



Santa Cruz City Schools Complete Streets Master Plan February 2015



Santa Cruz City Schools Complete Streets Master Plan

Prepared for City of Santa Cruz Public Works by Ecology Action



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1. EXECUTIVE SUMMARY

The Project

The City of Santa Cruz Public Works Department partnered with non-profit Ecology Action to develop a Community Based Transportation Plan entitled Santa Cruz City Schools Complete Streets Master Plan which was funded in February 2013 by Caltrans. This two-year effort was launched to identify barriers to safe student sustainable transportation and guide future transportation developments and interventions at the 10 city schools.

What Are Complete Streets?



Complete Streets address congestion, climate change and oil dependence by shifting shorter trips to lower-carbon modes.

Complete Streets improve safety.

Complete Streets foster strong, equitable, healthy communities

Complete Streets are designed and managed to enable safe and efficient access for pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Everyone – ages 8 to 80 – should feel safe moving along and across our transportation corridors. Moving from place to place should be an enjoyable experience that contributes to a sustainable and healthy lifestyle for the entire community – no matter if it’s near Westlake pond or in the Beach Flats. Complete Streets serve everyone equally.

Locally, the County of Santa Cruz developed The Santa Cruz County Complete Streets (CS) Program with policy guidance and tools to implement this larger effort. Key elements of the County CS Program include the Monterey Bay Area CS Guidebook, public education and training, and a framework for evaluating the economic impacts of CS investments.

1. EXECUTIVE SUMMARY

What is the Safe Routes to School Movement?

Safe Routes to School (SRTS) is a national and international movement to create safe, convenient, and fun opportunities for children to bicycle and walk (skate and scooter) to and from school. SRTS can also play a critical role in reversing the alarming nationwide trend toward childhood obesity and inactivity. SRTS programs are built on collaborative partnerships among many stakeholders.

The most successful SRTS programs incorporate the Five E's:

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 the community.

Enforcement: Partnering with law enforcement to ensure that traffic laws are obeyed in the vicinity of schools (including 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 intervention(s).



The goal of Safe Routes to School is to get more children bicycling and walking to schools safely on an everyday basis.

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Benefits When More Students Walk, Bike And Take Transit To School

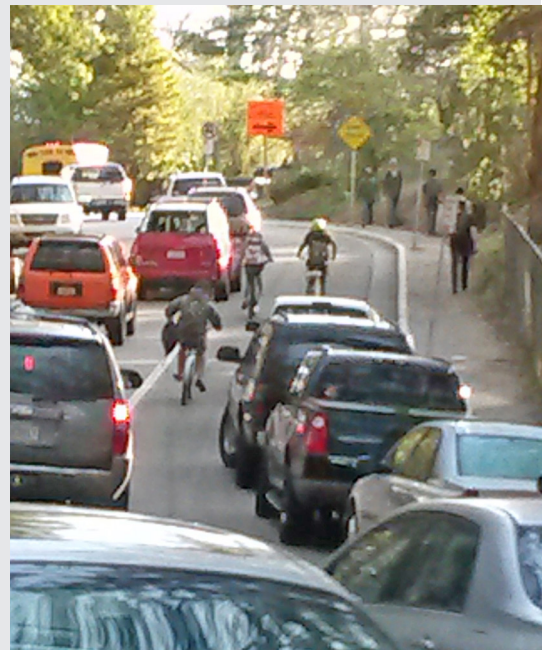
Reduced Greenhouse Gas Emissions (GHGE). California generates 7% of all U.S. GHGE and is the 12th highest emitter worldwide. 38% of California's emissions are due to transportation; personal vehicles comprise 79% of that total. Every vehicle mile we replace with a non-emitting substitute, reduces GHGE by 1 pound on average (SRTS National Partnership).

Congestion Reduction. In 2009, American families drove 30 billion miles and made 6.5 billion vehicle trips to take their children to and from schools; this accounts for 10- 14% of morning traffic (SRTS National Partnership). Congestion not only affects the overall morning commute but is a major safety concern at most area school sites.

Increased Student Health. Research demonstrates that children who walk or bike to school have higher daily rates of physical activity and better cardiovascular fitness than children who do not actively commute to school.

Increased Safety for Student Cyclists/Pedestrians. By reducing the number of cars heading to and from school, traffic conditions are improved and the safety of those biking and walking are increased.

Within the span of one generation, the percentage of children walking or bicycling to school has dropped precipitously, from approximately 50% in 1969 to just 13% in 2009 (National SRTS Partnership). Here in Santa Cruz 2013 data indicate 30% of students use active transportation. This plan provides a specific roadmap for getting children biking and walking rates closer to 50%.



1. EXECUTIVE SUMMARY

The Community Participation Process

The backbone of this 2-year effort focused on engaging with parents, school staff, students and the general public to gather input with the goal of increasing safe student sustainable transportation. A variety of methods were employed to gather this public input.

Community Forums. Two forums were held, October 23rd & 24th, 2013, to introduce the project and solicit public comment. The first forum was held at Santa Cruz High School and the second was held at Harbor High School. Parents, community members, elected officials, school staff, school district officials and agency staff participated. Alta Planning and Design presented the project goals and timeline. Large format maps of the 10 schools and surrounding neighborhoods were displayed for community members to share their insights and comments on regarding good and bad biking and walking routes. All comments were captured on the maps.

School Site Walking/Biking Audits. A walking audit was conducted at every school site. Parents, students, principals, community members, Ecology Action and City staff met at the school site and walked the perimeter during the busy morning student drop-off times. Audit members evaluated infrastructure, circulation, and behavior of pedestrians, bicyclists and drivers. After the field work, participants came together to log observations on a large scale map created especially for this planning process. All observations were noted and became the basis for plan recommendations.

Parent Survey. A 2-page Spanish/English National SRTS Parent Survey was circulated to the entire parent population of 8 of the 10 schools. Two of the schools opted out of this survey. All surveys were collected and sent to the National Center for analysis. Parent narrative comments as well as the full survey results can be found in the appendix of this report.

Student Travel Mode Survey. EA staff conducted student mode surveys at all of the 10 school sites using the National SRTS Tally Survey. This survey asks students to indicate by a show of hands how they got to and from school during a 2-day period. Results are tabulated by the National SRTS Data Collection center. The full report is available in the appendix.

Online Outreach and Input. A website was created to explain the public process, notify the public of upcoming meetings and audits and to solicit public comments.

PTA/School Meetings. At the completion of the field audits, EA and Public Works staff met with parents and staff at all 10 schools to share audit findings and solicit input for revisions.



1. EXECUTIVE SUMMARY

The City of Santa Cruz Transportation Overview

This small coastal city has 13 Metro bus routes operating exclusively within the city and was recognized nationally in 2007 as a Bicycle Friendly Community by the League of American Bicyclists. According to 2009-2013 American Commuter Survey (ACS), the City of Santa Cruz, when compared to other similar sized cities with college campuses in the West has a total Walking/Biking mode split of 19%. Its biking rate is higher than Chico, Santa Barbara, Palo Alto and San Luis Obispo.

Transportation Modes in College Towns of Similar Size

City	Population	Bike	Walk	Total Bike/Walk	Transit	Carpool	SOV*
Corvallis	54,462	12.50%	12.20%	24.70%	2.90%	7.80%	56.70%
Davis	65,622	20.70%	3.40%	24.10%	6.50%	8.00%	55.80%
Boulder	97,385	10.60%	9.80%	20.40%	9.00%	5.70%	51.60%
Santa Cruz	59,946	9.50%	9.90%	19.40%	5.40%	8.30%	59.50%
San Luis Obispo	45,119	7.40%	7.40%	14.80%	2.70%	7.00%	69.60%
Palo Alto	64,403	8.60%	5.80%	14.40%	5.30%	6.30%	64.60%
Missoula	66,788	6.20%	7.50%	13.70%	2.00%	9.00%	69.20%
Santa Barbara	88,410	5.50%	6.80%	12.30%	6.10%	9.90%	64.60%
Chico	86,187	5.50%	5.40%	10.90%	1.30%	12.00%	69.80%

Note: ACS numbers are based on surveys of a sample of the population, so they are estimates -- sometimes with large margins of error. Some changes may not be statistically significant. They are bike commuter estimates; many people who ride bikes are not counted here. *Single Occupancy Vehicle

The Schools

In the spring of 2013, the 10 City school sites served a total of 5,893 students with 650 staff. (By January 2015 enrollment has grown to 7,023 students). Eight of these sites are neighborhood schools with 51% of students living a mile or less from the school. The two remaining sites are charter schools that draw students from throughout the county. The following chart shows overall student distance from school, current use of active transportation and crash history near the 10 sites.

Student distance from school, current use of active transportation and crash history by site.

	Students who live within a mile of school	Students who use Active Transportation	Students who live within a mile and DO NOT use Active Transportation	Bicycle & Pedestrian crashes within 1/4 mile of school 2007-2012	Bicycle & Pedestrian crashes within 1/2 mile of school 2007-2012
Bay View Elementary	73%	38%	35%	29	106
De Laveaga Elementary	38%	21%	17%	0	25
Gault Elementary	89%	36%*	53%	4	63
Westlake Elementary	64%	25%*	39%	5	15
Branciforte Middle	59%	40%	19%	34	78
Mission Hill Middle	49%	45%	4%	14	70
Harbor High	31%	24%	7%	23	47
Santa Cruz High	41%	34%	7%	41	117
Branciforte Small Schools	Unavailable	24%	Unavailable	32	100
Pacific Collegiate	Unavailable	16%	Unavailable	3	15

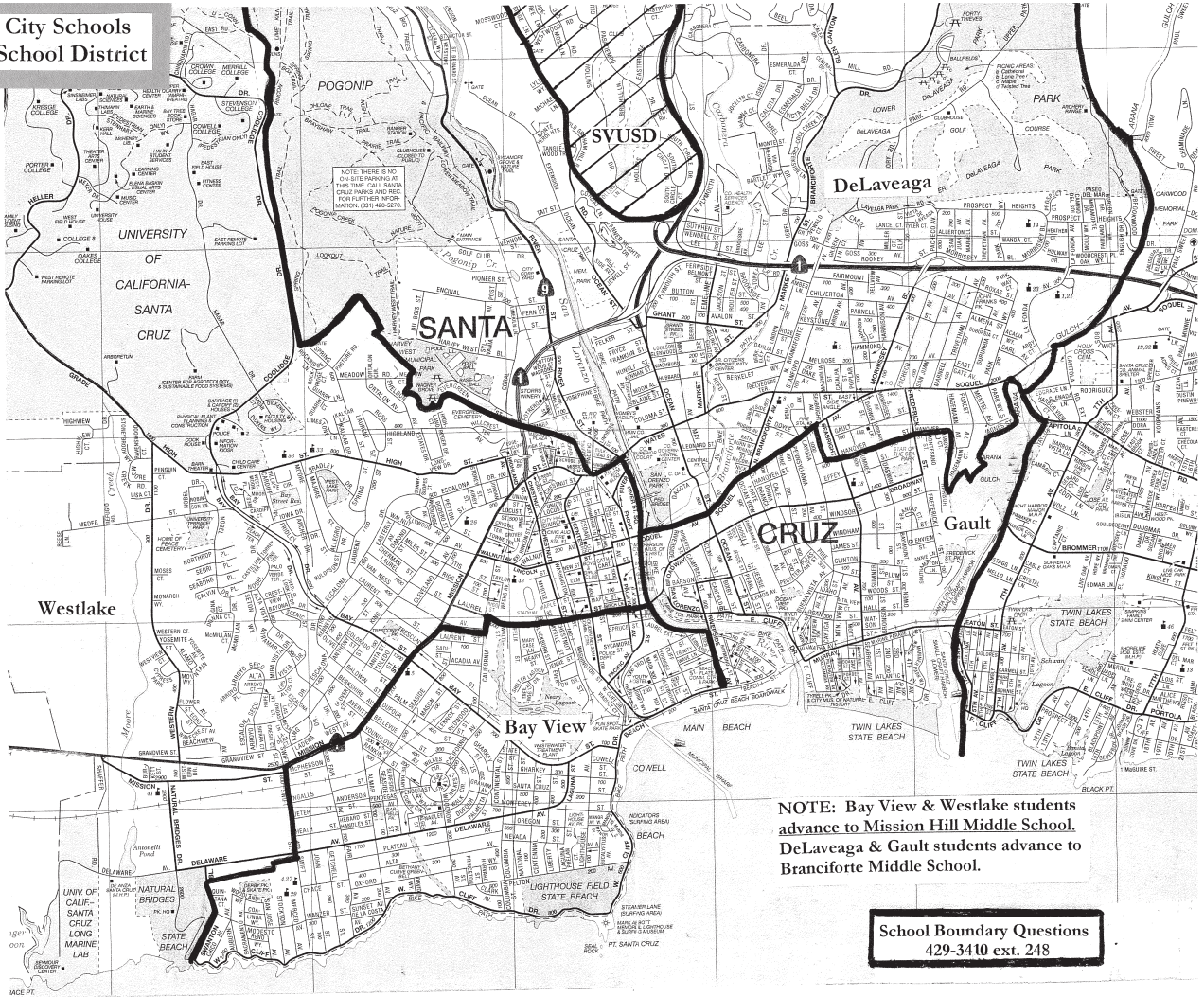
*Rates may be higher according to parent survey data



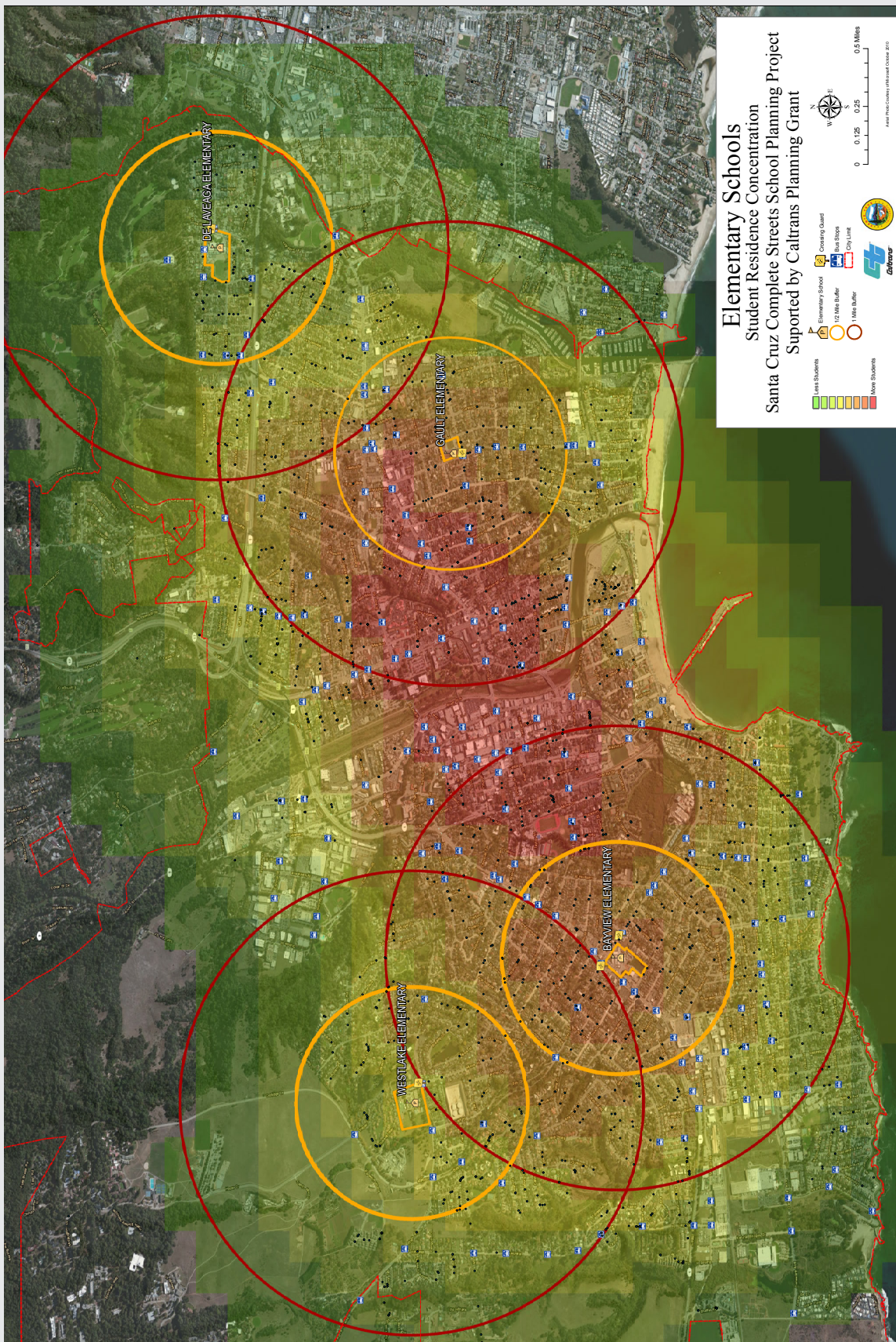
1. EXECUTIVE SUMMARY

Santa Cruz City Schools Elementary District Boundary Map

Santa Cruz City Schools
Elementary School District



1. EXECUTIVE SUMMARY



1. EXECUTIVE SUMMARY



Project Goals:

- Identify obstacles to students biking, walking and taking transit to all City schools.
- Develop list for each school to reduce those obstacles.
- Identify low-cost sustainable transportation projects.
- Identify and rank projects for potential funding opportunities.

Project Findings:

Student Travel Data

According to self-reporting student surveys from the 10 sites:

- 30% of students currently use active transportation to get to and from school.
- 3% of students take public transportation.
- 9% of students carpool.
- 57% of students travel to and from school in a family car.

It should be noted that student self-reporting mode data is similar to parent self-reporting data at 6 of the 8 surveyed schools. However, at Gault Elementary parents reported a 54% active transportation rate while students only reported a 36% active transportation rate. Similarly at Westlake Elementary parents reported active rates at 39% but students only reported 25%. It is conceivable that both of these schools have higher active transportation rates or that the pool of parents that returned surveys were more likely to have their students use active transportation.

50%

of the City of Santa Cruz's greenhouse gas emissions (GHGE) are attributed to the transportation sector.

80% by 2050

= the GHGE reduction goal for the City of Santa Cruz.

Reducing the estimated

1,209,240

annual home to school motor-vehicle trips could substantially help the City attain its 80% GHGE reduction goal. (Calculated using current reported trips in family vehicle).

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Traffic Safety Data

Office of Traffic Safety (OTS) data from federal fiscal years (FFY) 2008 to 2012 show that pedestrian and bicycle crashes account for 40% of all reported Santa Cruz City traffic injury crashes and 86% of fatalities. Although most of these crashes do not involve school age children they certainly affect parents' attitudes on the perceived safety of children walking and biking to school in the City.

OTS ranked the City of Santa Cruz as the worst city for bicyclist injury and fatalities- 1st out of 102 similar sized cities in 2008, 2009, and 2012. It ranked Santa Cruz 4th/103 in 2010 and 3rd/101 in 2011. (In 2012 when Santa Cruz ranked first in bike injury and fatalities, the city of Davis ranked third even though the bike mode split is twice that of Santa Cruz -- Santa Barbara was 4th , Chico was 7th and San Luis Obispo ranked first in it's class of 92 similar sized cities).

Injuries:

1,231

Total Motor Vehicle Related (MVR) **Injuries** in Santa Cruz 2008 - 2012.

496 or 40%*

MVR **Injuries** involving Pedestrians/Bicyclists (compared to 12%* statewide)

Fatalities:

7

Total MVR **Fatalities** in Santa Cruz 2008 - 2012

3 or 43%*

MVR **Fatalities** involving Bicyclists (compared to 5%* statewide)

3 or 43%*

MVR **Fatalities** involving Pedestrians (compared to 23%* statewide)

OTS Collisions by Category - City of Santa Cruz - Federal Fiscal Year

	2008	2009	2010	2011	2012	5 Year Total
Victims Injured - All Categories	284	239	216	250	242	1231
Total Fatalities - All Categories	2	3	1	0	1	7
Pedestrians Injured	30	27	26	25	22	130
Bicyclists Injured	81	80	54	70	81	366
Pedestrians Killed	2	0	0	0	1	3
Bicyclists Killed	0	2	1	0	0	3

1. EXECUTIVE SUMMARY

School Crossing Guard Program

Currently the Santa Cruz Police Department (SCPD) runs the City Crossing Guard program and is responsible for hiring and training guards. The city's four elementary schools currently have 8 guard positions staffed by 10 individuals. Funding for the guards is shared by City Schools and the City of Santa Cruz. There is no formalized training program for guards currently in place. A traffic officer will spend time with guards at their specific location at the beginning of their tenure to observe and instruct. Traffic officers do provide follow up training as needed if requested or a problem is identified. When motorists endanger guards or their charges, guards are instructed to write down license plate numbers and report the incident to SCPD. Subsequently, warning letters are mailed to the registered owners of the vehicles involved. In 2014 there were 5 such complaints and in only one case was a license number captured so that a warning letter could be sent out.

Parent Survey Data

Parents were surveyed, in English and Spanish, on their attitudes toward transportation and their children's travel modes in 8 of the 10 schools (two schools declined to conduct the surveys). When asked what are the biggest barriers to having their child bike or walk to school, the following were the top barriers:

1. **Safety of Intersections and Crossings**
2. **Distance**
3. **Violence & Crime/Speed of Traffic/Amount of Traffic (these three categories tied)**

Project Recommendation Summary

Safety is a primary barrier for parents allowing students to bike or walk to school. To address this barrier we recommend:

- **Implementation of as many of the plan-recommended infrastructure improvements near school sites as is possible. (160 infrastructure projects were recommended for a total cost of over \$18,000,000 – feasibility and costs for each project vary widely making some improvements easily implemented and others more challenging to implement)**
- **Implementation of as many of the plan-recommended education efforts which include students, motorists and crossing guards**
- **Deliver annual bicycle safety education training to all city 5th graders and pedestrian education to younger students**
- **Deliver education campaign for drivers at all school sites to reinforce vital safety messaging and education.**

1. EXECUTIVE SUMMARY

Citywide Recommendations

1

Install two speed feedback signs in advance of all school sites with priority given to elementary, then middle school and lastly high schools.



2

Throughout School Zones citywide refresh existing worn crosswalks, stop bars, centerlines, and SLOW SCHOOL XING pavement markings as needed.



3

Implement countdown pedestrian signal heads citywide.



4

Continue city practice of requiring homeowners to cut back intruding vegetation and repair damaged sidewalks adjacent to property to ensure adequate pedestrian through zone and sight distance.



5

Conduct education campaign aimed at increasing motorist and bicyclist understanding of Shared Lane Markings - sharrows.



6

Conduct bicycle safety education to all 5th grade students and pedestrian safety education to all 2nd graders at all City School sites.



7

Create annual crossing guard training to better support the important and challenging work that guards perform every day for the City's children. Office of Traffic Safety could be a viable source.

