize donated by local businesses or the PTA)



Having a high-quality suggested walking route map, and sharing it through a "Back to School Blitz" campaign, can be a relatively simple but effective way to encourage parents to seek alternatives to driving their children to school (or engage in a Park + Walk activity).

In addition to the packet, the following strategies can be included as part of the "Blitz":

- Staff a table at back-to-school night with materials and trained volunteers who can answer questions about transportation issues
- Post a "School Pool" map to facilitate coordination by nearby families (see School Pool for more information)
- Include an article in the first school newsletter about transportation options and resources
- Coordinate with local law enforcement on enhanced enforcement activities, such as school zone speed and crosswalk enforcement, at the beginning of the school year or after a holiday break
- Occasional follow-up "backpack mail" (e.g. after holiday breaks) to remind parents about travel options and policies or upcoming SR2S events (such as National Bike Month)

## Resources

- Addressing the Behavior of Parents and Caregivers (SRTS) [http://www.saferoutesinfo.org/lawenforcement/resources/parent\\_ed.cfm](http://www.saferoutesinfo.org/lawenforcement/resources/parent_ed.cfm)
- California Walk to School Headquarters <http://www.cawalktoschool.com/>
- Let's Move! (White House health encouragement campaign) <http://www.letsmove.gov/>

## Types of Encouragement Activities

### Walk and Bike to School Day/Week/Month

Walk and Bike to School Day/Week/Month are special events that encourage students to try walking or bicycling to school. The most popular of these is International Walk to School Day, a major annual event that attracts millions of participants in over 40 countries in October. Schools can register for this event, and download free educational and promotional materials, by visiting <http://www.walktoschool.org/>.

Other walk and bike to school events can be held yearly, monthly, or even weekly depending on the level of support and participation from students, parents and school and local officials. In preparation for Walk to School Day, students can make signs and banners as part of a “safety art” activity that helps promote the event and builds an understanding of the reasons for promoting walking and biking. Sample recurring event ideas include:

- “Walk or Wheel on Wednesdays”/Walk or Wheel Once a Week (WOW)
- “Spring into Spring”
- “Winter Walk”

### Park + Walk (also known as Park & Stride)

Not all students are able to walk or bike to school; some live too far away or their school walking route includes hazardous situations, such as a busy arterial roadway without sidewalks. This year-round campaign (or individual event) is designed to encourage families who drive to stop several blocks from school and walk the rest of the way. By allowing all students and families to participate in a Safe Routes program, Park + Walk is an inclusive campaign that can be matched up with other activities, such as a walking school bus. It also helps reduce traffic congestion in and around the school.

### School Route Walking Maps

Suggested walking route maps can help parents overcome fears related to traffic and/or a lack of knowledge of pedestrian facilities. These maps typically show stop signs, signals, crosswalks, sidewalks, trails, overcrossings, and crossing guard locations around a school and can also include information about bicycle facilities and average

travel times. Often produced as part of a school walk audit, this resource is best developed in partnership with city, consulting, or other technical experts who have access to Geographic Information Systems (GIS) data and mapping software.



As part of a Park + Walk (or Park & Stride) campaign, some schools provide self-applied car stickers to develop a sense of pride and connection with the SR2S program for those families who do not have viable biking or walking options from home. ([www.brightkidz.co.uk](http://www.brightkidz.co.uk))

## Benefits

- Increases physical activity, which can combat health problems
- Reduces traffic congestion around the school's pick-up and drop-off areas
- Improves air quality
- Alerts parents to potential walking and biking routes available in their area
- Creates a supporting, encouraging environment for parents and kids who do not regularly walk or bike to school

## Resources

- International Walk to School  
<http://www.walktoschool.org/>
- California Active Communities' California Walk to School Project  
<http://www.caactivecommunities.org/w2s/>
- Park and Walk Guide (United Kingdom)  
[http://www.bucksgov.uk/bcc/transport/park\\_walk.page](http://www.bucksgov.uk/bcc/transport/park_walk.page)
- Santa Clarita, CA Suggested Routes to School Maps  
<http://www.santa-clarita.com/Index.aspx?page=615>
- Santa Cruz, CA SR2S Maps (Google Maps example)  
[http://www.ecoact.org/Programs/Transportation/Safe\\_Routes\\_to\\_School/maps.htm](http://www.ecoact.org/Programs/Transportation/Safe_Routes_to_School/maps.htm)

# 4. Enforcement

Strengthening and sustaining relations with local law enforcement officials and implementing strategies that improve traffic law compliance are essential components of any successful Safe Routes to School program.

The following pages describe the most popular enforcement tools, including:

- Crossing Guard Programs
- Speed Watch / Feedback Signs
- School Safety Patrols
- Crosswalk Stings /Enforcement Campaigns
- School Parking Lot “Citations”

It is important to remember that proper enforcement starts and ends with good behavior from parents, students, and neighbors. To be effective and sustainable, enforcement campaigns should be school and community-driven partnerships that do not overly rely on punitive measures by local law enforcement. To that end, these targeted and “do it yourself” strategies can help engage - but not overwhelm - police departments that are often faced with increasing demands and fewer resources.

## Overview

The primary responsibility of an adult school crossing guard is to help children safely cross the street as they walk or bicycle to and from school. The guard stops traffic with hand signals or a STOP paddle, and is always the first person in and the last person out of the street. While an adult crossing guard should not direct traffic unless specifically trained as a traffic control officer, motorists can be cited for an infraction under section 42001 of the California Vehicle Code (CVC Section 2815), if they do not stop for or otherwise ignore a guard's direction.

## Benefits

A well-trained adult school crossing guard can:

- Discourage unsafe behavior by children near traffic, such as darting into the street without looking or crossing against a traffic signal - as well as for all pedestrians at the school crossing
- Create temporary gaps in traffic, and utilize existing gaps more efficiently, to help students cross safely
- Increase compliance of motorists who should be stopping for pedestrians in the process of using the school crossing
- Observe and report any incidents or conditions that present a potential safety hazard to the school children or the guard (i.e., add "eyes on the street")

## Steps to Take

### Program Structure

An adult school crossing guard can be composed of volunteer community members or paid employees. Typically a paid program is preferable since it increases motivation, although many highly-organized volunteer programs exist and have been sustained over time. Regardless of whether or not crossing guards receive compensation, substantial efforts are required from a coordinator to conduct the screening and hiring, perform background checks, handle insurance coverage and equipment purchase/maintenance, and monitor the guards daily. Funding from the County's Safe Routes to School Program currently cannot be used to pay for crossing guard salaries.



### Identifying Need and Locations

Although some federal technical guidance exists, the decision of where and when to locate crossing guards is typically the responsibility of local officials and organizers. Some schools use a formal crossing guard request system, while others organize a committee or hire outside technical assistance to identify appropriate locations. All programs should work closely with their local police and traffic safety departments to administer the program.

## Resources

- Crossing Guard Program Guidelines (SRTS)  
[http://www.saferoutesinfo.org/guide/crossing\\_guard/index.cfm](http://www.saferoutesinfo.org/guide/crossing_guard/index.cfm)
- Crossing Guard Training Program (NCDOT)  
[http://www.ncdot.org/bikeped/about/training/school\\_crossing\\_guard/](http://www.ncdot.org/bikeped/about/training/school_crossing_guard/)

## Enforcement

## SPEED WATCH / FEEDBACK SIGNS

### Overview

Fast-moving traffic is a major deterrent to children and parents walking and biking to school, especially where crossings of arterial roadways are required or where sidewalks are discontinuous. In known speeding problem areas, radar detection can help reduce speeds and enforce speed limit violations. Two common strategies that do not require active police enforcement (i.e., manned patrol vehicles) are setting up mobile radar trailers that display approaching motorists' speed next to a speed limit sign, and loaning radar guns to local residents or school officials in order to document and self-report speed limit violators.

### Benefits

- Provides 'hard' data to assist local traffic enforcement and roadway engineering services
- Alerts motorists, who may otherwise not be looking at their speedometer, to their actual driving speeds
- Low-cost, high yield activity to improve both traffic safety and education
- Radar trailers or guns can be shared among several schools

### Neighborhood Speed Watch

With a Neighborhood Speed Watch program, a radar unit is loaned out to a designated neighborhood or school representative to record speed information about



vehicles. The person operating the radar unit must record information such as the make, model, license number, and travelling speed of offending vehicles. This information is sent to the local law enforcement agency, which then sends a letter to the registered vehicle owner informing them that the vehicle was seen on a specific street exceeding the legal speed limit. Letters are typically sent out to those driving at least 5 mph over the speed limit. Although not a formal citation, the letter explains that local residents are concerned about safety for their families and encourages the motorist to drive within the speed limit. Yard signs

Because they can be easily moved, radar trailers are often deployed on streets where local residents have complained about speeding problems. If frequently left in the same location without officer presence, motorists may learn that speeding in that location will not result in a citation and the strategy can lose its benefits. For that reason, radar trailers should be moved frequently.



can also be incorporated into the speed watch program. Participating neighbors post signs stating that children live in the neighborhood and it is necessary to slow down for their safety.

### Radar Trailers/Feedback Signs

Speed radar trailers can be used as both an educational and enforcement tool. By itself, the unmanned trailer serves as effective education to motorists about their current speed compared to the speed limit. As an alternative enforcement measure, the police department may choose to station an officer near the trailer to issue citations to motorists exceeding the speed limit.

A permanent speed radar sign can be used to display approaching vehicle speeds and speed limits on roadways approaching the school site. The unit is a fixed speed limit sign with built-in radar display unit that operates similar to a radar trailer. In order to maximize effectiveness for school settings, the radar display unit should be set to only activate during school commute hours. Roadways approaching the school site are the most appropriate location to display speeds, instead of streets along the school frontage that will likely have lower speeds due to pick-up/drop-off traffic.

### Resources

- Role of the Enforcement Officer (SRTS)  
[http://www.saferoutesinfo.org/guide/enforcement/role\\_of\\_the\\_enforcement\\_officer.cfm](http://www.saferoutesinfo.org/guide/enforcement/role_of_the_enforcement_officer.cfm)

## Types of Enforcement Activities

### School Safety Patrols

School safety patrols are comprised of 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.”

### School Crosswalk Stings / Enforcement Campaigns

In a crosswalk sting operation, the local police department targets motorists who fail to yield to pedestrians in a school crosswalk. 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. The City of Santa Clarita, CA has an



annual “Santa Sting” in which a police officer dresses up as Santa Claus and issues citations to motorists who do not yield to Santa in the crosswalk.

As part of a broader enforcement campaign targeting school safety, the City of Palo Alto Police Department conducts “Operation Safe Passage” three times a year during school commute periods. In addition to motorist violations (e.g., speeding, talking on cell phone, failure to yield to pedestrians), officers stationed at schools ticket jaywalking and bicycle safety violations to promote safe behavior for all travel modes.

### 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.

## Benefits

- Increases awareness of laws requiring that motorists yield to pedestrians in crosswalks
- Educates motorists about appropriate parking behavior
- Encourages older students to take on leadership positions and reinforces street crossing, student drop-off, and pick-up procedures
- Leverages/maximizes police enforcement levels that are otherwise difficult to sustain throughout the school-year

## Resources

- California Safe Routes to School State Network  
<http://www.saferoutespartnership.org/state/network/california>



# 5. Engineering (& Operations)

Engineering improvements to the physical environment around schools are integral to a comprehensive Safe Routes to School Program that ensures walking, biking, and other “green” forms of travel are easy and safe. They are also, typically, the most costly to implement and require traffic engineering expertise and approval. Before seeking to invest in infrastructure, a thorough site evaluation and discussion with community stakeholders are needed to determine the highest priority issues and appropriate range of potential solutions.

This section discusses the all important initial step toward engineering improvements - the walk about, or walk audit - together with related school travel operations and policies. For more information on specific engineering improvements and relevant design guidelines, please contact your local planning or public works department or use the online resource links as a start.

## **Focus on Easy to Implement Improvements First**

Signing and striping are low cost improvements that can greatly improve pedestrian and bicyclist access to school. In California, yellow crosswalks and school specific signage also identify a location as a school zone and warn motorists of potential pedestrian and bicyclist activity. Such improvements are relatively easy to install and will create momentum and support for more intensive infrastructure projects.

## **Operations & Policy**

In tandem with or independent from engineering improvements, certain operational strategies and policies can help reduce conflict between vehicle traffic, buses, and students walking and bicycling to school. This section describes various policies with regard to pick-up and drop-off activities that are incredibly important and can often be very low cost. Keep in mind, however, that these activities may involve a greater outlay of staff resources and new procedures often take time and outreach to gain acceptance.

## **Develop a School Travel Plan**

School travel plans are living documents that collect, organize, and share walk audit notes, improvement concepts, travel procedures and policies, and other school information relevant to a Safe Routes to School program. These plans are important tools to assist local task forces and city staff, and to compete for outside grant funding. Ideally, they are also made available to new and returning parents, either online, in a back-to-school packet, or by request. Without a travel plan, good work and effort toward identifying physical school improvements may go unnoticed.

## Overview

One primary purpose of this program guide is to provide a resource for local groups to conduct a “school site audit” of their school. A school site audit, sometimes called a walking audit or walkabout, is an assessment of the pedestrian and bicycling conditions around the school area. 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 could 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 identification of the built environment around a school (e.g. streets, sidewalks, pathways, crosswalks and intersections, bike routes, traffic controls), the 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).

## Steps to Take

A School Site Audit Checklist form is provided in Appendix A of this Program Guide. The checklist ensures detailed information is collected for each of the following topics:

- Student Drop-Off and Pick-Up Areas
- Bus Loading Zones
- Sidewalks and Bicycle Routes
- Intersections Near the School Property
- Sight Distances
- Traffic Signs, Speed Controls & Pavement Markings

The local school task force and/or SR2S coordinator should use the School Site Audit Checklist (or a similar form) as a basis for conducting or planning their walkabouts.

Along with the checklist, an aerial base map of the school area is an essential part of the site audit. These should be handed out to school groups and marked up with



Designated students assist with the drop-off process.

identified issues and suggested improvements. These maps, along with the information from the checklist form, can be forwarded to a school community task force, public works staff, or consultant for use in pinpointing and prioritizing improvements in the school area. Audit notes should also be documented within school travel plans.

## Benefits

- Provides an “on the ground” assessment and set of recommendations to improve school access and safety
- Facilitates local input to identify important issues and engages stakeholders on a range of potential solutions
- Helps document the public planning process for a specific improvement, which is critical to compete for grants and obtain decision-maker approval

## Resources

- National Safe Routes to School Partnership  
[http://guide.saferoutesinfo.org/engineering/neighborhood\\_walkabouts\\_and\\_bikeabouts.cfm](http://guide.saferoutesinfo.org/engineering/neighborhood_walkabouts_and_bikeabouts.cfm)
- The ABC’s of MTC (handbook for navigating the Metropolitan Transportation Commission and other regional agencies/potential funding sources)  
[http://www.mtc.ca.gov/library/abcs\\_of\\_mtc/MTC-ABCs.pdf](http://www.mtc.ca.gov/library/abcs_of_mtc/MTC-ABCs.pdf)
- SRTS Online Guide: Engineering  
<http://guide.saferoutesinfo.org/engineering/>

## Overview

School traffic safety begins at the front doorstep - or more accurately, the parking lot and pick-up/drop-off zones. Unlike most public facilities or office buildings, school traffic movements are heavily synchronized around a specific schedule. Left to organize itself, school traffic can easily overburden local roadway facilities and pose unique safety hazards to students. Inefficient drop-offs and pick-ups can also increase local air pollution and strain relationships with adjacent residents and community members.

## Types of Operational Strategies

### Valet Drop-off

“Valet” is a technique to improve traffic flow within the drop-off and pick-up loop by assisting students into and out of vehicles. This technique eliminates the need for parents to get out of the vehicle to open the door for a child or remove bags and other items, thereby reducing delays and unnecessary idling. The valet system is typically staffed by school teachers, staff, or parent volunteers. Some schools use older students as valets, for example 5th or 6th graders helping younger students in a K-6 school. However, student volunteers must get out of class early to prepare for pickup.

### Platooning Drop-off/Pick-up System

In a platooning system, all vehicles unload/load simultaneously, then proceed to the exit. If a vehicle unloads or loads more efficiently than the vehicle in front of it, the rear vehicle must wait for the lead vehicle to finish unloading/loading, then follow it out of the loop. This tool is best used to control the parent inclination to always drop-off and pick-up the student directly in front of the school. Often, additional curb loading available downstream of the school can go underutilized, creating excess congestion and delay prior to entering the lot. At least two monitors are needed to effectively operate the vehicle platoon – one at the loop entrance to direct the maximum number of vehicles into the lot for a single cycle, and a second to ensure that the lead vehicle proceeds to the frontmost loading stall.



With a valet drop-off process, designated (usually older) students assist arriving students and their belongings out of the car, which helps keep parents in their vehicles and lines moving, and reduces idling.

### Carpool Priority Parking and Load Zones

Policies that successfully encourage carpooling help limit demand on school facilities and on the local roadways. For older students and faculty/staff, priority parking permits can be awarded to those who commit to carpooling. For elementary school families, express loading can be used as an incentive if picking up more than one child.

### Dedicated Bus Zones

Establishing separate areas for vehicular and bus traffic can help improve traffic flows in the pick-up/drop-off area. Conflicts can occur when private vehicles and buses arrive at the same time and in the same location. Separating traffic often necessitates establishing an off-street bus zone, dedicated solely to buses. Private vehicles should not be allowed to load/unload in the bus zone. Bus zones need to be large enough to accommodate all the buses that might be parking there at one time. Sometimes it is possible to stagger the arrival times of the buses, thus requiring less space. The zones must be clearly marked and there should be adequate sidewalk space for students to wait for the bus.

## Resources

- School Zone Safety Supplies

<http://schoolzonesafety.com/index1.html>

# 6. *Evaluation*

Evaluation efforts are essential to developing and sustaining a Safe Routes to School program. By understanding and documenting the effects on travel behavior, parent and student attitudes, and/or the physical conditions around a school, programs can maximize their effectiveness and prioritize new investments. Evaluation efforts are often also required to be competitive or eligible for grant funding. This section discusses student hand tallies and parent surveys, which are the two primary evaluation methods used by most programs.

Other evaluation efforts/programs include:

## **Bicycle and Pedestrian Counts**

Bicycle and pedestrian counts provide hard data on student travel volumes by mode and can be used to verify or supplement the student hand tally and/or parent survey results. Counts on particular days may also help identify potential program goals. For example, if a school promotes International Walk and Roll to School Day (usually the first Wednesday in October), counts may be conducted during that day to assess how well the event was promoted and how many families took part. Counts are most informative when conducted annually on or near the same day to minimize the influence of unintended factors, such as bad weather, daylight savings time influences or the school calendar.

## **Bike Parking Survey**

Bike parking surveys are another way to assess travel behavior by counting the number of students parking their bicycles at school.

## Overview

Student hand tallies are conducted to quickly determine the way students travel to and from school on a particular day. Teachers (or another adult) ask students to raise their hands in response to the mode of transportation that is read aloud from a list (carpool, bicycle, drive alone, etc.). In addition to recording the number of students that use each mode, the tally taker records the weather and any special events occurring that day.

## Steps to Take

Ideally, student hand tallies should be conducted during the fall and spring on multiple mid-week days to gain the best understanding of mode choice during a typical school day. Two days is the minimum necessary to determine this ‘average’ percentage of modes, although programs are encouraged to conduct tallies for all three mid-week days - Tuesday, Wednesday and Thursday. In order to produce comparable results, hand tallies should not be conducted during the week of International Walk and Roll to School Day (in October) or on the same day(s) as other large-scale events.

Particularly for schools new to the Safe Routes to School program, or for schools expanding their SR2S activities, hand tallies early in the school year are important to measure the “baseline” from which the success of new or additional programs can be measured. In the fall semester, preparation for tallies should begin as soon as the school year starts (if not before) if they are to be conducted before the weather turns and days get noticeably shorter. Preparation activities include printing and distributing the appropriate number of tally sheets (in multiple languages as needed), training teachers or providing written instructions, establishing incentives for teacher participation (e.g., a coffee shop gift card), and coordinating who will collect the completed tally sheets.

The National Center for Safe Routes to School provides a hand tally form for which they are willing to collect completed surveys and produce a basic summary analysis. The Center does not provide this service if a different form is used. Appendix A provides a copy of the Center’s



Students raising their hands in response to the mode they used to get to school. It is important to conduct these surveys on at least two separate days within the same week to develop an accurate accounting for how children typically get to school.

hand tally form, and more information is provided in the “Resources” section below for sending and processing the completed tally sheets.

It should be noted that student hand tallies are required for eligibility under several grant programs, including the California Safe Routes to School funding cycles.

## Benefits

- Provides a general sense of mode choice on a typical day
- Provides mode choice data to assess the effectiveness of education, encouragement, and other programs
- Supplies important information for grant applications and other Safe Routes to School Initiatives

## Resources

*National Center for Safe Routes to School:*

- “Ways to Collect Information”  
[http://guide.saferoutesinfo.org/evaluation/ways\\_to\\_collect\\_information.cfm](http://guide.saferoutesinfo.org/evaluation/ways_to_collect_information.cfm)
- Student Arrival/Departure Hand Tally Form  
[http://www.saferoutesinfo.org/sites/default/files/SRTS\\_Two\\_Day\\_Tally\\_Scan2009.pdf](http://www.saferoutesinfo.org/sites/default/files/SRTS_Two_Day_Tally_Scan2009.pdf)
- Completed Hand Tally Data Entry Form  
<http://www.saferoutesdata.org/>

## Overview

In order to evaluate the impacts of the grant that is helping fund the San Mateo County SR2S program, the Metropolitan Transportation Commission (MTC) has developed a two-page parent/caregiver survey for use by participating schools. Included in Appendix A of this Program Guide and also available online, the survey asks a number of questions related to school travel behavior and attitudes toward existing travel conditions, real and potential impacts of SR2S programs, and opportunities for volunteering to establish walking school buses, bike trains, etc.

Parent surveys are a great way to find the reasons why families and/or students choose certain modes to get to/from school. Sometimes offered twice during the school year (similar to the student hand tally), parent surveys should be administered at least once per year in either the fall or spring semester as the primary method for assessing the overall impacts and success of a Safe Routes to School program.

## Steps to Take

Both hard copy and online parent surveys will be made available by the SR2S program. A popular method to distribute parent surveys and/or online survey flyers is by sending them home as “backpack mail” with the student. To maximize response rates and turnaround time, parents should be encouraged to complete the form in 1-2 days. Completed hard copy surveys are then returned to the school, either via a dropbox or to an identified staff person (online surveys will be automatically collected). Depending on the level of parent engagement, student reminders and cross-promotions at school events may also be needed.

Some parents and/or staff may be familiar with the National Center for Safe Routes to School standard parent survey form, which is available online and can be processed for free once completed (making it a popular choice for schools with limited resources). Please note this form will not be accepted by the San Mateo County Safe Routes to School program in the 2011-2012 and 2012-2013 school years. To limit the burden on schools, however,



Parent surveys are great opportunities for families to discuss their travel behavior and provide feedback on what issues are most important and what programs are most effective.

the Metropolitan Transportation Commission (MTC) will process and summarize all online survey responses and a limited number of completed hard copy forms at no charge.

## Benefits

- Provides a second travel mode data set for comparison with student hand tally results
- Supplies more detailed travel information to calculate environmental benefits, including reductions in greenhouse gases (GHGs) from SR2S activities
- Supplies information on parent attitudes and concerns related to school travel options
- Helps assess existing program impacts and prioritize future program activities/focus areas
- Engages families in a discussion of travel behavior
- Supports grant applications and other opportunities for funding
- Helps identify parent volunteers

## Resources

- Appendix A contains the parent survey to be used in the 2011-2012 school year. An online version will also be provided through the SR2S program website, and surveys will be available in English, Spanish and Chinese
- Contact the San Mateo SR2S program for more information on how to distribute, collect and process hard copy parent surveys and/or identify the survey web address.

# Appendix A: Key Forms



The following pages contain three key forms for use by schools and volunteers participating in a Safe Routes to School Program:

**1. Student Arrival and Departure Hand Tally Sheet (national form, one page)**

**2. Safe Routes to School Parent/Caregiver Survey  
(MTC grant evaluation version, six pages total)**

*A. English (two pages)*

*B. Spanish (two pages)*

*C. Traditional Chinese (two pages)*

**3. Suggested School Site Audit Checklist (eight pages)**