



# Safe Routes to School Summary Report

## Lafayette School and Springhill School

### Lafayette, CA

November 2013

# **Safe Routes to School Summary Report**

**Lafayette Elementary School and Springhill Elementary School**

November 2013

Developed for the Springhill Elementary School Parent-Faculty Club and the Lafayette Elementary School Parent-Teacher Association



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## Introduction

In spring 2013, the City of Lafayette offered funding to all public schools within the City to hire a consultant to evaluate walking and bicycling conditions related to the school commute. Lafayette Elementary School and Springhill Elementary school both expressed interest, and parent-teacher groups at those schools provided matching funds to support the City's grant. The schools hired Alta Planning + Design, a Berkeley-based consulting firm that specializes in bicycle and pedestrian planning and design, to conduct walk audits at each school and develop recommendations.

This report presents infrastructure and programmatic recommendations that will improve the safety and convenience of students walking and bicycling to Lafayette and Springhill Elementary Schools. It represents a first step in implementing improvements. All recommendations in this report are contingent upon available funding, secured either through the City or the School District. Most recommended improvements (especially those needing significant engineering and construction) will be contingent upon winning federal, state, regional, or countywide grants. This report can be used to develop competitive grant applications.

## Safe Routes to Schools Context

Safe Routes to Schools is a nationwide program that works to increase the number of students who walk, bike, carpool, or take the bus to school. The program began in the late nineties in response to a dramatic drop in the number of children who walk or bike to school, coupled with increased obesity rates in schoolchildren and increased congestion around schools. Funding is available at the county, regional, and state level to build infrastructure and support programs that improve the safety of students on their way to and from school.

Safe Routes to Schools uses the concept of the "Five E's" to understand and solve school commute problems. The Five E's, as described by the Safe Routes to School National Partnership<sup>1</sup>, are:

- **Engineering** – Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds and potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails and bikeways.
- **Education** – Teaching children about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills and launching driver safety campaigns in the vicinity of schools.
- **Encouragement** – Using events and activities to promote walking and bicycling and to generate enthusiasm for the program with students, parents, staff and surrounding community.
- **Enforcement** – Partnering with local law enforcement to ensure that traffic laws are obeyed in the vicinity of schools (this includes enforcement of speeds, yielding to pedestrians in crosswalks and proper walking and bicycling behaviors) and initiating community enforcement such as crossing guard programs and student safety patrols.
- **Evaluation** – Monitoring and documenting outcomes, attitudes and trends through the collection of data before and after the interventions

## Planning and Policy Context

While the Lafayette Unified School District and City of Lafayette do not have an official Safe Routes to School Program, there are elements in place that support safe and convenient walking and biking to school. The Contra Costa Transportation Authority (CCTA) is currently considering overseeing a countywide policy on Safe Routes to Schools programming. The CCTA currently works with the San

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<sup>1</sup> See Safe Routes Partnership: <http://www.saferoutespartnership.org/local/getting-started-locally/5es>



Ramon Valley Street Smarts program to provide Safe Routes to Schools programming to the communities of San Ramon and Danville. It may be possible to work with CCTA to bring Safe Routes to Schools programming to Lafayette.

## Crossing Guards

There are nine crossing guards that serve the four elementary schools and one middle school in the Lafayette Unified School District system. The costs for the crossing guard program are shared between the Lafayette Unified School District and the Lafayette Police Department.

## Lamorinda School Bus Program

The Lamorinda School Bus program provides transportation to 1,500 students on twenty-one buses in the communities of Lafayette, Orinda, and Moraga. In Lafayette, the Lamorinda School Bus program serves students at Stanley Middle School, Burton Valley Elementary, and Springhill Elementary. Bus passes are available at variable prices, with discounts for low-income families. The program also receives funding through Measure J, a half-cent sales tax distributed by the Contra Costa Transportation Authority.

## Bicycling Policy

While bicycling to and from school is allowed under district policy, skateboards and scooters are prohibited on school grounds. Skateboards or scooters on any school grounds in Lafayette may be confiscated. Bicycles must be locked in a designated parking area upon arrival at school and use of a bicycle on school grounds is prohibited unless under the supervision of an authorized adult. All students must wear a helmet when bicycling, as required by state law.

There are no age or grade restrictions on students riding their bicycles to and from school, with the exception of Springhill Elementary. Springhill Elementary's school policy only permits students in grades 3 through 5 to ride their bicycles to and from school.

## District Wellness Council

The Lafayette School Board adopted a wellness policy for the district in 2006, and formed a District Wellness Council to help implement that policy with schools. The policy focuses primarily on healthy eating choices, but also contains a provision for ensuring adequate daily physical activity. The District Wellness Council could act as a facilitator when encouraging more students and families to try walking and biking to school.

## Walking Audit Process

In May 2013, consultants hosted school walk audits at Lafayette and Springhill Elementary Schools. A school site walking audit was conducted at each school during the morning drop-off period. Audit teams included Alta Planning + Design staff, parents, City staff, local law enforcement, and school administrators. Each visit began with a discussion of challenge areas and types of issues participants should observe. The team then observed pedestrian, bicyclist, and driver behavior during the drop-off period and reviewed the area near each school for quality of sidewalks, curb ramps, signage, as well as other engineering elements. After observations, the team regrouped to discuss what they saw and brainstorm potential recommendations. The refined recommendations are presented in the following plans.



*Walk audit participants discuss their observations*

## Lafayette Elementary School Walk Audit Report

**Principal:** Mary Maddux  
**Enrollment:** 468 Students, K-5  
**School Arrival:**

- AM Kindergarten: 8:10 AM
- PM Kindergarten: 11:40 AM
- 1<sup>st</sup> – 5<sup>th</sup> Grade: 8:30 AM

### School Dismissal:

- AM Kindergarten: 11:30 AM
- PM Kindergarten: 3:00 PM
- 1<sup>st</sup> – 5<sup>th</sup> Grade: 2:30 PM



*Students walking to Lafayette Elementary School*

**Mode Share:** 63% family vehicle, 27% walk, 9% bicycle, 1% carpool (student hand tallies)

## Existing Conditions

### Layout

Lafayette Elementary is located in central Lafayette, just south of downtown. It is bound by streets on three sides of the school grounds: the arterial roadway Moraga Road to the west, School Street to the south, and 1st Street to the east. To the north are houses that front onto Moraga Boulevard. There is a shared-use pathway on First Street that extends from Golden Gate Way in the north to School Street in the south. Just east of the school is the Lafayette-Moraga Regional Trail, with an access point on School Street. The former county library building and parking lot are also used for informal drop-off and pick-up.

There are pedestrian access points from the west, south and east, and the bicycle parking is located just inside the gate on the east side of the school. The loading loop for the school is accessed from Moraga Road.

### Loading Zones

The school parking lot is used for student drop-off and pick-up. Recommended enhancements to the existing passenger loading area are described among this plan's recommendations. Additional curbside loading was observed on 1<sup>st</sup> Street and School Street.

### Crossing Guard Location

One crossing guard assists students crossing Moraga Road at Brook Street. There is another crossing guard stationed at the intersection of School Street and Avalon Avenue that assists students from both Stanley Middle School and Lafayette Elementary School to cross School Street.

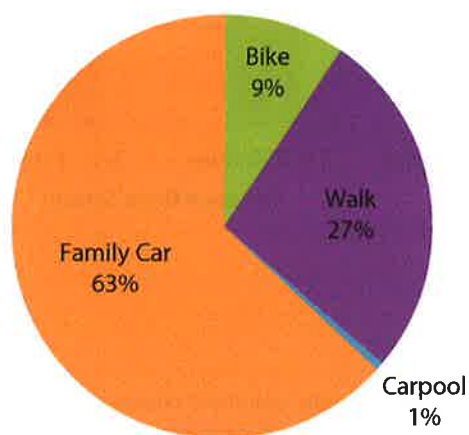


*The intersection of Moraga Road and Brook Street has an all-way pedestrian phase*

### Walking/Biking Rates

In late May, 2013, a member of the Parent Teacher Association worked with teachers to survey students about how they get to and from school. Two classrooms from each grade were surveyed. Students in these classrooms were asked how they traveled to and from school the day before, and how they would be traveling to and from school on that day. Students were given a choice of answers and raised their hand for the best answer.

Ten classrooms responded, representing approximately 120 students, or 26% of the student body. Results are shown in



Source: May 2013 Student Hand Tallies

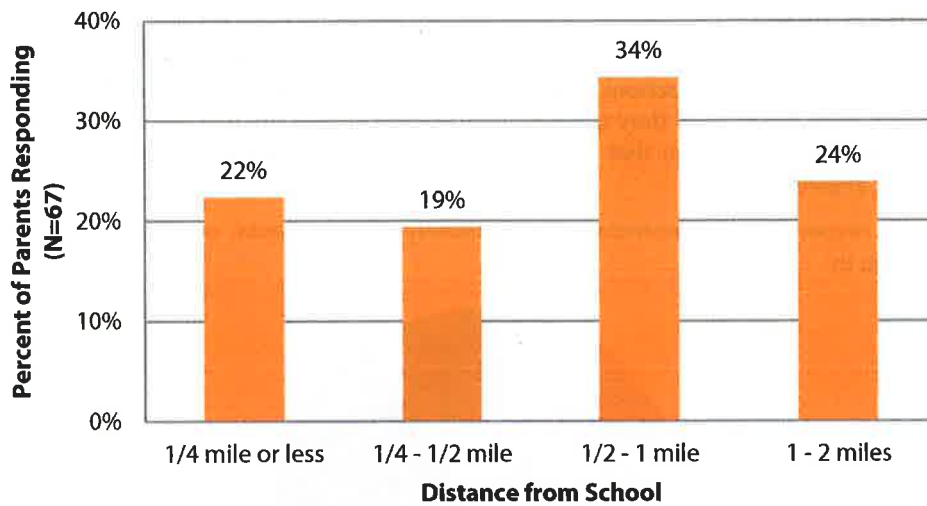
Twenty-seven percent of all trips to school are on foot and 9 percent of all trips to school are by bike. The walking mode split is similar to other communities located within walkable downtown areas. The bike mode split is fairly high for an elementary school.

### Parent Attitudes about Walking and Biking

The PTA distributed an online survey to parents in May 2013. Seventy-one parents responded. Highlights from the survey are shown below.

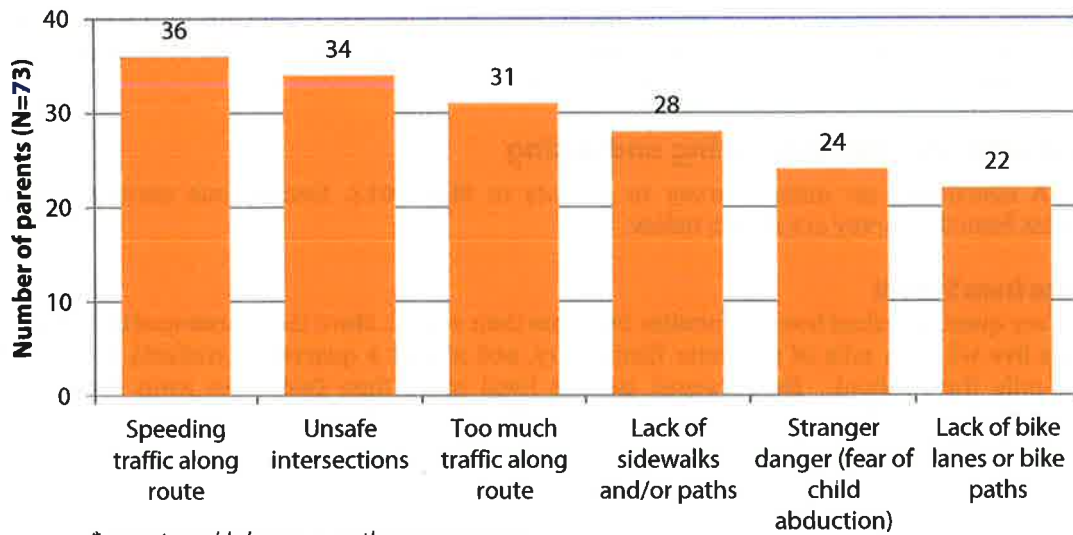
#### Distance from School

One survey question asked how far families live from their school. More than three-quarters of surveyed students live within a mile of Lafayette Elementary, and almost a quarter of students live less than a quarter-mile from school. No surveyed parents lived more than two miles away from Lafayette Elementary. The potential for increased walking and biking is high. Forty-one percent of students live within a half-mile of school—that represents a 10 minute walk or less.



**Parent Concerns**

Another survey question asked about parents’ greatest concerns when it came to walking or biking to school. The responses overwhelmingly expressed concern with drivers (“speeding drivers along route”, “too much traffic”) and infrastructure (“unsafe intersections”, “lack of sidewalks”, “lack of bike lanes/bike paths”). This was born out in the comments left by parents. One parent in particular lamented that their route was “all very safe until the last few blocks to school.”



\* parents could choose more than one response

Source: May 2013 Online Parent Survey



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## Lafayette Elementary School Improvement Plan



### 1st Street

- Construct raised crossing across 1st Street near gate, remove one parking space on west side of street
- Stripe raised crossing as high visibility school crosswalk, install tactile dome strips, Assembly B signage, parking restrictions, and advance yield teeth
- Install additional bike parking on campus, and consider placing near different school entrance or widening existing entrance

### 1st Street at School Street

- Install signage encouraging bicyclists coming from School Street to use the east side path to access the school
- Over the long term, consider widening sidewalk on north side of School Street to reduce conflict points at 1st Street

### Moraga Road at School Street

- Install advance stop bar on School Street and "Stop Here on Red" sign
- Study impacts of prohibiting right turns on red during school hours
- Construct sidewalk on the south side of School Street in front of Town Hall Theater and change diagonal parking to parallel parking

### Brook Street

- Construct traditional sidewalk on north side of Brook Street
- Construct sidewalk from Dewing Avenue to Mountain View Drive

### Moraga Road at Saint Mary's Road

- Modify southbound signal so that the protected left turn from Moraga Road occurs after the green light for through traffic
- Study operational Improvements at the slip lane, such as a pedestrian-actuated beacon or reconfiguring the intersection

### Saint Mary's Road at Solana Avenue

- Consider curb extensions or pedestrian-actuated beacons (e.g. Rapid Rectangular Flashing Beacons) to help pedestrians cross

### Topper Lane

- Construct sidewalk on east side of Topper Lane from Lafayette-Moraga Trail access to Saint Mary's Road

### School Loading Loop

- Stripe crosswalk through parking lot
- Enforce no parking signs
- Install "Please Pull Forward" signs
- Establish longer queueing area by striping a dedicated loading lane



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## Walk Audit Observations and Infrastructure Recommendations

Lafayette Elementary School is located at 950 Moraga Road in a mixed-use neighborhood of Lafayette. The project team conducted a walk audit at the school on Tuesday, May 21, 2013. The weather was sunny and mild. The audit was attended by several parents, two staff from the City of Lafayette Engineering Department, and two transportation planners from Alta Planning + Design.

### 1<sup>st</sup> Street

A gate on 1<sup>st</sup> Street provides access to the school from the east. The bicycle parking area is located immediately inside this gate. Students were observed accessing the school from both directions on 1<sup>st</sup> Street.

Due to the volume of pedestrians, bicyclists, and passenger loading activities on the west side of 1<sup>st</sup> Street, the sidewalk can become congested. A shared-use path on the east side of 1<sup>st</sup> Street provides more capacity for non-motorized travel. However, there is no crosswalk that connects the pathway on the east side directly to the school entrance. While students could potentially walk or ride down to the intersection with Monroe Avenue and turn around, this would require a significant detour for pedestrians and bicyclists and would do nothing to relieve sidewalk congestion. Students could also cross at School Street, but the sidewalk on the west side of 1<sup>st</sup> Street is narrow.

Bike parking on campus was reported to be over capacity. Students have a hard time accessing the parking due to a narrow gap in the fence, as well as the narrow sidewalks on the west side of 1<sup>st</sup> Street. Students and parents were observed crossing midblock across 1<sup>st</sup> Street to access the bike parking.

### Recommendations (A)

- Stripe a high-visibility school crosswalk and raise visibility by installing tactile dome strips, Assembly B signage, parking restrictions, and advance yield teeth. Work with school district to consider adding a crossing guard or stationing a parent or teacher monitor to supervise the crossing
- Construct a raised crossing across 1<sup>st</sup> Street as near as possible to the school gate entrance. Remove one parking space on the west side of the street to accommodate the raised crossing
- Install additional bike parking on campus using Association of Bicycle and Pedestrian Professionals (APBP) guidelines. Consider placing new parking near a different school entrance and/or widen entrance



*Passenger loading and pedestrian and bicycle travel all occur on the narrow sidewalk on 1st Street*



*The intersection of 1st Street and School Street can challenge pedestrians and bicyclists*



## **1<sup>st</sup> Street at School Street**

The intersection of 1<sup>st</sup> Street and School Street is a T intersection with complex flows of pedestrians, bicyclists, and motorists to both Lafayette Elementary and Stanley Middle School. Traffic on School Street is uncontrolled. First Street has one-way traffic in two lanes and is controlled with a stop sign at School Street.

First Street is flanked by a 10-foot shared-use path on the east side and a 5-foot sidewalk on the west side. Passenger loading for both elementary school and middle school students was observed on 1<sup>st</sup> Street.

Bicyclists accessing Lafayette Elementary School from School Street presently choose whether to cross 1<sup>st</sup> Street in the crosswalk and continue along the narrow sidewalk to the school or travel up the shared-use path and find another opportunity to cross at the school gate. If the recommendation for a midblock crossing is implemented, those students would have direct access to school.

Students walking and bicycling to Stanley Middle School from the west have the option of using the north or south side of School Street. Walking and bicycling on the south side of the street eliminates conflicts with traffic at 1<sup>st</sup> Street, but there is a sidewalk gap on the south side of the street at Moraga Road at the Town Hall Theater (discussed in the following section).

### **Recommendations (B)**

- Install signage encouraging bicyclists to use the east side path to access the school from the proposed crosswalk
- Over the long term, consider widening sidewalk on the north side of School Street to reduce conflict points at 1<sup>st</sup> Street. Evaluate parent support for project and potential benefits

## **Moraga Road at School Street**

Moraga Road and School Street are the two main streets fronting Lafayette Elementary School. They meet at a T-intersection at the southwest corner of the school site. The intersection is very busy during school loading periods, with many drivers encroaching over the crosswalk across School Street before making right turns from Moraga Road.

There is a sidewalk gap on the south side of School Street just east of Moraga Road in front of the Lafayette Town Hall Theater. Currently, pedestrians use a narrow dirt pathway which is separated from adjacent parking by bollards. As described above, encouraging Stanley Middle School students to use the south side of the sidewalk will reduce the number of conflicts at the 1<sup>st</sup> Street and School Street intersection.

### **Recommendations (C)**

- Install advance stop bar on School Street prior to crosswalk at Moraga Road to reduce vehicle encroachment
- Install "Stop Here on Red" signage to complement the advance stop bar.
- Study traffic impacts of prohibiting right turns on red during school hours to reduce crosswalk encroachment
- Construct sidewalk on the south side of School Street in front of the Town Hall Theater (approximately 100 feet). This will require changing existing angled parking to parallel parking (reducing parking from 8 spaces to 5 parallel stalls) or securing an easement from the property owner to build a sidewalk on their property where the at-grade walkway currently exists

## Brook Street

Audit participants identified Brook Street as a popular walking route to school. Between Hough Avenue and East Street, the sidewalk on the north of Brook Street is narrow and at the street level, with a berm separating sidewalk space from the roadway. Developing the sidewalk with a curb and gutter would formalize pedestrian space, discouraging drivers from blocking the sidewalk, provide a continuous smooth surface for pedestrians in wheelchairs, widen the usable sidewalk space, and improve drainage on the street and sidewalk.

Parents also noted the lack of sidewalk on either side of Brook Street from Dewing Avenue to Mountain View Drive as being a barrier for students walking to school. Implementing these sidewalks will be challenging due to right-of-way limitations, on-street parking, and topography, but it would improve walking conditions and connect to the existing sidewalk on the east side of Mountain View Drive.

### Recommendations (D)

- Construct traditional sidewalk on north side of Brook Street from Hough Avenue to East Street
- Construct sidewalk from Mountain View Drive to Dewing Avenue

## Moraga Road at Saint Mary's Road

Parents expressed concerns about bicyclist and pedestrian safety when crossing Saint Mary's Road. The traffic signal currently provides a protected left turn phase on southbound Moraga Road in advance of the through traffic signal. Children are able to cross Saint Mary's Road during the through traffic signal, but not during the left turn. As the left-turn cycle ends, motorists were observed racing through the end of the cycle to stay ahead of oncoming through traffic. This places them directly in conflict with pedestrians who had just received a walk signal across Saint Mary's Road.

Westbound on Saint Mary's Road is a pork chop pedestrian island and a slip lane providing access to northbound Moraga Road. The slip lane has a separate signal phase, but motorists were observed treating this signal as a yield symbol when there was no oncoming traffic on Moraga Road. This created conflicts with pedestrians crossing in the crosswalk across the slip lane to reach the crosswalk at the intersection. Drivers were also observed waving-through students across the slip lane crosswalk, even when the driver had a green signal phase to turn right.

### Recommendations (E)

- Modify the southbound signal so that the protected left turn phase from Moraga Road occurs after the green light for through traffic, allowing pedestrians to clear the intersection.
- Study operational improvements at the slip lane to increase driver and pedestrian predictability. This may include replacing the existing slip lane signal with a yield sign and a pedestrian-actuated beacon, such as a Rapid Rectangular Flashing Beacon (RRFB). The City may also consider reconfiguring the intersection to tighten the slip lane. This will require additional traffic and feasibility studies.

## Saint Mary's Road at Solana Avenue

An uncontrolled high-visibility crosswalk is located across Saint Mary's Road at Solana Avenue. Students may choose to cross at this intersection, rather than walking west to Moraga Road, to take a more direct route to Lafayette Elementary school.

### Recommendation (F)

- Consider curb extensions to facilitate pedestrian crossings at Solana Avenue. This may require relocation of the crosswalk to the east side of the intersection to avoid conflicts with a driveway on the north side of Saint Mary's Road.

- Consider pedestrian-actuated beacons such as Rapid Rectangular Flashing Beacons (RRFBs) at the uncontrolled crosswalk.

## Topper Lane

Topper Lane provides access to Lafayette Elementary School from the east. Parents reported that speeding and a lack of sidewalk discourage students from walking or bicycling along the street.

### Recommendations (G)

- Construct sidewalk on the east side of Topper Lane from the Lafayette-Moraga Trail access point (School Street) to Saint Mary's Road, approximately 1,100 feet. If there is sufficient right-of-way, consider constructing a shared-use path on the east side of the street.

## School Loading Loop

The passenger loading loop is accessed from Moraga Road on the west side of the school. Signage prohibits left turns out of the parking area. Students wearing reflective sashes act as student valets, assisting students out of cars.

The parking configuration within the passenger loading loop limits the area's operational effectiveness. Under the current configuration, there is little space for vehicles to queue prior to passenger loading, which can cause congestion to back out onto Moraga Road. While there are signs restricting parking adjacent to the school through the loading loop, these signs appear not to be enforced.



*Queuing in the Lafayette Elementary School Parking Lot*

Motorists form two lanes for passenger loading and there is no clear path of travel for pedestrians accessing the school from within the parking lot.

### Recommendations (H)

- Stripe a crosswalk through the loading loop to provide access to the parking lot.
- Enforce no parking signs.
- Work with existing student valet service to streamline operations and consider options for an afternoon valet service (e.g. a system to notify students in advance that their parents are coming into the loading loop)
- Install "Please Pull Forward" signs to encourage the efficient use of available space.
- Establish a longer queuing area for passenger loading by removing six parking spaces (four preceding the loading loop and two following) and removing a planter box at the north end of the driveway. Ensure new circulation plan meets ADA access needs.

## Programmatic Recommendations

### Remote Drop-Off

Audit participants identified several possible locations for remote drop off near Lafayette Elementary School. These locations include the Public Library, a public parking lot on Moraga Road, the Masonic temple, and the Old Library site. The school can promote these drop-off locations in back-to-school packets, flyers, and other parent communication.

### Walking School Buses and Bike Trains

Walking school buses and bike trains are organized groups of children walking or biking to school with an adult. They address parental concerns about children walking or biking to school alone. In addition, shifting parents away from driving to school may reduce congestion, improve air quality and encourage active communities. One parent participating in the walk audit has been part of a neighborhood-based walking school bus for several years. There are opportunities for the PTA to actively promote formation of additional walking school buses through promotional material and meet and greet sessions with interested parents.



*Walking school buses encourage students to walk to school by providing parental supervision*

### Walking and Biking Safety Education

Typical school-based bicycle education programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of biking. Potential pedestrian education curriculum elements include traffic sign identification and how to use a crosswalk. Such education programs can occur inside the classroom, in a school assembly, or through interactive exercises. Locally, East Bay Bicycle Coalition offers on-bike rodeos to schools for a small fee (approximately \$1,200 for one day of service serving an entire school).

### Special Events and Contests to Promote Walking and Biking

Lafayette Elementary School participates in International Walk and Bike to School Day, an annual special event encouraging students to try walking or bicycle to school. In addition to this annual event, walking can be promoted by regular ongoing walk and bike to school days. Walk and Bike to School Day can be held monthly, or even weekly, depending on the level of support and participation from students, parents and school and local officials. Often, walking or biking on one of these days is a first step in shifting someone to a new habit of walking and biking every day. These days can be supported through school advertising, student incentives, and fun themes.

### Walk and Bike to School Maps

Parents on the walk audit expressed interest in having walk and bike to school maps. These suggested route maps typically show routes for walking and biking, locations of crossing guards, stop signs, crosswalks, signals, as well as bike lanes, bike paths, and bike parking. They can also help encourage new parents and students to walk or bike by growing a family's familiarity with the surrounding streets and neighborhoods. Often, maps include a reverse side that contains walking and biking safety tips.



### Safe Routes to School Champions

Shifting people’s travel habits from driving to walking and biking takes sustained effort. Schools that have a group of committed parents, teachers, and administrators to promote the program have the most success in sustaining a program year-after-year, and thus promoting cultural change. These people are called “champions.” Champions can be integrated into the school structure in a variety of ways:

- Create a champion role as part of the PTA
- Establish a SR2S Champion as a separate volunteer role that reports directly to the principal
- Solicit teachers to take on the role of a champion as part of their duties

There are numerous resources online for champions to use in promoting events and getting ideas. The following website provide helpful information and resources:

- [511contracosta.org/tag/safe-routes-to-school/](http://511contracosta.org/tag/safe-routes-to-school/)
- [www.alamedacountysr2s.org](http://www.alamedacountysr2s.org)
- [www.marincountysr2s.org](http://www.marincountysr2s.org)
- [www.saferoutesinfo.org/](http://www.saferoutesinfo.org/)
- [www.saferoutespartnership.org/](http://www.saferoutespartnership.org/)
- [www.sparetheairyouth.org/](http://www.sparetheairyouth.org/)

### Prioritized Recommendations

Table 1 below summarizes and prioritizes recommendations for Lafayette Elementary School. Projects were prioritized based on the following factors:

- Potential to address a safety concern
- Student population served
- Community support
- Cost and engineering level-of-effort required

The proposed improvements total \$288,000, of which \$21,000 is high priority, \$117,100 is medium priority, and \$149,900 is low priority. Project rankings are subject to change based on additional city, school, and community feedback and advanced project design/cost estimation.

Table 1: Lafayette Elementary School Recommended Improvements

ID	Location	Recommendations	Lead Agency	Priority	Planning Level Cost
	Programs	<ul style="list-style-type: none"> <li>• Develop Walk and Bike to School Maps</li> </ul>	District/ City	High	\$2,000
		<ul style="list-style-type: none"> <li>• Educate students about safe walking and bicycling through classroom training, on-bike skills courses, and assemblies</li> </ul>	School/ District	High	\$1,200 and staff time
		<ul style="list-style-type: none"> <li>• Streamline existing student valet service and institute an afternoon valet system</li> </ul>	School/ District	High	Staff time
		<ul style="list-style-type: none"> <li>• Implement encouragement events and contests</li> </ul>	School/ District	Medium	Staff time
		<ul style="list-style-type: none"> <li>• Encourage parents to use park and walk locations</li> </ul>	School/ PTA	High	Staff time, printing
		<ul style="list-style-type: none"> <li>• Establish Safe Routes to School Champion Team</li> </ul>	School/ PTA	High	Staff time
		<ul style="list-style-type: none"> <li>• Encourage formation of walking school buses and bike trains</li> </ul>	School/ PTA	Medium	Staff time, printing

ID	Location	Recommendations	Lead Agency	Priority	Planning Level Cost
A	1 <sup>st</sup> Street	• Construct raised crossing across 1 <sup>st</sup> Street near gate, remove one parking space on west side of street	City	Medium	\$30,100
		• Stripe high-visibility school crosswalk, install tactile dome strips, Assembly B signage, parking restrictions, and advance yield teeth	City	High	\$2,300
		• Install additional bike parking on campus, and consider placing near different school entrance or widening existing entrance	City	Medium	\$800
<b>Total Location A:</b>					<b>\$33,200</b>
B	1 <sup>st</sup> Street at School Street	• Install signage encouraging bicyclists to use the east side path on 1 <sup>st</sup> Street to access the school	City	High	\$200
		• Consider widening sidewalk on the north side of School Street to reduce conflict points at 1 <sup>st</sup> Street	City	Low	\$10,000
<b>Total Location B:</b>					<b>\$10,200</b>
C	Moraga Road at School Street	• Install advance stop bars on School Street and "Stop Here on Red" sign	City	High	\$600
		• Study traffic impacts of prohibiting right turns on red during school hours	City	High	\$12,000
		• Construct sidewalk on the south side of School Street in front of the Town Hall Theater and change diagonal parking to parallel parking	City	Medium	\$7,500
<b>Total Location C:</b>					<b>\$20,100</b>
D	Brook Street	• Construct traditional sidewalk on north side of Brook Street from Hough Avenue to East Street	City	Low	\$29,900
		• Construct sidewalk from Mountain View Drive to Dewing Avenue	City	Medium	\$48,100
<b>Total Location D:</b>					<b>\$78,000</b>
E	Moraga Road at Saint Mary's Road	• Modify southbound signal so that the protected left turn from Moraga Road occurs after the green light for through traffic	City	High	\$2,000
		• Study operational improvements at the slip lane, such as a pedestrian-actuated beacon or reconfiguring the intersection	City	Medium	\$30,000
<b>Total Location E:</b>					<b>\$32,000</b>
F	Saint Mary's Road at Solana Avenue	• Consider curb extensions and/or pedestrian beacon to help pedestrians cross	City	Low	\$20,000-\$60,000
G	Topper Lane	• Construct sidewalk on Topper Lane from the Lafayette-Moraga Trail access to Saint Mary's Road	City	Low	\$50,000

ID	Location	Recommendations	Lead Agency	Priority	Planning Level Cost
H	School Loading Loop	• Stripe high-visibility crosswalk through parking lot	District	High	\$600
		• Enforce no parking signs	Police	High	Staff time
		• Install "Please Pull Forward" signs	District	High	\$200
		• Establish longer queuing area for passenger loading by removing six parking spaces and a planter at the north end of the driveway	District	Medium	\$600
<b>Total Location H:</b>					<b>\$1,300</b>

## Springhill Elementary School Walk Audit Report

**Principal:** Heather Duncan  
**Enrollment:** 462 Students, K-5  
**School Arrival:**

- AM Kindergarten: 8:15 AM
- PM Kindergarten: 11:40 AM
- 1<sup>st</sup> – 5<sup>th</sup> Grade: 8:30 AM

**School Dismissal:**

- AM Kindergarten: 11:30 AM
- PM Kindergarten: 3:00 PM
- 1<sup>st</sup> – 3<sup>rd</sup> Grade: 2:30 PM
- 4<sup>th</sup> – 5<sup>th</sup> Grade: 2:40 PM

**Mode Share:** 69% family car, 9% walk, 2% bike,  
13% carpool, 6% school bus  
(student hand tallies)



*Sign welcoming students to Springhill Elementary*

### Existing Conditions

#### Layout

Springhill Elementary is located on a hillside in eastern Lafayette. Two streets front onto the Springhill Elementary school grounds: the arterial roadway Pleasant Hill Road on the east and Springhill Road on the northeast. Homes facing out onto San Reliez Court bound the school to the northwest and hillside open space fronts the school on the west and south. A parking lot for access to the Brookes Trail is located immediately south of school grounds.

#### Loading Zones

The school parking lot has a passenger loading loop accessed from Springhill Road. Informal passenger loading was also observed on Pleasant Hill Road immediately east of the school. There may be additional potential for passenger loading to occur in the parking lot for Briones Regional Park south of the school.

#### Crossing Guard Location

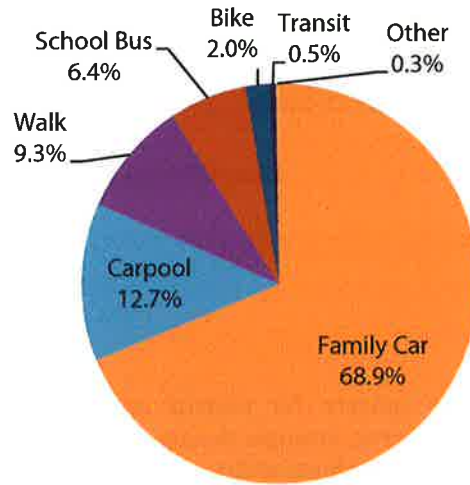
Two crossing guards assist students crossing Pleasant Hill Road at the intersection with Quandt Road and Springhill Road. One assists students at Quandt Road and northbound Pleasant Hill Road and the other at Springhill Road and southbound Pleasant Hill Road.



### Walking/Biking Rates

In late May, 2013, the Parent-Faculty Club (PFC) worked with teachers to survey students about how they get to and from school. Students were asked how they traveled to and from school the day before, and how they would be traveling to and from school on that day. Students were given a choice of answers and raised their hand for the best answer.

Seventeen Classrooms responded, representing 342 students, or 75% of the student body. Results are shown below.



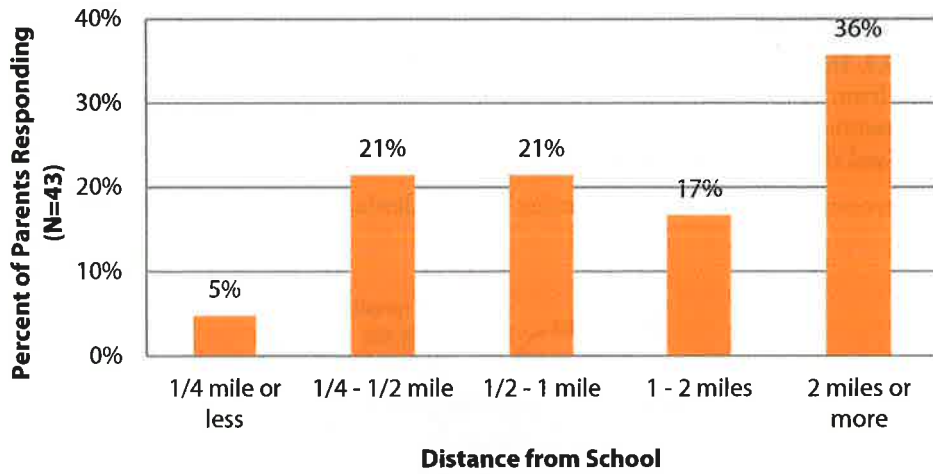
Nearly 70 percent of students travel to school in a family car, which is typical for less dense communities. The bike commute share is also typical, at 2 percent. The percentages shown in the graph above are an average of the trips to and trips from school. More students walk to school in mornings (11 percent) than walk home in the afternoon (7 percent), suggesting that there is room for expanding walking mode share. Springhill is one of the three Lafayette schools that participate in the Lamorinda School Bus Program: 6.4 percent of trips to and from Lafayette School are made on the bus.

### Parent Attitudes about Walking and Biking

The PFC also distributed an online survey to parents. Forty-five parents responded. Highlights from the survey are discussed below.

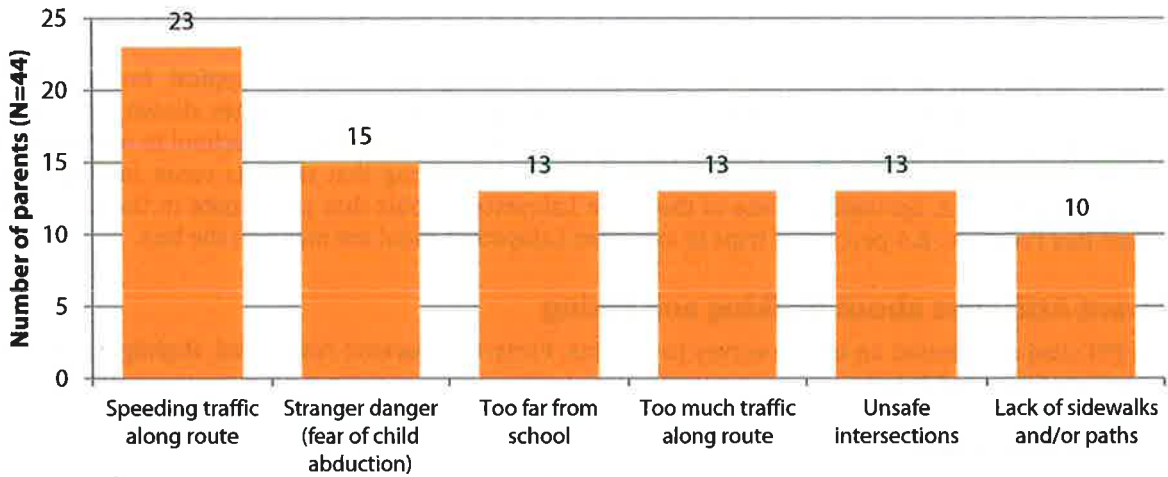
#### Distance from School

Families at Springhill Elementary are somewhat spread out, with just over a third of families living more than two miles away from the school. Still, just over a quarter of families surveyed lived within a half mile of the school—approximately a ten-minute walk—suggesting that a significantly increased walking/biking rate is achievable.



**Parent Concerns**

Driver behavior was the largest concern for parents at Springhill Elementary. In addition to infrastructure and traffic safety concerns, stranger danger and distance from home also played a large part in parents' willingness to let their students walk or bike to school.



\* parents could choose more than one response

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## Springhill Elementary School Safe Routes to School Improvement Plan



- A Pleasant Hill Road at Springhill Road**  
*Southwest corner, right turn slip lane*
- Install fluorescent Assembly B signage with reflective sign post panels at uncontrolled crosswalk across slip lane
  - Trim vegetation on Springhill Road in advance of slip lane
  - Stencil yield line in advance of crosswalk across slip lane
  - Consider constructing speed table with crosswalk
  - Install flexible bollards on pedestrian refuge island
  - Install green bike lane through conflict area between bike lane and bike pocket on southbound Pleasant Hill Road
- B Pleasant Hill Road**
- Formalize parking area on west side of Pleasant Hill Road
  - Consider split-rail fence barrier on east side of Pleasant Hill Road, separating sidewalk from vehicle traffic south of Hillview Lane
- C Quandt Road**
- Stripe advance stop bar 25 feet back from crosswalk on westbound Quandt Road, to provide room for school buses turning onto Quandt
  - Stripe double yellow centerline to del Arroyo Court
  - Implement plans to construct sidewalk on north side from Pleasant Hill Rd to Quandt Ct, including improvements to pedestrian waiting area at Pleasant Hill Road
  - Widen sidewalk on south side of Quandt Road and repave or construct sidewalk east of Del Arroyo Court
  - Evaluate signal timing to determine if changes would prevent use of Quandt Road as alternative access route to school
- D School Grounds Access**
- Repaint arrows in school driveway loop for one-directional traffic
  - Stencil KEEP CLEAR on Springhill Road at driveway entrance and exit
  - Repaint school driveway crosswalks with high-visibility yellow ladder crosswalks and install tactile dome strips
  - Pave the pathway between Briones staging area and school
  - Provide additional bicycle parking on campus
- E Springhill Road**
- Station mobile speed feedback signs on Springhill Road and other streets as needed
  - Improve crosswalk visibility at San Reliez Court with updated Assembly B and D signs in both directions, trimming vegetation, and marking yield teeth at existing crosswalk
  - Improve crosswalk visibility and stopping compliance at Martino Road by refreshing crosswalk lines, posting a pedestrian crossing sign at the crosswalk, and marking STOP AHEAD in the southbound direction at the curve
  - Include sidewalk on Springhill Road to Martino Road in City's Master Walkways Plan to be considered when funding is available

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## Walk Audit Observations and Infrastructure Recommendations

Springhill Elementary School is located at 3301 Springhill Road in a residential neighborhood of Lafayette. The project team conducted a walk audit at the school site on Wednesday, May 22, 2013. The weather was sunny and mild, comfortable for walking and bicycling. Several parents, a City police officer, two staff from the City of Lafayette Engineering Department, and two transportation planners from Alta Planning + Design attended the walking audit.

### Pleasant Hill Road at Springhill Road

The signalized intersection of Pleasant Hill Road and Springhill Road is the major intersection that serves the school. Both streets experience significant congestion during the morning arrival period, both from school traffic on Springhill Road and from commute traffic on Pleasant Hill Road. Pleasant Hill Road has two lanes in each direction, medians, and left turn pockets. Numerous infrastructural and behavioral issues at the intersection pose challenges to students walking and bicycling.

Many students cross the right turn slip lane from Springhill Road onto Pleasant Hill Road at a high-visibility uncontrolled crosswalk. Vegetation obscures a clear view of the crosswalk from Springhill Road. School signage indicates a crossing, although the sign is not updated for the most recent California MUTCD. This crossing may be further enhanced by raising the crosswalk to calm traffic and further enhance visibility and awareness.

Traffic becomes sufficiently congested on Pleasant Hill Road that motorists were observed failing to clear the intersection before cross traffic got a green light. Driver visibility of the refuge island in the southeast corner of the intersection could be enhanced with flexible bollards. This would provide a greater sense of separation for pedestrians.

Green skip stripes between the existing bike lane and the right-turn pocket would clarify a recommended path of travel for southbound bicyclists, increase visibility, and clearly indicate the right turn lane to motorists.

### Recommendations (A & B)

- Install fluorescent yellow-green Assembly B signage with reflective sign post panels at uncontrolled crosswalk across the slip lane
- Trim or remove vegetation on Spring Hill Road in advance of the slip lane to provide unobstructed view of the crosswalk



*Audit participants observing the passenger loading loop*



*Visibility challenges at the slip lane*



*Students walking around a car that failed to clear the intersection*

- Stencil yield markings in advance of crosswalk across slip lane
- Consider constructing speed table with crosswalk (see **Figure 7**).
- Install flexible bollards on pedestrian refuge island to provide greater sense of separation for pedestrians (see **Figure 8**).
- Install green bike lane through conflict area between bike lane and bike pocket on southbound Pleasant Hill Road (see **Figure 9**).



Figure 7. Speed table with crosswalk (Cambridge, MA)



Figure 8. Flexible bollards on pedestrian island (New York, NY) Source: NACTO



Figure 9. Green bike lane through conflict area (Seattle, WA) Source: NACTO

**Pleasant Hill Road**

Pleasant Hill Road is the main north/south street adjacent to the school. The previous section documents traffic issues related to Springhill Road but enhancements are possible at other locations.

The informal parking area adjacent to the school site has a mix of parallel and perpendicular parking, with no clear direction on how to properly park.

There is no sidewalk on the west side of Pleasant Hill Road and a narrow (5') sidewalk on the east side of the street south of Hillview Lane.

The City is pursuing grant funding to conduct a study of Pleasant Hill Road between Mt. Diablo Boulevard to Springhill Road to investigate how pedestrian and bicycle improvements could be incorporated and linked to those existing south of Mt. Diablo Boulevard.

**Recommendations (C, D)**

- Formalize the parking area on west side of Pleasant Hill Road to reduce conflicts with pedestrians and to ensure that vehicles can enter and exit traffic safely.
- Consider split-rail fence barrier on east side of Pleasant Hill Road, south of Hillview Lane, separating sidewalk from motor vehicle traffic.



Motorists parked on the side of Pleasant Hill Road



Example of split-rail fence barrier sidewalk separation



**Quandt Road**

Quandt Road provides access to Springhill Elementary school from residential neighborhoods to the east. The popular walking and bicycling route also provides access to a neighborhood connecting path. There is a narrow pathway on the south side of Quandt Road and no sidewalk on the north side, although the City has received a grant to construct sidewalks on the north side of Quandt Road. **Figure 10** and **Figure 11** show locations without sidewalks.

A school bus turning from northbound Pleasant Hill Road onto Quandt Road was observed jumping the curb because the vehicle's turning radius was too wide for the narrow intersection. To make the turn, the bus must turn into the oncoming lane on Quandt Road, but cars were stopped at the light, blocking the bus' turning path.

Parents reported frequent U-turns on Quandt Road because the wait for the left turn onto Springhill Road is so long. Drivers instead access the school by crossing Pleasant Hill Road from Quandt Road.



*This school bus was unable to complete the turn within the paved area due to cars stopped at the light*



**Figure 10. Quandt Rd west of Del Arroyo Ct showing sidewalks in need of widening and maintenance**



**Figure 11. Quandt Rd west of Pipeline Trail showing lack of sidewalks**

#### **Recommendations (E, F, G)**

- Stripe advance stop bar 25 feet back from crosswalk on westbound Quandt Road to provide room for school buses turning from northbound Pleasant Hill Road.
- Stripe double yellow centerline on Quandt Road to del Arroyo Court to discourage U-turns.
- Implement plans to construct sidewalk on north side from Pleasant Hill Road to Quandt Court. Include improvements to pedestrian waiting area on corner of Pleasant Hill Road.
- Widen sidewalk on south side of Quandt Road and repave or construct sidewalk east of Del Arroyo Court. Long term, construct rectangular curb to discourage cars from pulling onto the sidewalk.
- Evaluate signal timing at Pleasant Hill Road and Quandt Road to determine if a change in the timing for left turns from Pleasant Hill Road or the green cycle from Quandt Road could prevent drivers from using Quandt to turn onto Springhill Road.
- In school transportation information and traffic safety reminders, discourage parents from turning around on Quandt Road or at nearby cul-de-sacs.

#### **School Grounds Access**

Congestion through the school loading area leads to congestion on Springhill Road and Pleasant Hill Road. Improvements to circulation within the school parking lot may alleviate some of these issues by facilitating faster drop-off and reducing blockages.

A parking lot for Briones Regional Park, immediately south of the school grounds, may provide some opportunity for an alternative drop-off location for families living north of the school. An unpaved path links the staging area/parking lot to the school.



*Back entrance to the school from Briones Regional Park*



Access to this parking lot is only accessible to southbound drivers on Pleasant Hill Road.

The campus bike parking is currently above capacity and most recent parking designs will encourage more biking.

### **Recommendations (H, I)**

- Repaint arrows within school driveway loop for one-directional traffic with two lanes entering and exiting the driveway. If needed, reconfigure perpendicular parking in corner of school parking lot as angled parking to increase the available space.
- Stencil KEEP CLEAR on Springhill Road at driveway entrance and exit.
- Repaint crosswalks across school driveway entrance and exit with high-visibility yellow ladder crosswalks and install tactile dome strips on both sides.
- Paint white curb along school side of driveway to define the loading zone. Post PASSENGER LOADING ONLY signs.
- Pave the pathway between Briones staging area and the school.
- Provide additional bike parking per Association of Bicycle and Pedestrian Professionals (APBP) guidelines. Consider placing new parking near a different school entrance and providing locked cages to increase security.
- Consider recruiting student or parent volunteer "School Safety Patrol" valets to assist in loading and unloading students at the drop-off zone.



*Crossing guards assisting at Pleasant Hill Road and Springhill Road*

### **Springhill Road**

The main access point for Springhill Elementary school and a major commuting route, Springhill Road is challenged by a downslope approaching the school and Pleasant Hill Road, as well as a curve that impedes sightlines. Audit participants noted high speeds on Springhill Road being a barrier to families in nearby neighborhoods walking to school. San Reliez Court is sometimes used as a remote drop-off area and students walk along Springhill Road to get to school.

A high-visibility yellow ladder crosswalk is marked across Springhill Road on the southeast leg of the intersection with San Reliez Court, at an uncontrolled location. A white transverse crosswalk is marked on the southeast leg of the intersection with Martino Road, which is three-way stop-controlled. Pedestrian crossings at both locations are challenged by speeding vehicles and poor sight lines.

Sidewalks exist on both sides of Springhill Road to San Reliez Court, where they drop on both sides of the street.

### **Recommendations (J)**

- Station mobile speed feedback signs on Springhill Road and other streets as needed.
- Improve crosswalk visibility at San Reliez Court with updated Assembly B and D signs in both directions, trimming vegetation, and marking yield teeth at existing crosswalk.
- Improve crosswalk visibility and stopping compliance at Martino Road by refreshing crosswalk lines, posting a pedestrian crossing sign at the crosswalk, and marking STOP AHEAD in the southbound direction at the curve.
- Include sidewalk on Springhill Road to Martino Road in City's Master Walkways Plan to be considered when funding is available.



## Programmatic Recommendations

### **Biking Policy**

Springhill Elementary currently has a policy that only Third Graders and older students can bike to school. This policy discourages biking and is also not easily enforceable by the school. This policy should be revised or eliminated so that biking is acceptable for all students. The school can encourage parents to bike with their children to promote safe biking behaviors.

### **School Bus Provider Coordination**

Several students currently ride the school bus. However, feedback from the audit indicated that buses are currently over capacity. The City and District should coordinate with the school bus provider to accommodate current and potential future bussing demand as the planned middle school expansion will adversely impact routes.

### **Remote Drop Off**

Encouraging parents to drop students off in locations other than the school passenger loading loop can help to ease congestion at the school and nearby sites. Remote drop off also affords students the opportunity to walk at least part of the distance to school. Audit participants identified two possible locations for alternative passenger loading in the vicinity of Springhill Elementary School: At Acalanes High School at the parking lot closest to the south end of Hillview Drive, near the tennis courts) and at the staging area for Briones Regional Park. Coordination with the high school and East Bay Regional Parks District will be necessary to pursue these options.

### **Walking School Buses and Bike Trains**

Walking school buses and bike trains are organized groups of children walking or biking to school with an adult. They address parental concerns about children walking or biking to school alone. In addition, shifting parents away from driving to school may reduce congestion, improve air quality and encourage active communities. First walking school bus efforts could be focused on families living along Quandt Road, Springhill Road, and Reliez Valley Road, which have uninterrupted walkways to Springhill School. Quandt Road is divided into two sections, with motor vehicle access prohibited between the two sections. Families on the east end of Quandt Road could benefit significantly from a walking school bus, as the walking trip to school along Quandt Road is much shorter (0.6 miles) than the driving trip (.9 miles), and doesn't require one to wait at signals.

### **Safety Education Campaign**

Audit participants identified a need for reminders to parents about safe transportation behaviors, including reducing speeds and watching for students near the school. This information is particularly useful at the beginning of the school year. Reminders can be integrated with the school calendar, with traffic safety reminders sent out around events such as time changes, after winter break, and approaching the end of the school year.

Several marketing campaigns exist to remind parents about safe driving. StreetSmarts is a popular campaign, which includes banners and posters on streets near the school. A letter from the police can be a good opportunity to reinforce desired circulation.

### **Bicycle Education Programs**

Typical school-based bicycle education programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of biking. Potential pedestrian education curriculum elements include traffic sign identification and how to use a crosswalk. Such education programs can occur inside the classroom, in a school assembly, or through interactive exercises. Locally, East Bay Bicycle Coalition offers on-bike rodeos to schools for a small fee (approximately \$1,200 for one day of service serving an entire school).

Information about safe bicycling and walking practices can be included in the school newsletter or principal orientation letter, along with other traffic safety reminders.

### **Walk and Bike to School Day**

Springhill Elementary School participates in International Walk and Bike to School Day, an annual special event encouraging students to try walking or bicycle to school. In addition to this annual event, walking can be promoted by regular ongoing walk and bike to school days. Walk and Bike to School Day can be held monthly, or even weekly, depending on the level of support and participation from students, parents and school and local officials. Often, walking or biking on one of these days is a first step in shifting someone to a new habit of walking and biking every day. These days can be supported through school advertising, student incentives, and fun themes.

Parents expressed interest in recognizing students who walk and bike to school on a regular basis in addition to those who walk and bike to school during special events. There are specific programs that may help to accomplish this, such as friendly competitions where students or classrooms track their mileage individually or collectively to achieve goals such as “Walk Across California.” Schools can track students’ walking and biking trips via low-tech solutions such as punch cards, or high tech solutions, such as RFID cards and check-in machines (for example, Boltage [www.boltage.org](http://www.boltage.org)). Radio-frequency identification (RFID) cards are a wireless tag that assists with data tracking. Students can install RFID tags on their helmets or a bracelet to automatically count when they walk or bike to school. Students can win prizes, get extra recess time, or be entered into a raffle based on the number of walking or biking trips they make.

### **Carpooling**

The Metropolitan Transportation Commission (MTC) has a SchoolPool tool, which is an online ride matching program that helps families form carpools. A low-tech version of this is to print a map of where students live (without student names) and post it in the school office or circulate it during school orientation, so parents are aware of carpooling opportunities in their neighborhoods. Carpool encouragement is particularly beneficial in the fall, so parents are prepared to share a trip on rainy days when walking and biking is less appealing.

### **Safe Routes to School Champions**

Shifting people’s travel habits from driving to walking and biking takes sustained effort. Schools that have a group of committed parents, teachers, and administrators to promote the program have the most success in sustaining a program year-after-year, and thus promoting cultural change. These people are called “champions.” Champions can be integrated into the school structure in a variety of ways:

- Create a champion role as part of the PFC (Walk audit participants suggested that the Green Team could take on this role.)
- Establish a SR2S Champion as a separate volunteer role that reports directly to the principal
- Solicit teachers to take on the role of a champion as part of their duties

There are numerous resources online for champions to use in promoting events and getting ideas.

- [511contracosta.org/tag/safe-routes-to-school/](http://511contracosta.org/tag/safe-routes-to-school/)
- [www.alamedacountysr2s.org](http://www.alamedacountysr2s.org)
- [www.marincountysr2s.org](http://www.marincountysr2s.org)
- [www.saferoutesinfo.org/](http://www.saferoutesinfo.org/)
- [www.saferoutespartnership.org/](http://www.saferoutespartnership.org/)
- [www.sparetheyairyouth.org/](http://www.sparetheyairyouth.org/)

## Prioritized Recommendations

**Table 2** summarizes and prioritizes recommendations for Springhill Elementary School. Projects were prioritized based on the following criteria:

- Potential to address a safety concern
- Student population served
- Community support
- Cost and engineering level-of-effort required

The proposed improvements for Springhill Elementary total \$91,300, of which \$15,800 is high priority, \$51,600 is medium priority, and \$23,900 is low priority. Project rankings are subject to change based on additional city, school, and community feedback and advanced project design/cost estimation.

*Table 2: Springhill Elementary School Recommended Improvements*

ID	Location	Recommendations	Lead Agency	Priority Level	Planning Level Cost
	Programs	<ul style="list-style-type: none"> <li>• Formalize student valet program to improve efficiency of drop-off. Encourage parents to use identified park and walk locations</li> <li>• Encourage formation of walking school buses along Reliez Valley Road, Springhill Road, and Quandt Road</li> <li>• Develop Walk and Bike to School Maps</li> <li>• Work with Green Team to encourage walking and biking through special events and ongoing recognition of walkers and bikers</li> <li>• Educate students about safe walking and biking through classroom training, on-bike skills, and assemblies</li> <li>• Work with high school, school district, and East Bay Regional Parks District to identify potential remote drop-off locations</li> </ul>	School	High	Staff time
			School/District	High	Staff time
			School/PTA	Medium	\$2,000
			District/City	High	Staff time, printing
			School/District	Medium	\$1,200
			School/District	High	Staff time
A	Pleasant Hill Road at Springhill Road	<ul style="list-style-type: none"> <li>• Install fluorescent Assembly B signs with reflective sign post panels at uncontrolled crosswalk across the slip lane</li> <li>• Trim or remove vegetation on Spring Hill Road in advance of the slip lane to provide unobstructed view of the crosswalk</li> <li>• Stencil yield line in advance of crosswalk across slip lane</li> <li>• Consider constructing speed table with crosswalk</li> <li>• Install flexible bollards on pedestrian refuge island to provide greater sense of separation for pedestrians</li> <li>• Install green skip stripe between bike lane and bike pocket on southbound Pleasant Hill Road</li> </ul>	City	High	\$400
			City	High	Maintenance staff time
			City	High	\$400
			City	Medium	\$15,000
			City	High	\$300
			City	Medium	\$7,200
<b>Total Location A:</b>					<b>\$16,300</b>

ID	Location	Recommendations	Lead Agency	Priority Level	Planning Level Cost
B	Pleasant Hill Road	<ul style="list-style-type: none"> <li>Formalize parking area on west side of Pleasant Hill Road</li> </ul>	City	Medium	\$1,000
		<ul style="list-style-type: none"> <li>On east side of Pleasant Hill Road, consider split-rail fence barrier separating sidewalk from motor vehicle traffic south of Hillview Lane</li> </ul>	City	Medium	\$1,000
<b>Total Location B:</b>					<b>\$2,000</b>
C	Quandt Road	<ul style="list-style-type: none"> <li>Stripe advance stop bar 25 feet back from crosswalk on westbound Quandt Road to provide room for school buses turning from northbound Pleasant Hill Road</li> </ul>	City	High	\$600
		<ul style="list-style-type: none"> <li>Review signal timing to determine if a change in the length of the left turn cycle from Pleasant Hill Road will improve congestion</li> </ul>	City	Medium	\$12,000
		<ul style="list-style-type: none"> <li>Stripe double yellow centerline on Quandt Road to del Arroyo Court</li> </ul>	City	High	\$2,200
		<ul style="list-style-type: none"> <li>Implement plans to construct sidewalk on north side from Pleasant Hill Road to Quandt Court</li> </ul>	City	High	Funded
		<ul style="list-style-type: none"> <li>Improve pavement of existing pathway along south side of Quandt Road</li> </ul>	City	Medium	\$20,000
<b>Total Location C:</b>					<b>\$34,800</b>
D	School Grounds Access	<ul style="list-style-type: none"> <li>Repaint arrows in school driveway loop for one-directional traffic. If needed, reconfigure perpendicular parking in corner of school parking lot as angled parking</li> </ul>	District	Medium	\$700
		<ul style="list-style-type: none"> <li>Stencil KEEP CLEAR on Springhill Road at driveway entrance and exit</li> </ul>	District/City	High	\$400
		<ul style="list-style-type: none"> <li>Repaint school driveway crosswalks with high-visibility yellow ladder crosswalks and install tactile dome strips</li> </ul>	District	High	\$2,000
		<ul style="list-style-type: none"> <li>Provide additional bicycle parking on campus</li> </ul>	District	Medium	\$800
		<ul style="list-style-type: none"> <li>Pave the pathway between Briones staging area and the school.</li> </ul>	East Bay Regional Parks	Low	\$8,100
<b>Total Location D:</b>					<b>\$12,000</b>
E	Springhill Road	<ul style="list-style-type: none"> <li>Station mobile speed feedback signs on Springhill Road and other streets as needed</li> </ul>	City	Medium	\$4,000
		<ul style="list-style-type: none"> <li>Improve crosswalk visibility at San Reliez Court with updated Assembly B and D signs in both directions, trimming vegetation, and marking yield teeth at existing crosswalk</li> </ul>	City	High	\$2,100

ID	Location	Recommendations	Lead Agency	Priority Level	Planning Level Cost
		<ul style="list-style-type: none"> <li>• Improve crosswalk visibility and stopping compliance at Martino Road by refreshing crosswalk lines, posting a pedestrian crossing sign at the crosswalk, and marking STOP AHEAD in the southbound direction at the curve</li> </ul>	City	Medium	\$1,100
		<ul style="list-style-type: none"> <li>• Include sidewalk on Springhill Road to Martino Road in City's Master Walkways Plan to be considered when funding is available</li> </ul>	City	Low	\$15,800
<b>Total Location E:</b>					<b>\$23,000</b>