

Los Cerritos Elementary School: Safe Routes to School Workshop Summary

Prepared for: Los Cerritos Elementary School

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Recommendations Supporting Safer Routes to School & Healthy Community Design

On March 21, 2019 Los Cerritos Elementary School in South San Francisco, along with the San Mateo County Departments of Education and Health, hosted a walk audit and healthy design workshop, facilitated by Mark Fenton. The intent was to develop recommendations to increase the safety of walking and bicycling to the school, with the goal of increasing those modes while reducing the amount of vehicle traffic at school arrival and dismissal times.

Before the walk audit the group discussed the key elements that are known to increase walking and bicycling in a community. Mark summarized the key research into what creates a more livable community generally, and settings that specifically encourage walking, bicycling, and transit use. This included the growing evidence that these factors not only support public health through increased physical activity, but also economic vibrancy, environmental sustainability, and quality of life. Four key characteristics of such thriving communities are as follows:

A. Mixed land use patterns: Compact development with different land uses and activities intermingled and close together, allowing for varied types of destinations within walking, cycling, and transit distance, while preserving open land and agricultural space. Neighborhood schools are thus integral to healthy and sustainable community design.

B. Active transportation facilities: A comprehensive and connected network of pedestrian, bicycle, and transit facilities, such as sidewalks, bicycle lanes, and non-motorized pathways, as well as frequent, affordable, quality transit service appropriate to the community scale, from dial-a-ride to buses and rail.

C. Functional site designs: Destinations and routes are designed to reward, not punish, those who arrive on foot, by bike and transit, such as buildings at the sidewalk, with parking on-street or behind, and elements such as street trees and landscaping; street furnishings such as benches, shade structures, planters, and awnings; human scale lighting and way-finding signs; safe and appealing transit stops with cover, benches and schedule information; and quality, plentiful bicycle parking.

D. Safety and access for people of all ages, incomes, physical abilities and disabilities, including quality street crossings (e.g. highly visible markings, countdown timers and auditory pedestrian signals), full ADA-compliant design, and appropriately applied state of the art traffic calming such as curb extensions, chicanes, median islands, roundabouts, and lane narrowing and road diets.

Recommendations and priorities

At the end of this report is a rudimentary design map, locating some of the specific recommendations for actions that were generated during our working sessions. Many of the ideas focused specifically on encouraging parents to consider walking and bicycling for their students due to the health, performance, and environmental benefits. The following is a list of specific policy and infrastructure actions that should be high priorities, as they could lead to some fairly quick positive outcomes for walking and bicycling safely to school, which could help parents move in this direction.



1. Launch a pedestrian & bicycle safety and skills education program

In general it was felt that many parents would respond to learning of the benefits to students who are more physically active, including better academic performance and fewer disciplinary problems. Walk and bike promotions could be offered to parents through the school website and newsletters, on back to school night, during school fairs, picnics, and other activities.



It was also felt that students will benefit from training in pedestrian and bicycle safety and skills, to make certain all are able to safely navigate streets and sidewalks on their trips to and from school. The instructors could be parent volunteers, the PE teacher, law enforcement, or other partners such as bicycling instructors trained by the League of American Bicyclists; in all cases they should have formal training in pedestrian and bicycle safety instruction. And it's best if all students receive the safety education because it has been woven into the curriculum. Possibilities include the following:

- Build walk and bike safety and skills training into the first several weeks of PE classes. Or include regular assemblies or other class activities focused on key lessons.



- Grade K, 1, 2, curriculum can focus on general safety and pedestrian skills.
- Grade 3, 4, 5 students could be trained in bicycle safety and operation skills. It is worth reaching out to bicycle advocacy organizations and safety groups to obtain bikes, helmets, and trained instructors and curricula.

2. Launch walking school buses.

A walking school bus is simply a designated route to school that a group of students routinely walk, often with adult supervision. The adult can be a parent, teacher, or vetted community volunteer (such as retired teachers, law enforcement, and others). A walking school bus is an excellent way to encourage as many students as possible to be allowed to walk, and for older children to bicycle, to school. Make clear the myriad benefits, including evidence that more physically active students have been shown to perform better academically and have fewer disciplinary problems. It was specifically suggested that the school begin with two walking school bus routes. To establish a walking school bus, consider the following actions:

- **Find student home clusters.** To develop one route, the school can analyze clusters of student residences to identify a logical route that captures the maximum student households over a reasonably short distance, with a safe, direct route to the school. Parents can be encouraged to support such a neighborhood route.



- **Engage parents and high school students as walking bus leaders.** Adults and high school students fulfilling community service obligations can possibly act as leaders for walking school bus groups. Generally background checks and rudimentary safety training are provided for such walk leaders.

- **Centennial Way Trail walking school bus.** The second walking route could be south of the school on the Centennial Way Trail, with students walking from the South Spruce Avenue crossing. This could support a satellite drop-up/pick-off location on S. Spruce Avenue if one could be identified fairly near the trail, such as a church or store parking lot. This would allow parents of older students (say, grade 3 and above) to drop and meet the students there for a walking group. Obviously any vehicles using this location helps alleviate the congestion immediately in front of the school.



- **Five-minute safety delay on car-line at dismissal.** Consider a briefly delayed departure for students going to the car line in front of the school, first releasing those who are walking and bicycling, either all the way home or to a satellite pick-up location (such as the Boys and Girls Club or S. Spruce Avenue). Keeping cars from moving for the first five minutes at dismissal reduces motor vehicle/pedestrian conflicts as students are leaving the school, and allows pedestrians to safely cross key intersections such as W. Orange Avenue and C Street. It also rewards those who walk and bike and is further incentive to consider leaving the car behind.

3. Create a Boys & Girls club drop-off/pick-up circuit.

One of the challenges at peak arrival and dismissal time is traffic congestion created by vehicles immediately adjacent to the school. The best solution is of course to have more children walking (and if mature enough, bicycling), and fewer cars arriving. A satellite pick-up/drop-off (mentioned in #2) on the Centennial Way Trail could help. Creating a designated drop-off/pick-up area in the Boys & Girls Club parking could also be very effective. Done well, this could redirect a significant amount of traffic coming from the east on W. Orange Avenue into a drop-off circuit through the Boys & Girls club parking lot. Following are the proposed steps:



- **Enter from W. Orange Avenue, westbound.** Require vehicles to only enter from W. Orange Ave., such that it is a right turn from the westbound lane.
- **Curbside drop-off/pick-up along the trail.** Direct drop-off/pick-up to occur at the curb along the portion of the parking directly abutting the Centennial Way Trail. Use cones to define a curbside drop-off/pick-up lane. The farther into the parking lot this occurs the better, as it allows more vehicles to cue in the parking lot.
- **Pull forward before stopping.** Require vehicles to pull as far forward in the line as possible before opening the car door, and then have them exit out the back end of the lot onto C street. Consider having safety patrol or adult valets on the curb to open car doors, so that parents never get out of their vehicles during drop-off and pick-up.



- **Students to cross at the high visibility trail crossing.** Students should walk along trail to the crossing of W. Orange Avenue with rectangular rapid flashing beacons (RRFB). It may be advantageous to also locate an adult with a high visibility reflective vest here simply to help assure driver yielding behavior.

- **Note:** Check the sensitivity of the pedestrian sensors on the RRFB at the crossing; it was observed that they seem to go off even when there is not a pedestrian present, and thus may be ignored by some drivers.

4. Create defined drop-off/pick-up lane in front to school (white curb).

Enforce a drop-off/pick-up lane along the white curb in front of the school with cones to require sequential curb-side access only. Currently vehicles routinely park in these areas, and drivers regularly stop there, often leaving their cars to retrieve their students. And cars pull in and out at random whenever a space opens, which is quite unpredictable and unsafe for all drivers. The following could dramatically improve the safety and efficiency of this process:



- Create a continuous loading/unloading lane along the white curb in front of the school, lining it with cones so that vehicles must move through in sequence.
- Eastbound vehicles on W. Orange Avenue would enter the lane near the C Street intersection. They would then pull forward as far as possible before stopping.
- Adults should not be allowed to leave their vehicles, and curbside valets (safety patrol or adults) should open the car doors to allow students in and out.
- To ease connecting students with their cars at dismissal, students could queue in a particular area (say, near the doorway portico), and walk down to the loading area when their car is seen. Or an adult with a radio can be calling for students from a staging area as their cars pull up.

Note that afternoon pick-up may prove to need a longer queuing area than is available in front of the school. In this case, consider placing a coned-off drop-off/pick-up lane on the east side of C Street, adjacent to the school. This would require drivers to enter C Street, drive up (south) to the wide area at the top of the hill, and then turn around (to face north) to pull up next to the school. In this case, a small painted circle at the top of the hill could help define where the vehicles turn around. The loss of all-day parking spaces here, as a white curb is created, could be balanced by eliminating white curb and restoring all-day parking back in front of the school on W. Orange Avenue.



Although these steps may appear to slow the motor vehicle process, it will actually make it quite smooth and predictable, and take roughly the same amount of time. But drivers will have to be patient and wait their turn in an ordered way, which may be a disincentive to some drivers. The positive result may be an incentive to consider letting their children walk, which should be easier to do with the proposed safety enhancements and the opportunity to join neighborhood walking groups.

5. Open two key gateways for pedestrians.

Consistently open the gate on the path connecting the C Street circle to B Street. There is a gate connecting a sidewalk from the C Street neighborhood circle to the sidewalk in front of the High School on B Street. Remove the pole in the middle of the opening as soon as possible (which renders it impassable to strollers, wheelchairs, and very difficult for bicycles), and repair the broken concrete and dirt area connecting the two sidewalks at this gate, so that this can



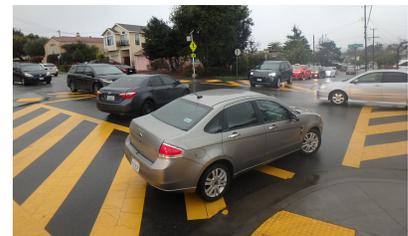
provide consistent access for students walking to and from the High School, and elementary students coming to Los Cerritos from the south.



Open the High School rear gate onto the Centennial Trail. Open the gate at the southeast corner of the school athletic fields onto the Centennial Trail, at least daily at arrival and dismissal times. This would allow High School students to walk directly from the Centennial Trail into the school grounds, and avoid adding additional pedestrian traffic to the congested area on W. Orange Ave. around the Elementary School.

6. Test a mini-circle at B Street and W. Orange Ave., and one-way high school vehicle loop.

It was noted that driver behavior at B Street and W. Orange Avenue intersection (at right) is very poor, with drivers often blocking the intersection, and east bound vehicles occasionally driving over the curb extension on the southwest corner of the intersection due to their desire to turn right toward the High School (pictures below). Drivers trying to get back onto W. Orange Avenue from the high school often get frustrated and simply pull part of the way into the intersection. Redesigning this area could help improve driver behaviors, preclude vehicles from blocking the intersection, and improve pedestrian safety dramatically. This could be an ideal location for a mini-circle, or at very least creating barriers on the curb extensions so that vehicles can not cut across the curbs.



- **Barriers on the curb extensions.** First include some type of planter, vertical delineator, or other barrier to preclude vehicles from driving over the curb extensions, especially the one on the southwest corner. This is exceptionally dangerous to pedestrians, and unsafe for vehicles as well.

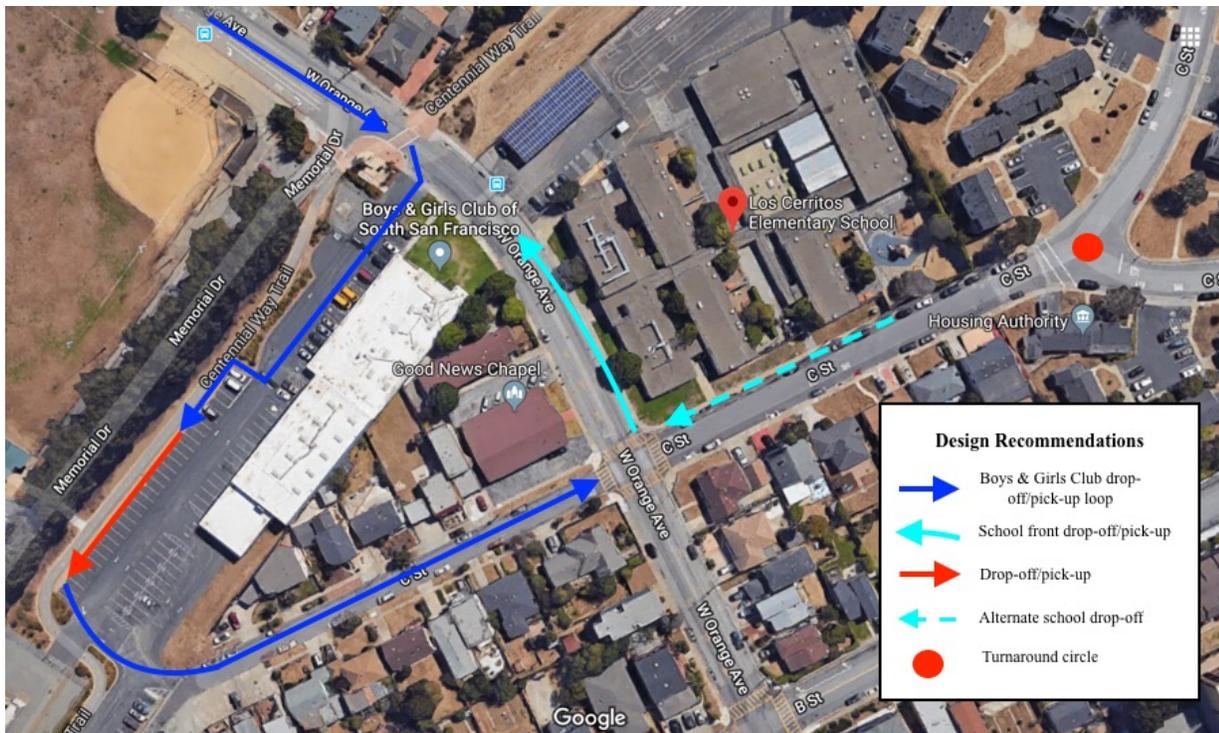
- **Start with a pop-up mini-circle.** Try implementing a demonstration or pop-up mini-circle, with low cost, removable materials (rubber curbing materials, hay bales, planters, temporary delineators) and paint. The paint could define the area that would eventually be a tapered, mountable curb to allow emergency vehicles quicker passage through the intersection. (At right, pop-up mini-circle from Trailnet: *Slow Your Street: A How-to Guide for Pop-Up Traffic Calming.*)



- **Create a one-way loop for high school traffic.** Provide an opportunity for cars to enter B Street from W. Orange Avenue, then drive west through the high school parking lot, and out onto El Camino Real at the traffic signal. Student pick-up and drop-off can occur along the edge of the high school parking lot, and this could reduce the number of cars trying to re-enter W. Orange Avenue at B Street.
- **Stagger High School and Elementary School arrival and dismissal times.** Many school districts are making high school arrival times somewhat later, both to ease traffic congestion in areas where different levels of school are in close proximity, and to align more naturally with older students' sleep patterns. This might also allow motivated high school students and older siblings to earn community service credits by leading walking school buses for younger students.

The focus of these recommendations is three-fold. First, make the area immediately around the school safer and more accessible for walking and bicycling. Second, organize the vehicle drop-off and pick-up to make it safer and more predictable, though not necessarily faster as that would simply be an incentive for more children to be driven. Third, generally promote walking (and for mature enough students, bicycling) as healthier for students and the environment, and as the preferred and recommended mode of travel for any and all of those who can do it safely.

Schematic of recommendation locations



References and Resources

The National Center for Safe Routes to School; lots of practical information and downloadable resources: www.saferoutesinfo.org

The Safe Routes to School National Partnership; coalition of organizations and experts providing great implementation support to schools & communities: www.saferoutespartnership.org

Complete Streets: National coalition working for streets that work for pedestrians, bicyclists, transits riders, and drivers of all ages, incomes, and abilities: <http://www.completestreets.org>

Slow Your Street: A How-to Guide for Pop-Up Traffic Calming. Available from Trailnet. <https://trailnet.org>

The Tactical Urbanist's Guide to Materials & Design, by the Streets Plan Collaborative. Downloadable for free. <http://tacticalurbanismguide.com>

Urban Street Design Guide and the *Urban Bikeway Design Guide* by the National Association of City Transportation Officials (NACTO \$50 each). <https://nacto.org/publication/urban-street-design-guide/>

Small Town and Rural Multi-Modal Networks, FHWA 2017. Lots of relevant images and information. Downloadable for free. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/

Guidebook for Developing Bicycle and Pedestrian Performance Measures, FHWA 2016; downloadable for free. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/performance_measures_guidebook/pm_guidebook.pdf

Costs for Pedestrian & Bicycle Infrastructure Improvements, Pedestrian & Bicycle Information Center (PBIC), 2013. http://www.pedbikeinfo.org/cms/downloads/Countermeasure_Costs_Summary_Oct2013.pdf

Better Block: educates, equips, and empowers communities and their leaders to reshape and reactivate built environments to promote the growth of healthy and vibrant neighborhoods: www.betterblock.org