



Photo Credit: Chris Metka, 2007, Boulder, CO.



Photo Credit: Mike Cynecki, 2010, Phoenix, AZ.



Photo Credit: Dan Burden, 2006, U.S.



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CONTRA COSTA
**transportation
authority**

Contra Costa Safe Routes to School: Understanding Needs, Moving Ahead

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There is sustained and growing interest in Safe Routes to School efforts throughout the Bay Area. Safe Routes to School (often abbreviated as SR2S) activities can take many forms, but all have the basic objective of improving safety for pedestrians and cyclists around schools. When more children walk or bike to school there can be a wide range of benefits, from reduced vehicular traffic in the school vicinity, to improved public health outcomes through increased physical activity, to an enhanced sense of community for the neighborhood around the school.

There have been and continue to be significant SR2S efforts in Contra Costa. These efforts generally fall into two categories: capital improvements and programs. Capital improvement projects enhance the physical infrastructure around schools to allow for safer and more convenient walking and bicycling. Programs promote safety and encourage walking and bicycling activities through student and parent education and encouragement.



*Bike/Ped Road Simulation at Knightsen Elementary School in Knightsen.
Source: Street Smarts Diablo.*

Benefits of SR2S Activities

SR2S projects and programs can encourage physical activity, improve safety and reduce greenhouse gas emissions. Walking or biking to school can help more students reach the recommended goal of at least 60 minutes of physical activity every day. Reducing vehicle speeds in school zones is a common goal of SR2S projects and programs; research has consistently shown a link between higher-speed collisions and increased risk of injuries and fatalities.



*International Walk to School Day at Timber Point Elementary School in Discovery Bay.
Source: Street Smarts Diablo.*

In addition to personal health and safety benefits, research suggests that SR2S projects and programs may have a modest effect on reducing the total number of vehicle trips in a community, thereby contributing to reductions in vehicle miles of

travel (VMT) and associated greenhouse gas emissions. MTC, for example, has estimated that the regional SR2S programs funded through the Climate Initiatives Program reduced VMT by about 34 miles annually for every \$1000 spent. If that same relationship holds in Contra Costa, and the county were to fund all its SR2S needs over a 20-year period, that could reduce annual VMT by over 2 million miles.

The SR2S Needs Assessment

To understand what was needed to encourage more walking and bicycling to school, the Contra Costa Transportation Authority (CCTA, or the Authority) initiated a comprehensive assessment of



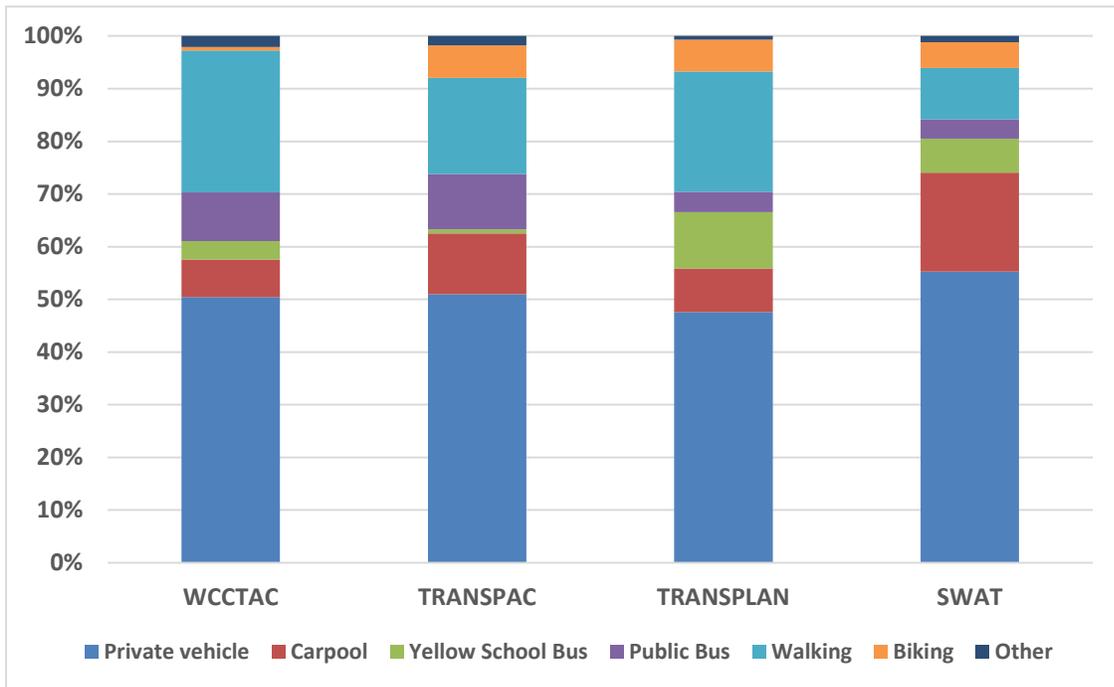
SR2S projects and programs in Contra Costa. The purpose was to understand SR2S activities occurring throughout Contra Costa, estimate the funding needed to support future SR2S capital improvements and programs, provide resources to local communities as they plan, design and implement improvements, and offer targeted technical assistance to specific school sites. This summary offers a brief overview of the Authority's efforts. Detailed documentation of each element is attached.

Understanding Current Activities

The Authority's efforts began with an Existing Conditions report summarizing the SR2S programs being offered and the level of participation in those programs. Much of the information came from detailed surveys of schools and local jurisdictions, as well as input from a SR2S Task Force made up of local staff involved in SR2S activities throughout the county.

The survey found that, on average, about 65 percent of the students in Contra Costa traveled to school using a car, while 5 percent rode a bicycle and 17 percent walked. Approximately 13 percent used public buses or yellow school buses. Results varied by location: walking, for example, is more common in West County and East County, but less common in the Lamorinda and Danville/San Ramon areas. Survey respondents cited a number of barriers to walking or bicycling to school. These included physical barriers such as a lack of sidewalks or crosswalks, concerns about student safety when using high-speed or high-volume roads, and the inconvenience of walking or biking when there are long distances between home and school. The Existing Conditions report also goes into detail about the nature of the current SR2S programs and the number of schools participating in them.

How Students Get to School in Contra Costa



SR2S Needs in Contra Costa

Building upon the understanding of Existing Conditions and with important assistance from the SR2S Task Force, a needs assessment exercise was undertaken to estimate the funding required to address SR2S needs for all 217 of Contra Costa’s public elementary, middle, and high schools. (Private schools were outside the scope of this effort, but could be added later using a similar approach.) The needs assessment could be used as a basis for establishing new funding programs and advocating for new funding sources.

Given the size and complexity of the county and the diversity of its needs, this effort necessarily required a number of assumptions and simplifications to complete the assessment within the available timeframe and resources. The needs assessment thus presents an order-of-magnitude estimate of costs for both capital and programmatic categories, unconstrained by available funding levels.

For capital projects, the approach involved assembling information from recently completed local SR2S infrastructure projects and extrapolating that information across all public school locations countywide. Example projects were categorized based on the type of improvements involved; an average cost was calculated for each project type, and that cost was applied to an estimated proportion of schools that have unmet needs for SR2S improvements. The assessment estimated the unmet countywide need for future SR2S capital improvements at \$243 million.

There are currently three organizations in Contra Costa providing SR2S programs: Contra Costa Health Services, San Ramon Valley Street Smarts, and Street Smarts Diablo. Staff from these three organizations provided essential information to understand current SR2S programs and to determine future needs. First, all currently active programs were divided into categories by program type, and an average cost to provide each type of program was calculated based on the experiences of the current providers. Next, the stakeholders identified a series of new programs that could be implemented

to augment the current offerings, and the cost per school of each new program was also calculated. The new programs would include substantial investments in subsidized transit passes and



Walking School Bus at Meadow Homes Elementary School in Concord

Source: Contra Costa Health Services.

expansion of the yellow school bus programs currently active in certain parts of the county. Finally, the average annual cost per school for both the current and new programs was applied to all schools. The assessment estimated the unmet countywide cost of all SR2S programs at \$58 million annually.

SR2S Resource Guide

To support local SR2S efforts, the Authority developed an online resource guide (<http://www.ccta.net/uploads/536d436cbe703.pdf>).

The guide contains important information for local communities in planning, designing and implementing SR2S infrastructure improvements and support programs. The resource guide is a directory of best practices, case studies, model policies and programs, standards and guidelines. Several SR2S resources already exist, so the Authority's online resource guide compiles and synthesizes available documents, best practices and current research. The tools provided assist local jurisdictions in becoming more strategic about supporting bicycling and walking to school activities, improve its chances in applying for funding, and in addressing engineering, programmatic and funding. The intent of the online resource guide is to provide a single, consolidated location individual jurisdictions can explore to find what is most applicable to their situation.

There are essentially two types of SR2S programs local communities can pursue: those hosted by an independent program provider (such as Contra Costa Health Services, Street Smarts Diablo, and San Ramon Valley Street Smarts), or local volunteer-driven efforts run by the school itself or an active parents group. Many programs function as a hybrid of the two. Regardless of the type of program pursued, involvement of the school district is essential for success. The Authority's online resource guide provides information on both types



Bike rodeo with parent volunteers at Hidden Hills Elementary School in San Ramon.
Source: San Ramon Valley Street Smarts.



Bike rodeo with parent volunteers at Green Valley Elementary School in Danville.
Source: San Ramon Valley Street Smarts.

of programs, describing the programs available through local providers, as well as offering insights to communities seeking to develop other activities not currently hosted by these providers.

SR2S Technical Assistance

As part of the overall SR2S effort, the Authority provided direct technical support to local jurisdictions throughout Contra Costa to help them identify barriers to walking and bicycling, and to plan for specific SR2S improvements at individual school sites. Technical assistance resources were allocated to the four Regional Transportation Planning Committees (RTPCs) based on school enrollment, and each RTPC led an effort to prioritize requests from the local jurisdictions. In total, 17 requests from 14 different jurisdictions were submitted and received funding.



Solano County SR2S

The table below shows the locations where technical assistance was provided. Site visits and data collection at all 17 school locations were conducted in spring 2015, with the involvement of staff from local agencies and school administration, and work products were delivered in the summer and fall. Several of the local jurisdictions have indicated they are moving ahead with implementation of the improvements that were addressed in these technical assistance efforts.

Jurisdiction	School	Technical Assistance Provided
West County — WCCTAC		
El Cerrito	Korematsu Middle School	➤ Prepare traffic control plan and a walk-and-roll to school map.
San Pablo	Downer Elementary School	➤ Prepare concept plan for crosswalk, sidewalk and street improvements.
Contra Costa County	John Swett High School and Carquinez Middle School	➤ Field observations and counts to determine pedestrian circulation patterns during bell times. Recommendations for enhanced crosswalk treatments at four locations.
East County — TRANSPLAN		
Pittsburg	Marina Vista Elementary School	➤ Prepare concept plan for street improvements and parking access changes.

Jurisdiction	School	Technical Assistance Provided
Pittsburg	Pittsburg High School	➤ Field observations and traffic counts to look at auto/pedestrian conflicts. Recommendations for operational improvements to enhance pedestrian safety.
Antioch	Marsh Elementary School	➤ Prepare concept plan and cost estimate for crosswalk, sidewalk and street improvements.
Oakley	Orchard Park School	➤ Prepare concept plan for street improvements and parking access changes.
Oakley	O'Hara Park School	➤ Prepare concept plan for street improvements and parking access changes.
Oakley	Vintage Parkway School	➤ Prepare concept plan and cost estimate for changes to parking access and pedestrian accommodations.
Brentwood	Heritage High School and Adams Middle School	➤ Field observations and counts; recommendations for operational improvements.
Central County — TRANSPAC		
Concord	Silverwood Elementary School	➤ Field observations of pedestrian activity and volumes, assessment of missing sidewalk facilities along Claycord Avenue, and recommendations for safety improvements.
Contra Costa County (Saranap)	Parkmead Elementary School	➤ Field observations of pedestrian and bicycle activity and recommendations for safety improvements.
Pleasant Hill	Valley View Middle School, College Park High School	➤ Field observations of vehicle circulation, drop-off/pick-up activity, and pedestrian and bicycle activity along Viking Drive; prepare traffic control plan.
Walnut Creek	Walnut Creek Intermediate School, Walnut Heights Elementary School, and Las Lomas High School	➤ Data collection of vehicle, pedestrian and bicycle counts and vehicle speed surveys along Walnut Boulevard.
Southwest County — SWAT		
Moraga	Campolindo High School	➤ Field observations and traffic counts; signal warrant assessment; evaluation of potential changes to parking and access; conceptual design plans.
Danville	San Ramon Valley High School	➤ Field observations of pedestrian crossing; prepare concept plan for crosswalk improvements.
Lafayette	Stanley Middle School	➤ Field observations of school bus stop on Reliez Valley Road; prepare concept plan for crossing and street improvements.

Funding Opportunities

SR2S projects can be eligible for funding from a range of sources. Typical funding sources at the state level are the Active Transportation Program (ATP) or the Highway Safety Improvement Program (HSIP), and certain plans or programs may be eligible for Caltrans Transportation Planning Grants. At the regional level, these projects may be eligible for funding through the One Bay Area Grant (OBAG) program administered by MTC, and bicycle infrastructure projects may be funded through the Bay Area Air Quality Management District's (BAAQMD) Transportation Fund for Clean Air. Measure J, the transportation sales tax program administered by CCTA, is also a potential source of funds for SR2S projects.

Most grant funding programs are highly competitive, and assembling sufficient financial resources to construct these types of projects can be challenging. Local jurisdictions may consider the following strategies, which have helped achieve success in other competitive funding situations:

- ◆ Consider partnering with another agency, such as the school district or public health department, to prepare a joint application, which can demonstrate broad project need and support and thereby improve the project's ranking in the competitive decision-making process
- ◆ Leverage existing local funding sources as matching funds for state or federal grants
- ◆ Prepare scaled concept plans and include them in the grant application to demonstrate project readiness
- ◆ Develop a solid cost estimate, based on justifiable unit costs, and include it in the grant application to underscore the reliability of the project's financial plans
- ◆ Take advantage of opportunities associated with new private developments, which might be conditioned to construct needed elements of the pedestrian and bicycle systems

Next Steps

This package of materials is intended to be a helpful resource to all local jurisdictions and public agencies intending to sponsor SR2S projects and programs. To leverage the materials created as part of this effort, the Authority intends to:

- ◆ Periodically refresh the online resource guide to stay up-to-date with the latest state and national SR2S trends
- ◆ Provide ongoing opportunities for local jurisdictions to receive technical assistance at specific school sites; by taking on responsibility for procurement and contract management, the Authority removes barriers and makes it more efficient for individual local agencies to pursue smaller-scale projects
- ◆ From time to time, update the SR2S needs assessment for application in future funding cycles

Attachments

1. Contra Costa County Safe Routes to School Master Plan Existing Conditions: Data Summary
2. Contra Costa Safe Routes to School Needs Assessment
3. Contra Costa Safe Routes to School Online Resource Guide
4. Contra Costa Safe Routes to School Technical Assistance Documentation

