ORIGINAL

ACTIVE TRANSPORTATION PROGRAM

CYCLE 1

Sacramento County

Howe Avenue Bike & Pedestrian Improvement Project

Award of this grant will provide for a complete Road Diet solution of Howe Avenue between El Camino Avenue and Marconi Avenue. The existing four lanes will convert to three lanes with a through lane in each direction and a shared left turn lane in the center. This Project will also provide much needed sidewalks and Class 2 bike lanes for this disadvantaged community.

Thank you in advance for your hopeful award of these much needed funds.

Howe Avenue
Elementary School

Dyer-Kelly
Elementary School

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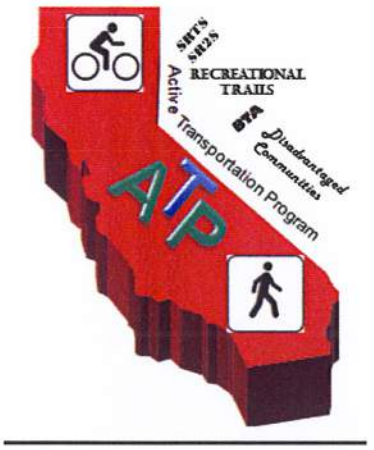


ACTIVE TRANSPORTATION PROGRAM

CYCLE 1

APPLICATION
Part 1
(Includes Sections I, V, VI, VII, VIII & XI)

Please read the Application Instructions at
http://www.dot.ca.gov/hq/LocalPrograms/atp/index.html
prior to filling out this application

Project name:	Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

For Caltrans use only: ____TAP ____STP____RTP ____SRTS ____SRTS-NI ____SHA
____DAC ____Non-DAC ____Plan

I. GENERAL INFORMATION

Project name: Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

(fill out all of the fields below)

1. APPLICANT (Agency name, address and zip code)	2. PROJECT FUNDING
Sacramento County, Dept. of Transportation	ATP funds Requested $ 1,853,000.00
3. APPLICANT CONTACT (Name, title, e-mail, phone #)	Matching Funds (If Applicable) $
Ron E. Vicari, II Principal Civil Engineer Vicarir@saccounty.net (916) 874-5164	Other Project funds $
	TOTAL PROJECT COST $ 1,853,000.00
4. APPLICANT CONTACT (Address & zip code)	5. PROJECT COUNTY(IES):
4111 Branch Center Road, Sacramento, CA 95827	Sacramento
6. CALTRANS DISTRICT #- Click Drop down menu below District 3	7. Application # 1 of 3 (in order of agency priority)

Area Description:

8. Large Metropolitan Planning Organization (MPO)- Select your" MPO" or "Other" from the drop down menu>	SACOG Sacramento Area Council of Government
9. If "Other" was selected for #8- select your MPO or RTPA from the drop down menu>	
10. Urbanized Area (UZA) population (pop.)- Select your UZA pop. from drop down menu>	Within a Large MPO (Pop > 200,000)

Master Agreements (MAs):

11. ☒ Yes, the applicant has a FEDERAL MA with Caltrans. 03-5924R
12. ☒ Yes, the applicant has a STATE MA with Caltrans. 00090S

13. If the applicant does not have an MA. Do you meet the Master Agreement requirements? Yes ☐ No ☐
The Applicant MUST be able to enter into MAs with Caltrans

Partner Information:

14. Partner Name*:	15. Partner Type
16. Contact Information (Name, phone # & e-mail)	17. Contact Address & zip code

☐ Click here if the project has more than one partner; attach the remaining partner information on a separate page

*If another entity agrees to assume responsibility for the ongoing operations and maintenance of the facility, documentation of the agreement must be submitted with the application, and a copy of the Memorandum of Understanding or Interagency Agreement between the parties must be submitted with the request for allocation.

Project Type: (Select only one)

18. Infrastructure (IF) ☒ 19. Non-Infrastructure (NI) ☐ 20. Combined (IF & NI) ☐

Project name: Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

I. GENERAL INFORMATION-continued

Sub-Project Type (Select all that apply)

21. ☐ Develop a Plan in a Disadvantaged Community (select the type(s) of plan(s) to be developed)
☐ Bicycle Plan ☐ Safe Routes to School Plan ☐ Pedestrian Plan
☐ Active Transportation Plan

(If applying for an Active Transportation Plan- check any of the following plans that your agency already has):
☐ Bike plan ☐ Pedestrian plan ☐ Safe Routes to School plan ☐ ATP plan

22. ☒ Bicycle and/or Pedestrian infrastructure
Bicycle only: ☐ Class I ☒ Class II ☐ Class III
Ped/Other: ☒ Sidewalk ☒ Crossing Improvement ☐ Multi-use facility

Other:

23. ☐ Non-Infrastructure (Non SRTS)

24. ☐ Recreational Trails*- ☐ Trail ☐ Acquisition

***Please see additional Recreational Trails instructions before proceeding**

25. ☒ Safe routes to school- ☒ Infrastructure ☐ Non-Infrastructure

If SRTS is selected, provide the following information

26. SCHOOL NAME & ADDRESS: Howe Avenue Elementary, 2404 Howe Avenue, Sacramento CA 95825
27. SCHOOL DISTRICT NAME & ADDRESS: San Juan Unified School District, 3738 Walnut Avenue, Carmichael, CA 95608

28. County-District-School Code (CDS) 34-67447-6034623	29. Total Student Enrollment 553	30. Percentage of students eligible for free or reduced meal programs ** 93.49
31. Percentage of students that currently walk or bike to school 27%	32. Approximate # of students living along school route proposed for improvement 75	33. Project distance from primary or middle school 1,600'

**Refer to the California Department of Education website: http://www.cde.ca.gov/ds/sh/cw/filesafdc.asp

☒ Click here if the project involves more than one school; attach the remaining school information including school official signature and person to contact, if different, on a separate page

Project name: Sacramento County - Howe Avenue Sidewalk Infill

I. GENERAL INFORMATION-continued

Sub-Project Type (Select all that apply)

21. ☐ Develop a Plan in a Disadvantaged Community (select the type(s) of plan(s) to be developed)
    ☐ Bicycle Plan ☐ Safe Routes to School Plan ☐ Pedestrian Plan
    ☐ Active Transportation Plan

    (If applying for an Active Transportation Plan- check any of the following plans that your agency already has):
    ☐ Bike plan ☐ Pedestrian plan ☐ Safe Routes to School plan ☐ ATP plan

22. ☒ Bicycle and/or Pedestrian infrastructure
    Bicycle only: ☐ Class I ☒ Class II ☐ Class III
    Ped/Other: ☒ Sidewalk ☒ Crossing Improvement ☐ Multi-use facility
    Other:

23. ☐ Non-Infrastructure (Non SRTS)

24. ☐ Recreational Trails*- ☐ Trail ☐ Acquisition

    ***Please see additional Recreational Trails instructions before proceeding**

25. ☒ Safe routes to school- ☒ Infrastructure ☐ Non-Infrastructure

If SRTS is selected, provide the following information

26. SCHOOL NAME & ADDRESS:
Dyer-Kelly Elementary, 2236 Edison Avenue, Sacramento, CA 95821
27. SCHOOL DISTRICT NAME & ADDRESS:
San Juan Unified School District, 3738 Walnut Avenue, Carmichael, CA 95608

28. County-District-School Code (CDS)	29. Total Student Enrollment	30. Percentage of students eligible for free or reduced meal programs **
34-67447-6034524	406	88.67
31. Percentage of students that currently walk or bike to school	32. Approximate # of students living along school route proposed for improvement	33. Project distance from primary or middle school
24%	85	2,500'

**Refer to the California Department of Education website: http://www.cde.ca.gov/ds/sh/cw/filesafdc.asp

☒ Click here if the project involves more than one school; attach the remaining school information including school official signature and person to contact, if different, on a separate page

Note: The Howe Avenue Sidewalk Infill Project is near the midpoint of two disadvantaged Elementary Schools. The Howe Avenue Elementary 1,500' to the south is closest, and Dyer-Kelly Elementary School is 2,500' to the northeast of the sidewalk Project. Both schools will benefit from this project.

ACTIVE TRANSPORTATION PROGRAM

CYCLE 1

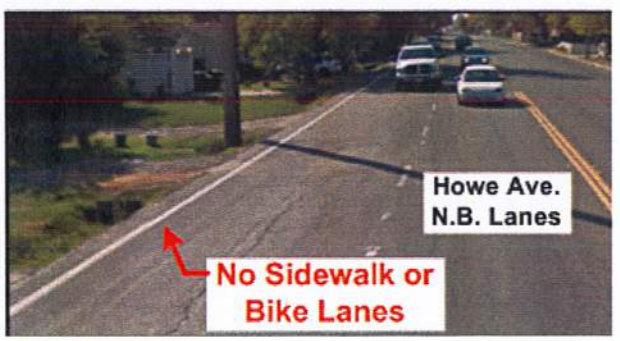
APPLICATION
Part 2
(Includes Narrative Sections II, III & IV)

II. PROJECT INFORMATION

1. Project Location: This sidewalk infill project is located along the frontages of Howe Avenue, a north-south arterial. The westerly sidewalk infill along Howe Avenue will begin at Red Robin Drive, and continue north approximately 1,000' to Marconi Avenue (See **Section IX, Additional Application Attachments – Location Map**). The easterly infill along Howe Avenue will begin at Tallac Street, and continue north approximately 1,100' to Marconi Avenue. This Project will also upgrade the signalized intersection of Marconi Avenue and Howe Avenue to better accommodate vehicular and pedestrian improvements, and to provide accessibility for all users. This Project is located within the Arden-Arcade Community District, located within the unincorporated County of Sacramento, located within Caltrans District 3. Refer also to the "Location Map" in Section IX.

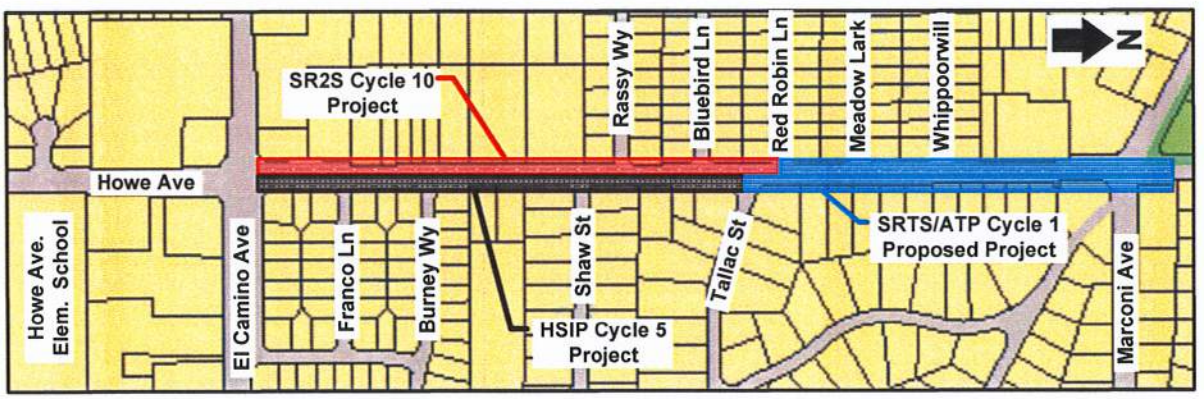
2. Project Coordinates Latitude N38.615973 (Decimal degrees) Longitude W121.415384 (Decimal degrees)

3. Project Description: The purpose of this Project is to provide sidewalks, bike lanes and curb ramps along a busy existing four lane arterial that provides primary access to two disadvantaged public schools. **The need** for these improvements are well documented with pedestrian fatalities and accidents. The nearby schools currently discourage their students from walking and biking to school along this primary street segment. **The scope** of this Project is referred to as a "road diet", reducing the existing four traffic lanes (two lanes in each direction), to three lanes (one lane in each direction) with a shared center turn lane. This lane reduction (and re-stripping) will create the needed space along the both shoulders to provide new sidewalks, and bike lanes.



4. Project Status: This Project is the final (third) phase of the northerly section of a very important segment of Howe Avenue located between two busy arterial streets, Marconi Avenue, and El Camino Avenue. As noted below, the Sacramento County Department of Transportation (SacDOT) has been awarded two previous grants for construction funding of the southerly portions of this Howe Avenue segment (between El Camino to Marconi) to provide a road diet with sidewalks and bike lanes on Howe Avenue.

1. SacDOT was awarded a Safe Routes To School (SR2S) Cycle 10 grant to fund sidewalk and bike lane construction on the west side of Howe Avenue between El Camino Avenue and Red Robin Lane (Re: Caltrans Project ID: SR2S10-03-Sacramento County-1).
2. SacDOT was awarded a Highway Safety Improvement Program (HSIP) Cycle 5 grant to fund sidewalk and bike lane construction on the east side of Howe Avenue between El Camino Avenue and Shaw Ave, however Sac DOT extended the improvements to Tallac Street for ADA continuity reasons.



With the two previously funded design/construction grants (SR2S-10 and HSIP-5), Sac DOT has already prepared many pre-construction tasks (see below) for this final proposed SRTS/ATP-1 Project that will extend the road diet, sidewalks and bike lanes through the Marconi Avenue intersection. As such, the Project status for this proposed SRTS/ATP-1 Project is as follows:

- **Preliminary Design** including Striping plan: **Complete.**
- California Environmental Quality Act (**CEQA**): **Categorical Exemption expected May 2014**

- National Environmental Policy Act (**NEPA**): **Categorical Exclusion expected June 2014.**
- **Right-Of-Way** (R/W) Status: **No R/W is anticipated** due to the Road Diet design, the lane reduction and restriping will allow sidewalks to be constructed within current R/W limits. Only temporary construction easements are anticipated.

III. SCREENING CRITERIA

1. Demonstrated Need for Project

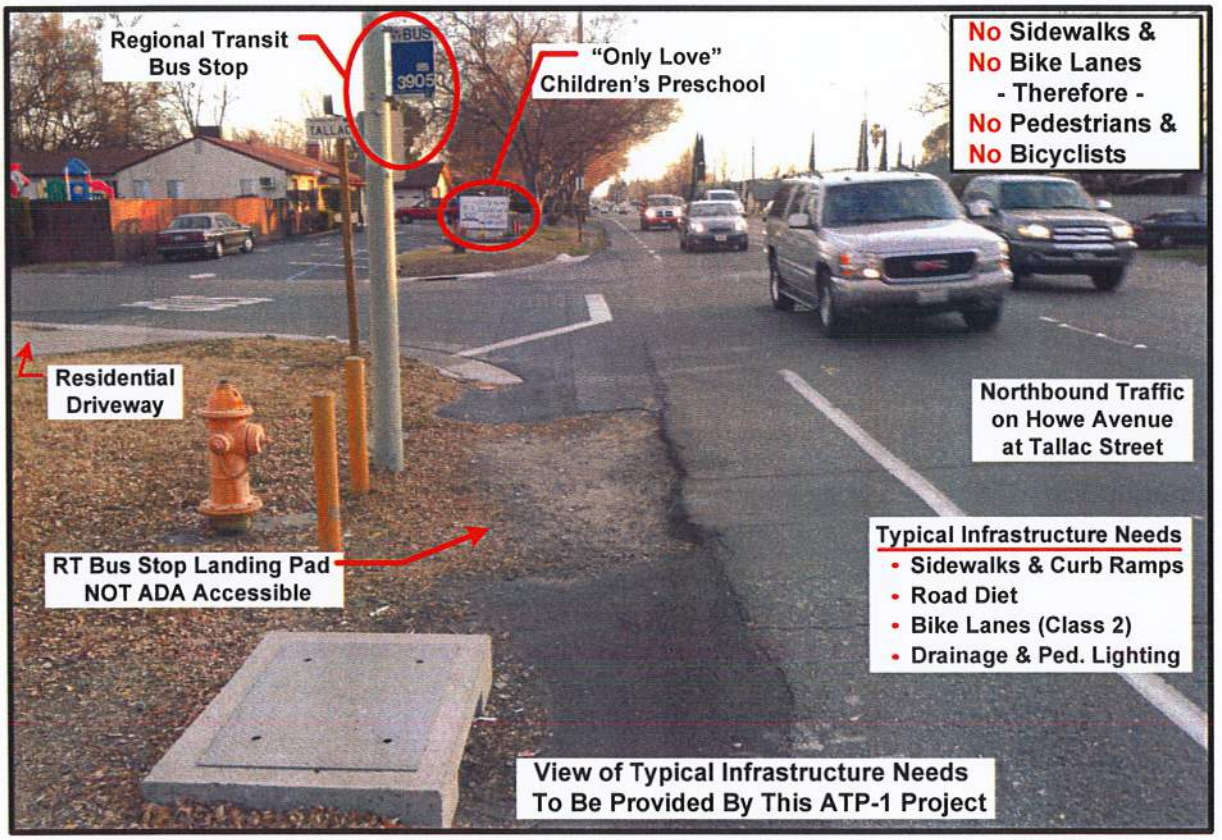
Infrastructure:
Howe Avenue is a critical north-south arterial street serving numerous communities, commercial districts, Freeway access, commuters, truck traffic and many other uses. The existing four lane segment of Howe Avenue where this Project is located between El Camino Avenue and Marconi Avenue serves over 15,200 vehicles per day (**See Section IX, Additional Doc's #1 – 24 Hour Traffic Count**). There are nine minor residential streets that intersect with Howe Avenue between El Camino Avenue and Marconi Avenue in addition to several driveways. There are no left-turn lanes at any of the intersections. There is also no two-way center left-turn lane on this section of Howe Avenue. Peak southbound traffic flow occurs during the morning commute, peak northbound traffic occurs during the afternoon commute. Both peak traffic flows coincide with the timing of neighborhood students going to and from school. There are no existing sidewalks or bike lanes along the northerly segment of Howe Avenue north of Tallac Street until approximately 100' south of Marconi Avenue.

The need for this infrastructure Project is significant for vehicular traffic flow, pedestrians and bicyclists. The majority of the vehicular accidents along this segment are rear-end accidents involving vehicles that had stopped in the through lanes on Howe Avenue waiting to turn left. There have also been many head-on and broadside accidents involving vehicles making left turns into or out of the side streets or driveways. The primary collision factor has been unsafe speed.

The location of this SRTS/ATP Project is such that students from two elementary schools will benefit from these improvements, Howe Avenue E.S. and Deyer Kelley E.S. A letter of support from each of

these schools is provided with a letter of support from their school district, San Juan Unified School District (See **Section IX, Additional Application Attachments – School Letters of Support, 3 total)**. There are no existing sidewalks, no curb ramps, no bike lanes, no accessible bus stops, inadequate storm drainage and insufficient pedestrian lighting. These are all strong deterrents against walking, biking or using the Regional Transit Bus service to this area. The vehicular traffic commonly exceeds the 35 mph speed limit, and the narrow shoulder strongly discourages pedestrians and bicyclists. The disabled community and many local residents (especially children) avoid this segment of Howe Avenue entirely, if at all possible.

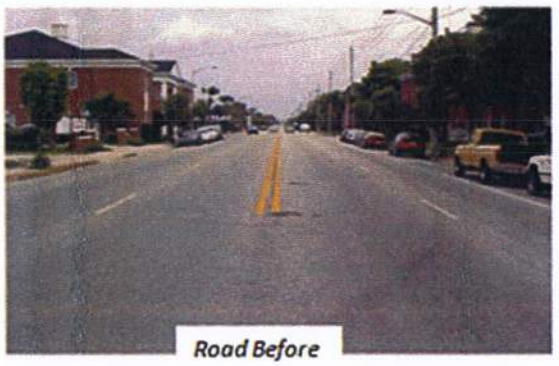
Several pedestrian fatalities in the last few years have caused the Howe Avenue Elementary School Staff to advise their students to avoid walking and biking on Howe Avenue even though many student families live in large apartment complexes on Howe Avenue. The need for this Project is undeniable.



The solution proposed by this SRTS/ATP-1 funding will provide for the continuation of the road diet through the northerly segment of Howe Avenue, between Tallac Street and Marconi Avenue. It has been a goal of SacDOT to make this stretch of Howe Avenue safer for pedestrians, bicyclist, and area

residents. We can accomplish this by completing the sidewalk installation between El Camino Avenue and Marconi Avenue, installing continuous bike lanes, and reducing the travel speed along this stretch by implementing the road diet. Funding for the complete road diet solution of Howe Avenue between the intersecting arterials (El Camino and Marconi) will provide a smoother transition of traffic and complete sidewalks and continuous bike lanes.

The Classic Road Diet Configuration



The Plans for this Project are well underway. The preliminary design including the Striping Plan is complete. The CEQA Categorical Exemption for the proposed road diet Project including sidewalks and bike lanes for the entire segment of Howe Avenue between El Camino Avenue and Marconi Avenue was received in April 2014 and the NEPA Categorical Exclusion is anticipated in May 2014. Because of the road diet solution to this roadway segment between El Camino Avenue and Marconi Avenue, the back of sidewalks will be constructed at about the existing paved edge. Resulting in no anticipated right-of-way needs. The road diet will consist of restriping the existing four lanes (two in each direction, to one lane in each direction with a shared center turn lane. This vehicular lane and bike lane reconfiguration will also require an intersection upgrade at Marconi Avenue and Howe Avenue, to better accommodate the lane transitions, signal mast arms, loop detection relocation, curb ramps upgrades and crosswalk realignments. We do not anticipate any major obstacles in final design.

Education/Encouragement – Interrelationship with Prior Programs: As previously noted in Section II, Part 4 (Project Status), this Project represents the last phase of a three phase funding solution

to improve pedestrian and bicycling along this segment of Howe Avenue, between El Camino Avenue and Marconi Avenue.

This funding effort began as a result of the SRTS Cycle 1 (Project ID SRTSD50_0049), SacDOT received a $500,000 N.I. grant to conduct walkability/bikability audits for 15 schools in the unincorporated county, and to conduct educational, enforcement, evaluation and encouragement programs at those schools to encourage more students to walk and bike to school. Through a very competitive screening process, Howe Avenue E.S. was selected as one of the 15 schools to receive a walking/biking audit. The purpose of the audit was to conduct significant outreach through the school and the community to determine the highest priority infrastructure needs that are currently limiting the students from walking and biking to school. This segment of sidewalk and bike lanes along Howe Avenue between El Camino Avenue and Marconi Avenue was selected as the highest priority need.

Due to funding limitations of individual grant opportunities, it was necessary to use three successive grants to fund the needed road diet infrastructure for the entire Howe Avenue segment between El Camino and Marconi. The preliminary design of the Howe Avenue segment between El Camino and Marconi was originally performed to ensure feasibility of the road diet design, and to ensure no duplication of efforts would occur with the successive funding phases. The road diet concept was the most cost effective solution for providing sidewalks and bike lanes to this established roadway segment since it would not require additional right-of-way, reducing already minimal residential setbacks.

2. Consistency with Regional Transportation Plan

This proposed Project is entirely consistent with four separate relevant governing adopted regional transportation plans noted below, **digital copies provided** with this application, see "Approved Plans":

1. The Sacramento County **Pedestrian Master Plan (PMP):** The PMP website link is http://www.sacdot.com/Pages/PedestrianMasterPlan.aspx . The PMP was approved by the County Board of Supervisors (BOS) 0n November 27, 2007. The PMP is the result of a five year effort to

identify and prioritize pedestrian needs throughout the unincorporated county, based on needs assessments, neighborhood surveys, various stakeholders and community advisory groups. The PMP identifies and prioritizes $318 million in pedestrian needs throughout the county. The PMP is the primary governing Plan that is used by the County to help determine project funding priorities for pedestrian needs. The PMP identifies this Project segment as being a "High Priority Pedestrian District". It identifies the need for sidewalks, pedestrian lighting, and the intersection upgrade at Howe and Marconi that would include pedestrian audible and countdown signals.

2. The Sacramento County **Bicycle Master Plan, (BMP)**. The BMP website link is http://www.sacdot.com/Pages/BikewayMasterPlan.aspx . The BMP was approved by the County BOS in April 2011, it is intended to guide and influence bikeway policies, programs and standards in Sacramento County to make bicycling more safe, convenient and enjoyable for all bicyclists. The BMP shows that Class 2 bike lanes are a high priority along this segment of Howe Avenue to provide additional connectivity to local community destinations and adjacent interconnected routes.

3. The Sacramento County **Americans with Disabilities Act Transition Plan** (ADATP). The ADATP website link is http://www.sacdot.com/Pages/ADADocumentsandResources.aspx . The ADATP was originally approved by the County BOS in 2005 and updated in 2013. The Marconi and Howe intersection, and the Howe Avenue bus stops are all identified as high priority needs in the ADATP. The ADATP also requires that curb ramps be provided when sidewalks are installed as a result of this Project.

4. The **Sacramento Area Council Of Governments, Regional Bicycle, Pedestrian, and Trails Master Plan** (SACOG Regional Master Plan). The SACOG Master Plan Website link is http://www.sacog.org/bikeinfo/pdf/masterplan/Bicycle-Pedestrian-Trails-Master-Plan-2013-06-20.pdf The SACOG Regional Master Plan shapes the goals and strategies of regional pedestrian and bicycle network projects to support walking and biking as popular travel choices in active communities. This segment of Howe Avenue is of course identified as "Higher Priority" in the SACOG Regional Master

Plan, Appendix B Regional Project List, and Maps of Bicycle Network, for "Bike Lanes (Class II)" and "Sidewalk" Project Types, see Project ID # 31223, on page 37 of 61 in the referenced Master Plan PDF.

IV. NARRATIVE QUESTIONS

Q1. POTENTIAL FOR INCREASED WALKING AND BICYCLING, ESPECIALLY AMONG STUDENTS, INCLUDING THE IDENTIFICATION OF WALKING AND BICYCLING ROUTES TO AND FROM SCHOOLS, TRANSIT FACILITIES, COMMUNITY CENTERS, EMPLOYMENT CENTERS, AND OTHER DESTINATIONS; AND INCLUDING INCREASING AND IMPROVING CONNECTIVITY AND MOBILITY OF NON-MOTORIZED USERS.

A1. This Project is centrally located between two elementary schools, Howe Avenue Elementary and Dyer Kelly Elementary, students from each school will benefit from these Project improvements. Due to budget cuts, neither school provides bus service for their students. This Project area is composed primarily of residential properties including several large apartment complexes housing families where students of these K-5 schools live.

Impromptu Memorial At Bellview Park for Student Fatality

On October 27, 2011, a seven year old student from Howe Avenue Elementary School who lived in one of these apartments was struck and killed by a vehicle when walking home from school along this Project segment of Howe Avenue near Bellview Park, where no sidewalks exist, (**See Section IX, Additional Doc #2 – Student Fatality**). Since that student fatality, both schools have strongly discouraged their students from walking or biking along Howe Avenue between Marconi Avenue and El Camino Avenue any time of day, and especially when going to or from school because of the heavy commuter traffic and lack of sidewalks (**See Section IX, Additional Doc #1 - 24 Hr. Traffic Count**). Just a few hundred feet south of that student fatality was another fatality in 2007 (Re: Case ID 3232784 in SWITRS). During the period from January 1, 2003 through December 31, 2012, there were a total of 12 vehicular accidents

involving either a bicycle or a pedestrian. (**See Section IX, Additional Doc #3 – TIMS-SWITRS Bike & Ped Accidents**). There was another fatal pedestrian accident in 2013 that is outside of the SIMS database, but accident report is attached with a TV News report (**See Section IX, Additional Doc #4 – TV Report Re: Deadly stretch of Howe Avenue takes another life & Accident Report**)

That is a total of three fatalities in the last seven years. When a segment of roadway, such as this segment of Howe Avenue between El Camino and Marconi, begins getting high profile local TV news coverage and newspaper stories referring to it as a "deadly stretch of roadway for pedestrians and bicyclists", it is no surprise that especially young K-5 students will avoid using it, and in some cases are forbidden by their parents from using it to walk and bike to school. There is no doubt that providing bike lanes, sidewalks and improved pedestrian lighting with this proposed road diet project will encourage bicyclists, pedestrians and transit bus users to the area schools and other destinations served by this segment.

Some parent volunteers have initiated a "walking school bus", where an adult chaperone will lead a small group of student pedestrians to school once a week by way of longer detour route that avoids walking or biking along Howe Avenue. However, most students living in this Project vicinity are driven the half mile to and from school by their parents. This proposed Project will provide the final segment of sidewalk and bike lanes needed to allow these students to once again be free to walk and bike to both K-5 schools that it will serve. This Project is certain to have an impact with the schools once again encouraging students who live along this segment to walk and bike to school. To help ensure this Project will help to increase the active mode share for all types of trips, SacDOT will issue a press release upon completion of the project so the public and nearby schools will be notified of the safety measures that have been implemented to encourage public use for walking, biking and transit along this important Howe Avenue segment.

A 2011 survey of student parents was conducted at Howe Avenue Elementary to determine more about their attitudes regarding their children getting to and from school. Although 66% of the parents agree

that walking and biking to school is very healthy for children, 69% of the parents still prefer to drive their children to school due to traffic safety concerns. The parents main concerns is the speed of traffic and a lack of sidewalks. Other results are shown below:

AM or PM Trip	Family Vehicle	Walk	Bike	School Bus	Carpool/Other
Morning Trip	69%	15%	2%	0	14
Afternoon Trip	63%	24%	3%	0	10%

Sac DOT has conducted several other bike and pedestrian survey counts, most recently at Howe Avenue Elementary on April 23, 2014, during a fair weather school day. There were no bicyclists, and only 15 pedestrian students that walked to school from the Project area. However, there were 46 pedestrian students that walked home from school in the afternoon on the same day. Therefore, there were three times as many students who walked home from school than walked to school, suggesting perhaps that their parents dropped them off on their way to work, but were not available to drive them home from school. It is very likely that more parents would feel comfortable in allowing their kids to walk to and from school if the sidewalk and bike lane infrastructure were in place. Sac DOT will conduct another bike and pedestrian survey after this Project construction to determine the increase of students walking and biking to school.

This Project would provide the final critical segment of sidewalk and bike lane connectivity along both sides of Howe Avenue between Marconi Avenue and El Camino Avenue, this segment of Howe Avenue serves two disadvantaged schools (Howe Avenue E.S. and Dyer Kelly E.S.), both schools would greatly benefit from these improvements, encouraging more kids to walk or bike to school.

Destinations that would benefit from this Project would include Bellview Park. It is a popular neighborhood park, over four acres in area with a playground, basketball courts, picnic areas, trees and

lawn located on the east side of Howe Avenue, near the southern edge of this SRTS/ATP-1 Project. As referenced above, Bellview Park is the location of the 2011 Howe Ave. E.S. Student fatality and the 2013 fatality. Other destinations that will also be served by these Project improvements include neighborhood shopping districts, other parks, employment centers, two disadvantaged K-5 grade schools (Howe Avenue E.S. and Dyer Kelly E.S.), a nursery school, and several large apartment complexes, interconnecting bus stops and interconnecting bicycle routes (**See Section IX, Additional Application Attachments – Vicinity/Location Map**). There are four Regional Transit (RT) Bus Stops (Route #87) located along the Segment of Howe Avenue between Marconi and El Camino (two south bound, two north bound). Based on RT passenger counts in 2013, the average daily passenger counts at these four bus stops totals 149 passengers getting on or off the bus. These specific ridership counts will be obtained from RT after this Project has been completed to determine how this Project has improved the RT bus mode share. The Marconi/Arden Light Rail Station is another destination served by the RT Bus route #87 on Howe Avenue, and the RT bus route #25 serving Marconi Avenue, located only a half mile away from this proposed Project, as noted on the Destinations Map. The lack of sidewalks, bike lanes and adequate pedestrian lighting along this Project segment serves as a destination deterrent for pedestrians and bicyclists.

Right-of-way and Other Needs. SacDOT does not anticipate any need for right-of-way for this proposed Project due to the road diet concept, the lane reduction from four to three lanes will allow room for the sidewalks to be constructed within the existing right-of-way. There will be some temporary construction easements necessary, but that is not expected to be a concern. This Project is not reliant on the completion of any other projects. The preliminary design is complete, the CEQA and NEPA clearance will be received by June 2014 for the full Howe Avenue road diet segment between El Camino Avenue and Marconi Avenue.

Q2. POTENTIAL FOR REDUCING THE NUMBER AND/OR RATE OF PEDESTRIAN AND BICYCLE FATALITIES AND INJURIES, INCLUDING THE IDENTIFICATION OF SAFETY

HAZARDS FOR PEDESTRIANS AND BICYCLISTS.

A2. The majority of vehicle accidents along this segment are rear-end accidents involving vehicles that had stopped in the through lanes on Howe Avenue waiting to turn left. There have also been many head-on and broadside accidents involving vehicles making left turns into or out of the side streets or driveways. The primary collision factor has been unsafe speed. **(See Section IX, Additional Doc #5 – TIMS/SWITRS Vehicular Accident Map)** There are nine minor residential streets that intersect with Howe Avenue between El Camino Avenue and Marconi Avenue in addition to several driveways. There are no left-turn lanes at any of the intersections. There is also no two-way center left-turn lane on this section of Howe Avenue.

It has been a goal of SacDOT to make this stretch of Howe Avenue safer for pedestrians, bicyclist, and area residents. We can accomplish this by completing the sidewalk installation between El Camino Avenue and Marconi Avenue, installing continuous bike lanes, and reducing the travel speed along this stretch by implementing the road diet.

To increase safety, it is proposed that a road diet be completed on Howe Avenue between El Camino Avenue and Marconi Avenue. As referenced above, this ATP-1/SRTS grant funding would complete the northerly unfunded portion between Tallac Street and Marconi Avenue. This segment of Howe Avenue carries 15,200 vehicles per day which can be adequately handled by a two-lane road. The addition of a two-way left-turn lane would improve safety for vehicles turning into and out of the minor streets and driveways, and would reduce the frequency of the rear-end and serious head-on accidents. The road diet is also expected to reduce the travel speed along this segment, making it safer for all modes of travel. The road diet would provide extra pavement along Howe Avenue for the striping of bike lanes, and room for new sidewalks. The Howe Avenue bike lanes will be carried through the intersection of Marconi Avenue. This will result in the shifting and restriping of lanes, and therefore signal modifications at this intersection. The modifications would include straightening the crosswalk striping, pushing back median nose, putting signals on mast arms, and installing pedestrian countdown heads.

The signal modification costs are considered to be a part of the road diet countermeasure. The intersection modifications are expected to significantly improve the pedestrian and bicycle safety at this intersection. To better accommodate the road diet to the south of Marconi Avenue, the Howe Avenue re-striping will continue a few hundred feet to the north of Marconi Avenue to improve lane transitioning and traffic movement through the intersection.

The potential of this Project to reduce pedestrian and bicyclist accidents and fatalities is very high. This Project segment of Howe Avenue has no sidewalks, no standard bike lanes and substandard pedestrian lighting. As referenced in answer A1, this section of Howe Avenue between El Camino Avenue and Marconi Avenue was reported by local television and newspaper news media on March 28, 2013, after another pedestrian fatality occurred as the "Deadly stretch of Howe Avenue". The continuity of this northerly segment will complete the road diet design with sidewalks and bike lanes through the entire segment between intersecting arterials and provide a complete solution for the traffic, pedestrians and bicyclists using this important segment of Howe Avenue.

The Preferred Project Safety Countermeasure: As noted in the Federal Highway Administration Bulletin FHWA-SA-12-013 regarding proven safety countermeasures (**See Section IX, Additional Doc #6 – FHWA Road Diet Countermeasure**), this segment of Howe Avenue is perfectly suited for the "road diet" countermeasure. This road diet solution is further substantiated in a case study sanctioned by the Oregon Institute of Transportation Engineers, involving six roadways similar to the Howe Avenue segment proposed by this Project, (**See Section IX, Additional Doc #7 – Road Diet Case Study**). The study found that traffic accidents were reduced by 10% to 65%, speeds were reduced from 18% to 76%, without queuing or diversion impact. Pedestrian and bicycling increased with much fewer conflicts. The accepted Crash Reduction Factor (CRF) for a road diet countermeasure is 30%. The CRF represents the percent fewer crashes experienced on a road with a given countermeasure than on a similar road without countermeasure. The benefits of the road diet will also allow room to provide the sidewalks and bike lanes as additional countermeasures:

1) The **Road Diet (CRF = 30%):** The reduction of the four existing lanes (two in each direction) to three lanes (one in each direction with a shared center left turn lane) will create the additional cross sectional area needed for providing new bike lanes and sidewalks without the need to obtain additional right-of-way and or property condemnation. The road diet is expected to easily accommodate the daily traffic flow of approximately 15,000 vehicles without queuing, and generally also helps to reduce the speed of traffic along this segment.

2) **Sidewalks (CRF = 80%):** There are currently no sidewalks along this Project location on either side of Howe Avenue. This Project will provide five foot attached sidewalks (ADA accessible) on both sides of Howe Avenue providing pedestrians (including K-5 students) the comfort and safety assurance they need before they feel comfortable walking again along Howe Avenue to their destinations.

3) **Bike Lanes (CRF = 35%):** Currently there are only Class 3 (share the road) bike lanes along this Project section of Howe Avenue. That is of course not the environment that will encourage a K-5 grade student to ride their bike to school. This Project will provide a standard Class 2 bike lane on both sides of the road to provide a measure of safety for bicyclists from the traffic flow.

Q3. PUBLIC PARTICIPATION and PLANNING

In January 2012, Sac DOT completed a walk audit report for Howe Avenue Elementary entitled "***Safe Routes To Howe Avenue Elementary, Improving Conditions for Walking and Bicycling***" (**See Section IX, Additional Application Attachments**). The actual walk audit had been scheduled for November 2, 2011, the community interest in the walk audit and providing pedestrian safety solutions was heightened due to the Howe Avenue student fatality that had occuered only four days prior to the walk audit. Walk audit participants included SacDOT staff, WALKSacramento (www.walksacramento.org), Howe Avenue Elementary School staff, students, student parents, and San Juan Unified School District Staff including their Safe Routes To School Coordinator. The staff of Sacramento Area Bicycle Advocates (SABA, http://sacbike.org/) independently conducted a bicycle audit of the cyclist facilities in the vicinity of Howe E.S., the SABA report is in Appendix E of the above referenced Walk Audit. The

participants separated into three groups to survey pedestrian and bicycle infrastructure needs along different common routes that Howe Avenue E.S. students take when going to and from school within approximately a half mile radius of the school. The groups met back up after the surveys to compare notes and determine the most urgent needs for SRTS grant funding. Although each group had high priorities along each of the three routes, the entire group unanimously decided that the Segment of Howe Avenue between El Camino Avenue and Marconi Avenue was by far the highest of all priorities. The referenced Walk Audit Report was completed including all the walk audit findings regarding sidewalks/walkways, intersection/crossings, bike facilities and traffic speeds. In-class and parent surveys were also included regarding attitudes towards walking and biking to school. The Walk Audit Report is a very comprehensive report reflecting the community desire to provide complete sidewalks and bike lane improvements between El Camino Avenue and Marconi Avenue.

Is the project cost over $1 Million? Y/N Yes
If Yes- is the project Prioritized in an adopted city or county bicycle transportation plan, pedestrian plan, safe routes to school plan, etc. YES, several that have been approved by our Board of Supervisors.

This proposed Project location on Howe Avenue between El Camino and Marconi Avenue is identified in the Sacramento County Board of Supervisors approved Pedestrian Master Plan (PMP), (refer to previous "Screening Criteria, Part 2. Consistency with Regional Transportation Plan") as a "High Priority" Pedestrian District", that also includes a need for pedestrian lighting and an intersection upgrade at Howe Avenue and Marconi Avenue. Reference the PMP "Figure 1: High Priority Pedestrian Projects, Arden Arcade" map that identifies the SRTS/ATP Project location and the legend of symbols on that page showing the identified needs (**See Section IX, Additional Doc #8 -PMP Priority Fig. 1**). The County BOS also approved the Bicycle Mater Plan, (refer to previous "Screening Criteria, Part 2. Consistency with Regional Transportation Plan") that proposes this section of Howe Avenue to have a high priority Class 2 bike lane that will provide improved connectivity to adjoining bike paths and destinations.

Q4. COST EFFECTIVENESS

Alternatives considered: Based on community feedback resulting from the previously referenced Howe Ave E.S. Walk Audit, the objectives for this highest priority segment of Howe Avenue between El Camino Avenue and Marconi Avenue was to help reduce traffic speeds, provide sidewalks and bike lanes on both sides of the street. An option was considered to leave this segment as four lanes by obtaining additional R/W as needed to accommodate the new bike lanes and sidewalks. However, this option did not accomplish all desired objectives and it was cost prohibitive due to the minimal setback distance that many older residential structures already had to the street frontage. The purchase of additional R/W would have required condemnation of several residences would be cost prohibitive and very unpopular. Also, maintaining the four lane configuration would not have provided a solution to the rear end and head-on traffic accidents caused by left turns into driveways or at intersections. As such the only viable option and solution was the road diet. By providing a shared center left turn lane, it will reduce traffic accidents, it also tends to reduce traffic speeds, it did not require additional right-of-way, and it will create additional space for continuous sidewalks and bike lanes.

Benefit/Cost:

Two countermeasures (CM) were used in the determination of the Benefit/Cost ratio for this Project 1) Road Diet and 2) Sidewalks. The crash data period considered was ten years (1/1/03 – 12/31/12). Refer to previously referenced "Vehicle to Vehicle Accidents" (**Sect IX, Add. Doc #5**) for the Road Diet CM, and "Bike & Ped" accidents (**Sect IX, Add. Doc #3**) for the Sidewalk CM. Since this is a SRTS Project there is no match, as such the "Total Project Cost" equals the "Program Funds Requested". The Benefit/Cost ratio ($17,291,640/$1,852,800) of this Project is 9.33. **(See Section IX, Additional Doc #9 – B/C and Project Cost Analysis)**

Q5. IMPROVED PUBLIC HEALTH

A. Describe how the project will improve public health, i.e. through the targeting of populations who have a high risk factor for obesity, physical inactivity, asthma, or other health issues.

A 2013 health study entitled "Sacramento County Community Health Needs Assessment" (http://www.sierrahealth.org/assets/HSC/HSC_CHNA_2013.pdf) was conducted by the Sierra Health Foundation. The results of this study is a compelling body of research that presents troubling disparities in health outcomes experienced by poor communities such as obesity, diabetes, asthma and heart disease. This entire SRTS/ATP-1 Project is located within the 95821 postal zip code community. The referenced study identifies the 95821 postal zip code region as one of Sacramento County's highest "vulnerability Index" zones, and residents are thereby more likely to suffer from chronic disease and poor health outcomes than those who live in other parts of the county, (**See Section IX, Additional Doc. #10 – Local Health Risk Factors**). The study concludes that improving the living and working conditions for residents in these high risk communities, such as this SRTS/APT-1 Project location, is key to addressing the poor health outcomes identified in the referenced Report.

Q6. BENEFIT TO DISADVANTAGED COMMUNITIES

A. I. Is the project located in a disadvantaged community? Y/N | Yes |

II. Does the project significantly benefit a disadvantaged community? Y/N | Yes |

a. Which criteria does the project meet? (Answer all that apply)

- Median household income for the community benefited by the project: $ 39,801
- California Communities Environmental Health Screen Tool (CalEnvironScreen) score for the community benefited by the project: 32.49
- For projects that benefit public school students, percentage of students eligible for the Free or Reduced Price Meals Programs: 96.93%

b. Should the community benefitting from the project be considered disadvantaged based on criteria not specified in the program guidelines? If so, provide data for all criteria above and a quantitative assessment of why the community should be considered disadvantaged.

As referenced in the previous Section #5 "Improving Public Health", this SRTS/ATP-1 Project area (Postal Zip Code 95821) is one of the communities with the highest "health vulnerability index" in Sacramento County based on many socio-economic factors. As such, the community surrounding this

Project has the highest rate of mortality due to heart disease (26.36 deaths per 10,000 residents) in Sacramento County. The community surrounding this proposed SRTS Project ranks as the third highest in the county for Diabetes related mortality, a precursor to diabetes is obesity. The referenced Study also determined that over 54% of the residents of this proposed Project community, age 12 and older, were obese, ranking as the region with the highest rate of obesity and overweight residents in the county. As such, Sac DOT suggests that the community surrounding this SRTS/APT-1 Project is a "sidewalk disadvantaged" community. Funding of this ARTS/ATP-1 Project will allow more students and residents to spend more time walking and biking to school, and to other destinations.

B. Describe how the project demonstrates a clear benefit to a disadvantaged community and what percentage of the project funding will benefit that community, for projects using the school based criteria describe specifically the school students and community will benefit.

The road diet, sidewalks and bike lanes proposed by this project will greatly benefit the health and safety of all the residents within this community. This Project will provide the community with an important option that has been lost over the years, to feel safe to walk, bike and use other alternative modes of transportation along Howe Avenue between El Camino Avenue and Marconi Avenue. As such, 100% of this Project funding will benefit the community that has become very weary of this street segment due to the pedestrian fatalities and other accidents.

Q7. USE OF CALIFORNIA CONSERVATION CORPS (CCC) OR A CERTIFIED COMMUNITY CONSERVATION CORPS

The applicant must send the following information to the CCC and CALCC prior to application submittal to Caltrans:

Project Description	Detailed Estimate	Project Schedule
Project Map	Preliminary Plan	

The corps agencies can be contacted at:
California Conservation Corps at: www.ccc.ca.gov
Community Conservation Corps at: http://calocalcorps.org

A. The applicant has coordinated with the CCC to identify how a state conservation corps can be a partner of the project. Y/N [Yes]

a. Name: Virginia Clark; e-mail: Virginia.clark@ccc.ca.gov; phone: (916) 341-3147 was emailed the Proj Desc, Map, Schedule, Detailed Estimate and Prelim. Plan on 5/16/14.

B. The applicant has coordinated with a representative from the California Association of Local Conservation Corps (CALCC) to identify how a certified community conservation corps can be a partner of the project. Y/N [Yes]

a. Name: Cynthia Vitale; e-mail: calocalcorps@gmail.com ; phone: (916) 558-1516 was emailed the Proj Desc, Map, Schedule, Detailed Estimate and Prelim. Plan on 5/16/14.

C. The applicant intends to utilize the CCC or a certified community conservation corps on all items where participation is indicated? Y/N [Yes]

I have coordinated with a representative of the CCC; and the following are project items that they are qualified to partner on:

> The CCC has decided not to participate in this Project ,
> Response by Melanie Wallace, CCC, (916) 341-3153

I have coordinated with a representative of the CALCC; and the following are project items that they are qualified to partner on:

> CALCC will consider Clearing and Grubbing provided that no heavy equipment is required,
> Response by Baldeo Singh, SRCC, bsingh@saccorps.org

Q8. APPLICANT'S PERFORMANCE ON PAST GRANTS

A. Describe any of your agency's ATP type grant failures during the past 5 years, and what changes your agency will take in order to deliver this project.

Sac DOT has received several Transportation Enhancement, Safe Routes to School and bike and pedestrian project grants through Caltrans. To date Sac DOT have performed very well on each of these past and current projects. We strive to maintain a high level of performance and cooperation with Caltrans on this, and all future high priority projects.

Project name: Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

V. PROJECT PROGRAMMING REQUEST

Applicant must complete a Project Programming Request (PPR) and attach it as part of this application. The PPR and can be found at http://www.dot.ca.gov/hq/transprog/allocation/ppr_new_projects_9-12-13.xls

PPR Instructions can be found at http://www.dot.ca.gov/hq/transprog/ocip/2012stip.htm

Notes:

- Fund No. 1 must represent ATP funding being requested for program years 2014/2015 and 2015/2016 only.
- Non-infrastructure project funding must be identified as Con and indicated as "Non-infrastructure" in the Notes box of the Proposed Cost and Proposed Funding tables.
- Match funds must be identified as such in the Proposed Funding tables.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST

DTP-0001 (Revised July 2013)

General Instructions

☑ New Project					Date:	5/19/14
District	**EA**	**Project ID**	**PPNO**	**MPO ID**		**TCRP No.**
03	00000	0000000000	TBD	TBD		N/A

County	**Route/Corridor**	**PM Bk**	**PM Ahd**	**Project Sponsor/Lead Agency**	
SAC				Sacramento County	
				MPO	**Element**
				SACOG	Local Assistance

Project Manager/Contact	**Phone**	**E-mail Address**
Ron Vicari, II	(916) 874-5164	vicarir@saccounty.net

Project Title

Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

Location, Project Limits, Description, Scope of Work ☐ See page 2

Project is in Caltrans District 3, Sacramento County, on Howe Ave between Tallac Street and Marconi Avenue. The Project includes a road diet, sidewalk construction, bike lanes, and signalized intersection upgrade at Howe Avenue and Marconi Avenue. The Project will improve pedestrian, bicycle and vehicular traffic safety.

☑ Includes ADA Improvements ☑ Includes Bike/Ped Improvements

Component	**Implementing Agency**
PA&ED	Sacramento County Department of Transportation
PS&E	Sacramento County Department of Transportation
Right of Way	Sacramento County Department of Transportation
Construction	Sacramento County Department of Transportation

Purpose and Need ☐ See page 2

Improving safety and access for pedestrians, bicyclists and transit users to several schools, parks, commercial districts, employment centers and other destinations for both the local community and visitors from outside the local community. Vehicular traffic will also benefit with fewer accidents by having a continuous left turn lane. Several pedestrian fatalities, with one being a young Howe Avenue E.S. student, has caused a lot of concern about walking biking and even driving a vehicle on this Project segment of Howe Avenue.

Project Benefits ☐ See page 2

Improving safety and access for bicyclists, pedestrians will allow more more K-5 students to walk and bike to school. This disadvantaged region has the highest rates of diabetes in the Sacramento County, a precursor to diabetes is obesity. This Project is imporatant to enable kids to be healthier and reduce the obesity rates. The safety improvements will also help prevent pedestrain fatalities.

☑ Supports Sustainable Communities Strategy (SCS) Goals ☑ Reduces Greenhouse Gas Emissions

Project Milestone			**Proposed**
Project Study Report Approved			**08/20/14**
Begin Environmental (PA&ED) Phase			DONE
Circulate Draft Environmental Document	**Document Type**	CE/CE	06/30/14
Draft Project Report			N/A
End Environmental Phase (PA&ED Milestone)			06/30/14
Begin Design (PS&E) Phase			10/09/14
End Design Phase (Ready to List for Advertisement Milestone)			11/15/15
Begin Right of Way Phase			10/09/14
End Right of Way Phase (Right of Way Certification Milestone)			10/01/15
Begin Construction Phase (Contract Award Milestone)			01/15/16
End Construction Phase (Construction Contract Acceptance Milestone)			08/31/16
Begin Closeout Phase			01/01/17
End Closeout Phase (Closeout Report)			04/01/17

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST

DTP-0001 (Revised July 2013)

Date: 5/16/14

District	County	Route	EA	Project ID	PPNO	TCRP No.
03	SAC		00000	0000000000	TBD	N/A
Project Title:	Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements					

Proposed Total Project Cost ($1,000s)									Notes
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E		280						280	
R/W SUP (CT)									
CON SUP (CT)									
R/W		40						40	
CON			1,533					1,533	
TOTAL		320	1,533					1,853	

Fund No. 1:	Active Transportation Program (ATP)							Program Code
Proposed Funding ($1,000s)								Safe Routes to School
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									CTC
PS&E		280						280	
R/W SUP (CT)									
CON SUP (CT)									
R/W		40						40	
CON			1,533					1,533	
TOTAL		320	1,533					1,853	

Fund No. 2:								Program Code
Proposed Funding ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Fund No. 3:								Program Code
Proposed Funding ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Project name: Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

VI. ADDITIONAL INFORMATION

Only fill in those fields that are applicable to your project

FUNDING SUMMARY

ATP Funds being requested by Phase (to the nearest $1000)		**Amount**
PE Phase (includes PA&ED and PS&E)	$	280,000
Right-of-Way Phase Temporary Const. Easements	$	40,000
Construction Phase-Infrastructure	$	1,533,000
Construction Phase-Non-infrastructure	$	
Total for ALL Phases	**$**	1,853,000

All Non-ATP fund types on this project* (to the nearest $1000)	**Amount**
	$
	$
	$
	$
	$
	$

*Must indicate which funds are matching

Total Project Cost	$	1,853,000
Project is Fully Funded		No

ATP Work Specific Funding Breakdown (to the nearest $1000)		**Amount**
Request for funding a Plan	$	
Request for Safe Routes to Schools Infrastructure work	$	1,853,000
Request for Safe Routes to Schools Non-Infrastructure work	$	
Request for other Non-Infrastructure work (non-SRTS)	$	
Request for Recreational Trails work	$	

ALLOCATION/AUTHORIZATION REQUESTS SCHEDULE

	Proposed Allocation Date	**Proposed Authorization (E-76) Date**
PA&ED or E&P	10/09/2014	11/09/2014
PS&E	02/01/2015	03/01/2015
Right-of-Way		
Construction	11/15/2015	12/15/2015

All project costs MUST be accounted for on this form, including elements of the overall project that will be, or have been funded by other sources.

Project name: Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

VII. NON-INFRASTRUCTURE SCHEDULE INFORMATION

Start Date	End Date	Task/Deliverables

Project name: HOWE AVENUE BIKE & PEDESTRIAN IMPROVEMENT PROJECT

VIII. APPLICATION SIGNATURES

Applicant: The undersigned affirms that the statements contained in the application package are true and complete to the best of their knowledge.

Signature: Ron E Vicari II
Name: Ron E Vicari II
Title: Principal Engineer

Date: 5-18-2014
Phone: 916 874 5164
e-mail: vicarir@saccounty.net

Local Agency Official (City Engineer or Public Works Director): The undersigned affirms that the statements contained in the application package are true and complete to the best of their knowledge.

Signature:
Name: Michael J. Penrose
Title: Director - Sac DOT

Date: 5/20/2014
Phone: 916-874-6291
e-mail: penrosem@saccounty.net

School Official: The undersigned affirms that the school(s) benefited by this application is not on a school closure list.

Signature:
Name: Kent Kern
Title: Superintendent

Date: 05/14/2014
Phone: 916 971-7104
e-mail: kkern@sanjuan.edu

Person to contact for questions:

Name:
Title:

Phone:
e-mail:

Caltrans District Traffic Operations Office Approval*
If the application's project proposes improvements on a freeway or state highway that affects the safety or operations of the facility, it is required that the proposed improvements be reviewed by the district traffic operations office and either a letter of support or acknowledgement from the traffic operations office be attached (_) or the signature of the traffic personnel be secured below.

Signature:
Name:
Title:

Date:
Phone:
e-mail:

*Contact the District Local Assistance Engineer (DLAE) for the project to get Caltrans Traffic Ops contact information. DLAE contact information can be found at http://www.dot.ca.gov/hq/LocalPrograms/dlae.htm

Project name:
Sacramento County - Howe Avenue Sidewalk Infill and Bike Lane Improvements

VIII. ADDITIONAL APPLICATION ATTACHMENTS

Check all attachments included with this application.

- ☒ Vicinity/Location Map- **REQUIRED for all IF Projects**
  - ☒ North Arrow
  - ☒ Label street names and highway route numbers
  - ☒ Scale
- ☒ Photos and/or Video of Existing Location- **REQUIRED for all IF Projects**
  - ☒ Minimum of one labeled color photo of the existing project location
  - ☒ Minimum photo size 3 x 5 inches
  - ☐ Optional video and/or time-lapse
- ☒ Preliminary Plans- **REQUIRED for Construction phase only**
  - ☒ Must include a north arrow
  - ☒ Label the scale of the drawing
  - ☒ Typical Cross sections where applicable with property or right-of-way lines
  - ☒ Label street names, highway route numbers and easements
- ☒ Detailed Engineer's Estimate- **REQUIRED for Construction phase only**
  - ☒ Estimate must be true and accurate. Applicant is responsible for verifying costs prior to submittal
  - ☒ Must show a breakdown of all bid items by unit and cost. Lump Sum may only be used per industry standards
  - ☒ Must identify all items that ATP will be funding
  - ☒ Contingency is limited to 10% of funds being requested
  - ☒ Evaluation required under the ATP guidelines is not a reimbursable item
- ☒ Documentation of the partnering maintenance agreement- Required with the application if an entity, other than the applicant, is going to assume responsibility for the operation and maintenance of the facility
- ☐ Documentation of the partnering implementation agreement-Required with the application if an entity, other than the applicant, is going to implement the project.
- ☐ Letters of Support from Caltrans (Required for projects on the State Highway System(SHS))
- ☒ Digital copy of or an online link to an approved plan (bicycle, pedestrian, safe routes to school, active transportation, general, recreation, trails, city/county or regional master plan(s), technical studies, and/or environmental studies (with environmental commitment record or list of mitigation measures), if applicable. Include/highlight portions that are applicable to the proposed project.
- ☒ Documentation of the public participation process (required)
- ☒ Letter of Support from impacted school- when the school isn't the applicant or partner on the application (required)
- ☒ Additional documentation, letters of support, etc (optional)

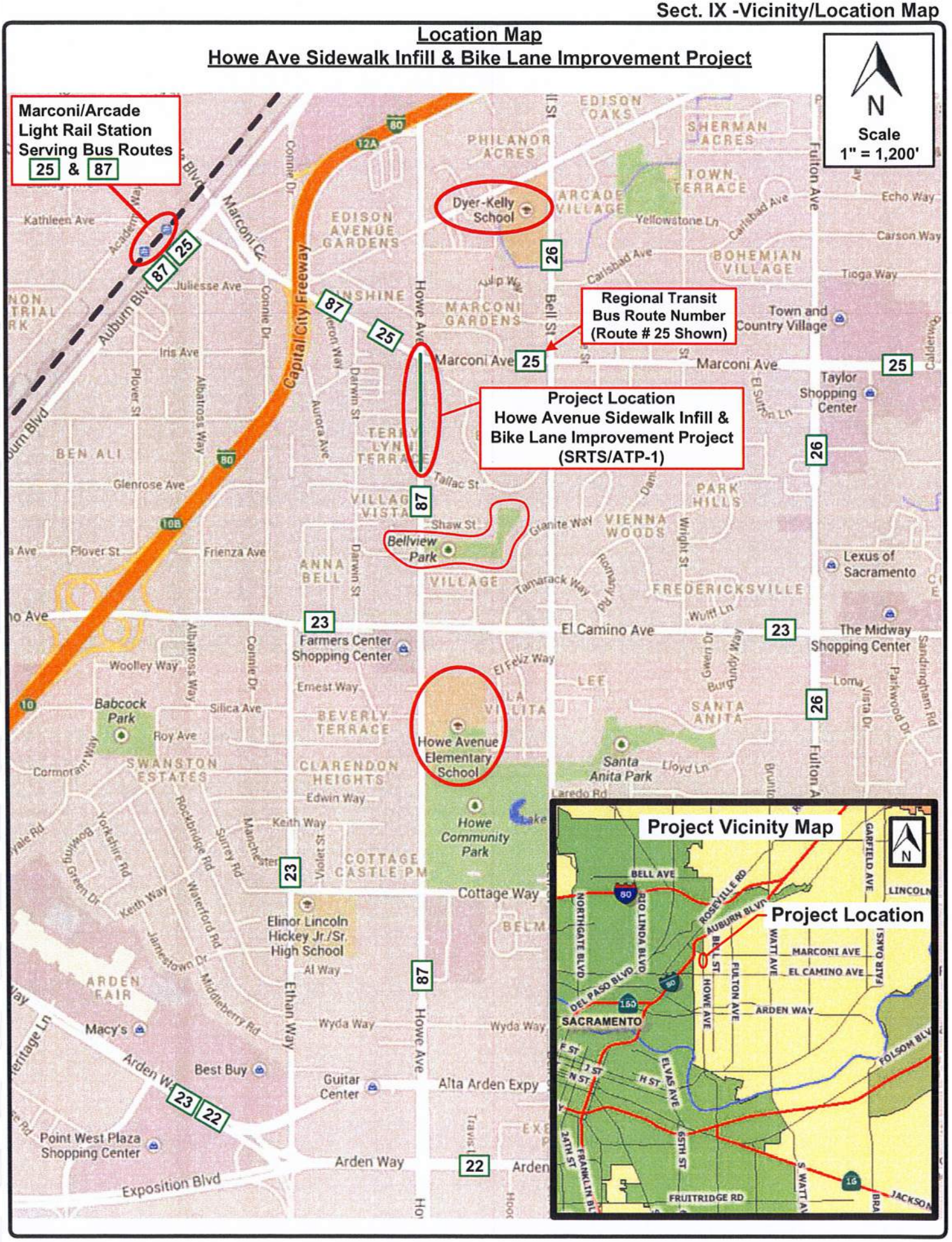
Sacramento County

Howe Avenue Sidewalk Infill and Bike Lane Improvements

Index for Section IX - Additional Application Attachments

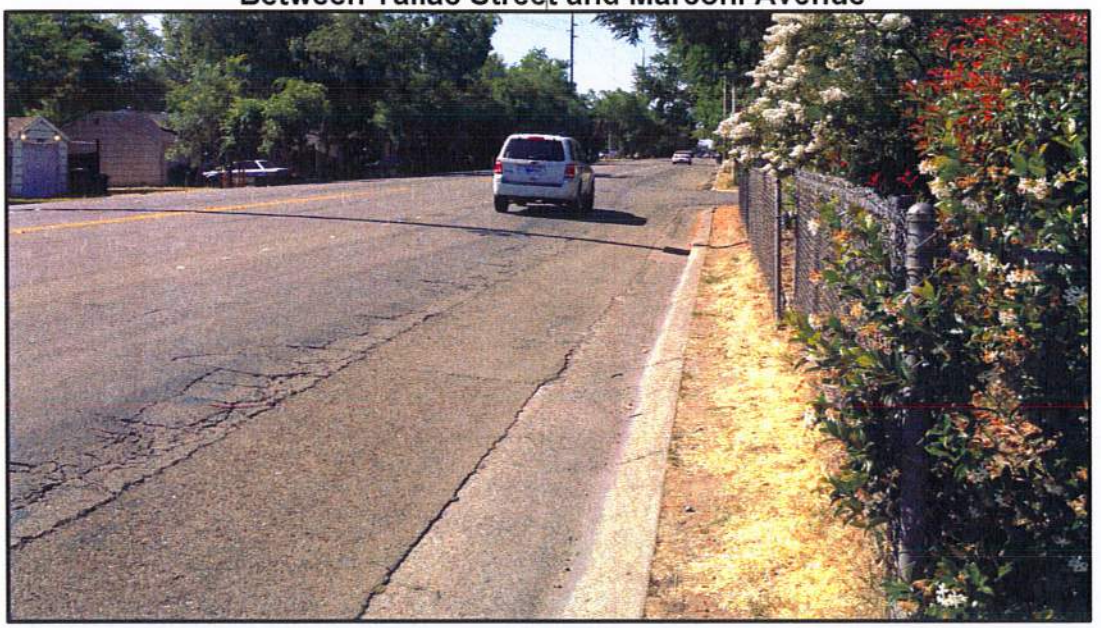
1. Vicinity/ Location Map (1 page)
2. Photos of Existing Conditions (3 pages)
3. Preliminary Plans & Cross Section (2 pages)
4. Construction and Project Costs (2 pages)
5. Howe Ave E.S. Walk Audit Report (34 pages)
6. School District & Schools letters of Support (3 pages)

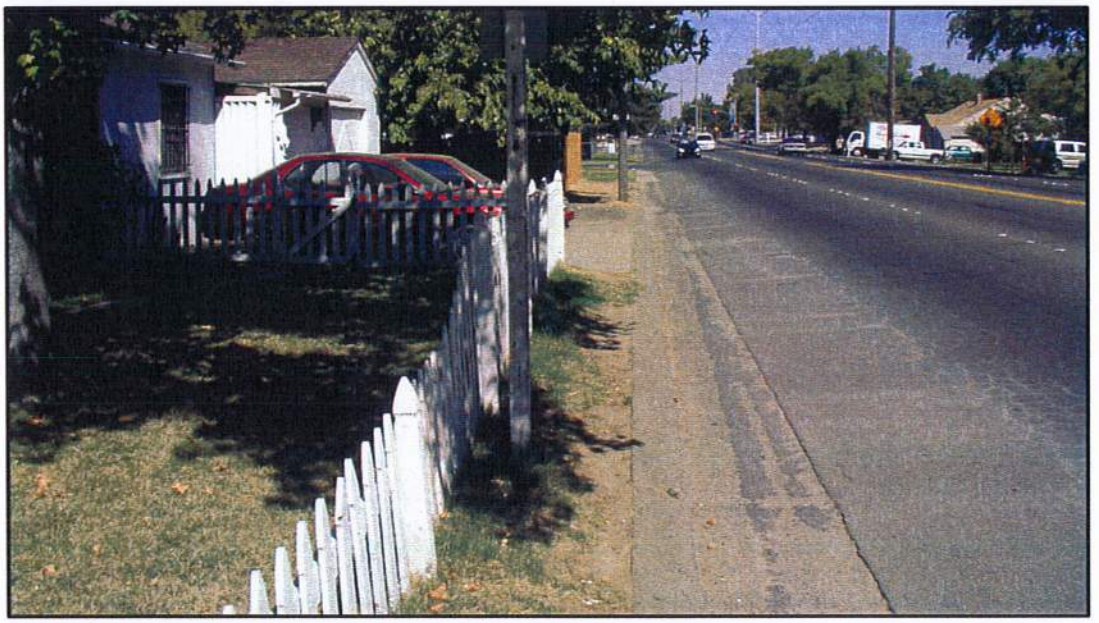
Location Map
Howe Ave Sidewalk Infill & Bike Lane Improvement Project



Photos of Existing Condition On Howe Avenue Between Tallac Street and Marconi Avenue

Photos of Existing Condition On Howe Avenue Between Tallac Street and Marconi Avenue





Photos of Existing Condition On Howe Avenue Between Tallac Street and Marconi Avenue

SRTS/ATP-1 Project

MUNICIPAL SERVICES AGENCY
SACRAMENTO COUNTY
DEPARTMENT OF TRANSPORTATION

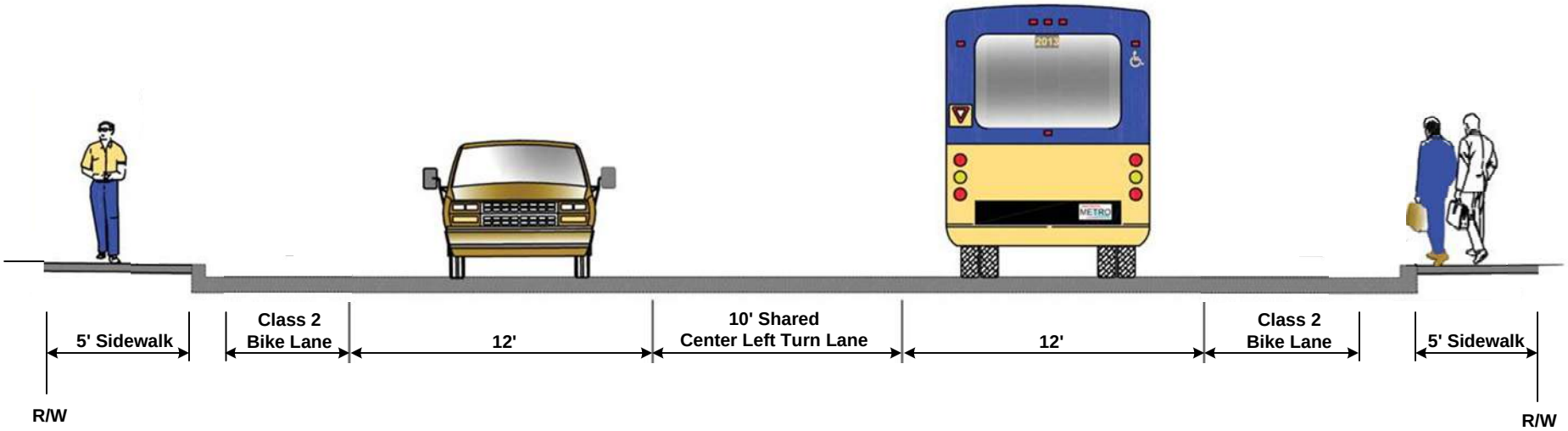
HOWE AVENUE SIDEWALK AND BIKE LANE IMPROVEMENT PROJECT

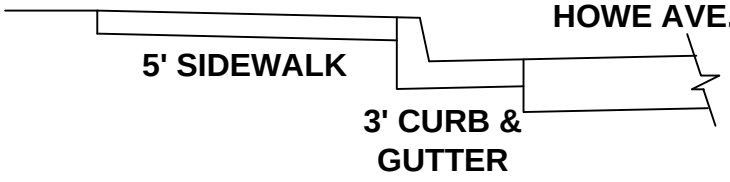
TALLAC STREET THROUGH MARCONI AVENUE

DATE: MAY 15, 2014	HORIZONTAL SCALE: 1"=100'	VERTICAL SCALE: NONE	DRAWN BY: C. LEDESMA	DESIGN BY: H. YEE	CHECK BY: A. RAYGANI	DWG 1 OF 1

H:\SAC DOT\PROJECTS\SACTO SAFE ROUTES TO SCHOOL – 5 E'S\2014 SRTS\HOWE AVE\DRAWINGS\CLARA HOWE\PLANNING051514 REV NOTE.DWG Last Saved: 5/15/2014 5:54 PM Irvingb

Proposed Typical Cross Section of the Howe Avenue Road Diet From Tallac Street to Marconi Avenue

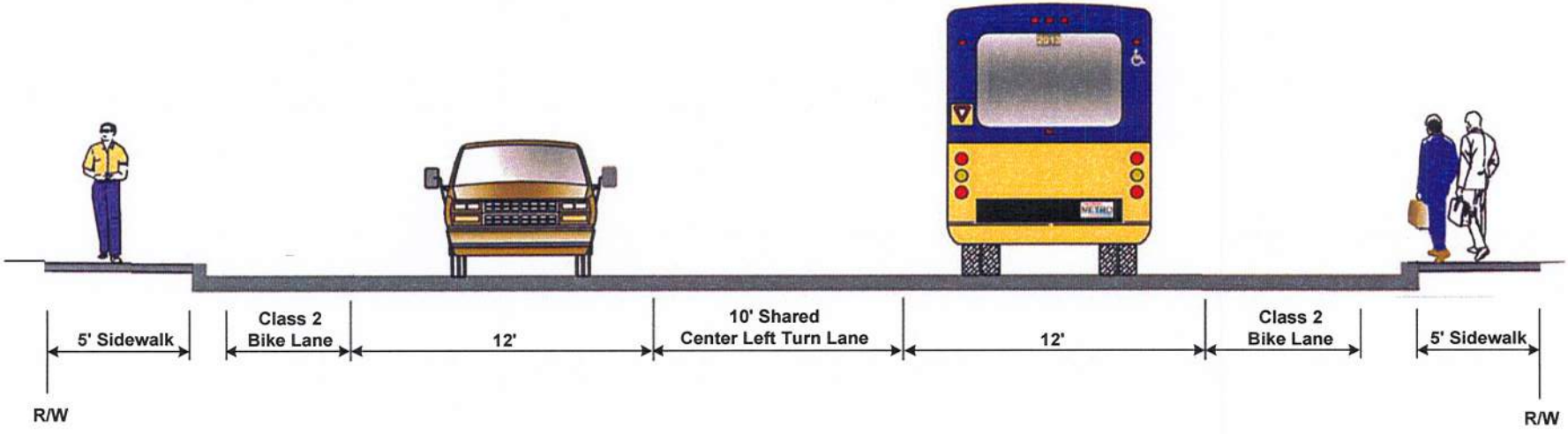


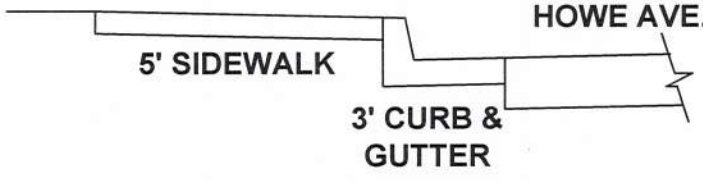


PROPOSED SIDEWALK CROSS SECTION

Note: Some dimensions may vary due to field constraints.

Proposed Typical Cross Section of the Howe Avenue Road Diet From Tallac Street to Marconi Avenue





PROPOSED SIDEWALK CROSS SECTION

Note: Some dimensions may vary due to field constraints.

Detailed Engineer's Estimate and Cost Breakdown by Countermeasure

For Construction Items Only

Agency:	Sacramento County	Application ID:	Dept. Of Transp.	Prepared by:	Heather Yee	Date:	4/14/2014

Project Description: Reduce travel lanes from 4 to 3 and add a two-way left-turn lane (Road Diet), install sidewalk and bike lanes, and modify traffic signal.

Project Location: Howe Avenue between Tallac Street and Marconi Avenue

Engineer's Estimate (for Construction Items Only)						Cost Breakdown									
						Safety-Related Costs								Non Safety-Related Costs	
						Countermeasure #1		Countermeasure #2		Countermeasure #3		Other Safety-Related			
Item No.	Item Description	Quantity	Units	Unit Cost	Total	%	$	%	$	%	$	%	$	%	$
1	Clearing and Grubbing	1	LS	$30,000.00	$30,000							100	$30,000		
2	SWPPP Preparation	1	Allow	$10,000.00	$10,000							100	$10,000		
3	Water Pollution Control	1	Allow	$10,000.00	$10,000							100	$10,000		
4	Mobilization	1	LS	$15,000.00	$15,000							100	$15,000		
5	Traffic Control	1	LS	$25,000.00	$25,000							100	$25,000		
6	Roadway Excavation	896	CY	$40.00	$35,840			100	$35,840						
7	Pavement Repair	1500	SF	$25.00	$37,500	100	$37,500								
8	Aggregate Base, Class 2	701	TN	$50.00	$35,050			100	$35,050						
9	Asphalt Concrete, Type A	372	TN	$170.00	$63,240			100	$63,240						
10	P.C.C. Curb & Gutter Type 2	2055	LF	$30.00	$61,650			100	$61,650						
11	P.C.C. Curb & Gutter Type 2 Reinforced	307	LF	$35.00	$10,745			100	$10,745						
12	P.C.C. Sidewalk & Ramps	12949	SF	$10.00	$129,490			100	$129,490						
13	Minor median Immprovements	738	LF	$45.00	$33,210	100	$33,210								
14	Driveway Conform	12	EA	$2,500.00	$30,000			100	$30,000						
15	Detectable Warning Surface	15	EA	$750.00	$11,250			100	$11,250						
16	Slurry Seal	130000	SF	$0.50	$65,000	100	$65,000								
17	Modify Striping	2500	LF	$9.50	$23,750	100	$23,750								
18	Drainage Modifications	1	LS	$80,000.00	$80,000			100	$80,000						
19	Pedestrian Lighting	6	EA	$5,000.00	$30,000							100	$30,000		
20	Howe Avenue/Marconi Avenue Modification	1	LS	$475,000.00	$475,000	100	$475,000								
Sub Total of Construction Items:					$1,211,725		$634,460		$457,265				$120,000		
	% of "Construction Items only" Cost per Countermeasure (Yellow fields - To be entered in TIMS B/C Calculator)					52%	CM #1	38%	CM #2		CM #3	10%	Other Safety		Non Safety
Construction Item Contingencies (% of Con Items): **Enter in the cell to the right**				10.00%	121,173										
Total (Construction Items & Contingencies):					1,332,900	(Rounded up to the nearest hundreds)									

Project Cost Summary
Sacramento County Department of Transportation
Howe Avenue Sidewalk Infill & Bike Lane Improvements

Phase	Total Cost	SRTS/ATP-1 Funding Request
Preliminary Engineering (PE)		
Environmental	$0	$0
PS&E	$280,000	$280,000
PE Sub Total	**$280,000**	**$280,000**
Right-of-Way (R/W)		
Temp. Const. Ease. (TCE) Engr	$10,000	$10,000
T.C.E. Acquisition	$30,000	$30,000
TCE Sub Total	**$40,000**	**$40,000**
Construction Engineering & Construction		
Construction Engineering	$200,100	$200,100
Construction	$1,332,900	$1,332,900
Construction Sub Total	$1,533,000	$1,533,000
Non-Infrastructure (NI)		
NI Elements	$0	$0
Total Project Cost	**$1,853,000**	**$1,853,000**

SAFE ROUTES TO HOWE AVENUE ELEMENTARY

Improving Conditions for Walking and Bicycling

Howe Avenue
Elementary School

Prepared for

Sacramento County Department of Transportation

Prepared by

WALKSACRAMENTO

Final Report
January 2012

ACKNOWLEDGMENTS

Walk Audit Participants

Tim Murphy	Principal, Howe Avenue Elementary
Tony Oddo	Safe Schools Manager, SJUSD
Nina Mancina	Grants and Special Programs Manager, SJUSD
Dan Allison	Safe Routes to School Coordinator, SJUSD

Parents of the Howe Avenue Elementary Traffic Safety Committee

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WALKSacramento Staff

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Terry Preston	Complete Streets Coordinator

The Sacramento Safe Routes 5 E's project is funded by a U.S. Dept of Transportation Safe Routes to School planning grant. For more information, go to: www.walksacramento.org

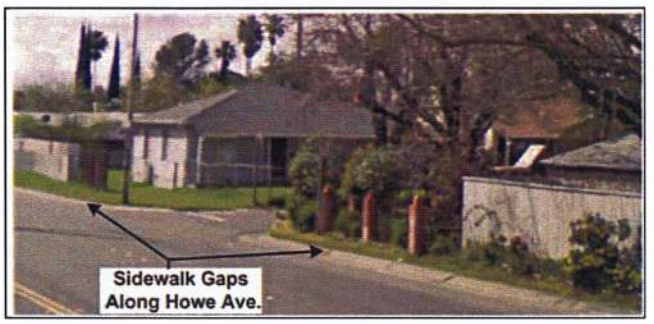
EXECUTIVE SUMMARY

This report presents the findings of a walk and bike audit evaluation that was conducted in the vicinity of Howe Avenue Elementary to increase the number of students who will walk and bike to school.

The walk audit was held November 2, 2011. Participants included WALKSacramento staff, Sacramento County Department of Transportation staff, the Howe Avenue Elementary principal and parents, and San Juan Unified School District staff including Safe Schools Manager Tony Oddo, Grants and Special Programs Manager Nina Mancina, and Safe Routes to School Coordinator Dan Allison.

Key findings

- There are sidewalk gaps and limited paved shoulders that discourage students from walking on Howe Avenue, north of El Camino Avenue. This four lane arterial is a major pedestrian route to Howe Avenue Elementary School.



- The asphalt pathway through Howe Community Park serves as the sidewalk along the east side of Howe Avenue, adjacent to the School's southern boundary. The path is narrow and it becomes flooded during a rainstorm.

- The signalization at the intersection of Howe Avenue and Delma Way is non-standard. Delma Way traffic is stop-controlled (not signalized), whereas Howe Avenue traffic is controlled by a pedestrian-activated signal for crossing Howe Avenue. A potential conflict arises when left turning traffic from Delma Way turns while the pedestrian signal has been activated to stop traffic on Howe Avenue. Also, when vehicles on Howe Avenue have a red light and pedestrians are crossing, south-bound drivers on Howe Avenue continue to turn into the Howe Avenue Elementary parking lot.

- Pedestrian signal heads do not have countdown signals at the intersection of Howe Avenue at Delma Way. Parents also requested the signal timing be adjusted to provide students more time to cross Howe Avenue.
- The parent-led Traffic Safety Committee is working to establish a walk- and bike-to-school program.

Recommendations resulting from the walk audit for infrastructure and programmatic improvements were presented to student parents at the November 3, 2011 and December 1, 2011 monthly parent-principal meetings "Muffins with (Principal) Murphy", and to the Traffic Safety Committee at a meeting on November 9, 2011.

Key recommendations

Sacramento County Department of Transportation

- Provide sidewalk infill along the west side of Howe Avenue between El Camino Avenue and Rassy Way.
- Improve the paved path through Howe Community Park so that it does not flood during rainy conditions.
- Consider incorporating Delma Way into the signalization of Howe Avenue and Delma Way. Upgrade the pedestrian signals to include a countdown and review signal timing for adequate crossing time for school-age pedestrians.

Howe Avenue Elementary and San Juan Unified School District

- Consider closing the school driveway entrance at Delma Way.
- Establish a year-round walk- and bike-to-school program that includes pedestrian and bicycle safety education for students, walking school buses, and incentives for participation.

These recommendations will be considered by Sacramento County Department of Transportation (SacDOT) in order to encourage more students to walk and bike to school.

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INTRODUCTION

The national Safe Routes to School (SRTS) movement is an effort to encourage children to walk and bicycle to school by removing obstacles to make it safer for them to do so, and through safety education. Obstacles to walking and biking can include a lack of infrastructure that provides a safe place for walking and cycling, and lack of knowledge of how to be a safe pedestrian or cyclist. The SRTS movement seeks to improve the physical environment to make walking and cycling safer and instill confidence and safe practices in children who walk and bike to school.

Bicycle and pedestrian safety is a priority in Sacramento County. By creating a safe way for children to walk and bike in their neighborhoods, SRTS can decrease the number of people hurt in collisions. From 2000 to 2006, 284 pedestrians ages five through fifteen were hospitalized with non-fatal injuries and eighteen were killed from collisions with vehicles in Sacramento County.[1] During that same time, 423 bicyclists ages five through fifteen were hospitalized with non-fatal injuries and four were killed from collisions with vehicles in Sacramento County.[2]

Improving walking and cycling conditions would promote physical activity and healthful lifestyles among children. The decrease in the percentage of children walking to school in the United States has been dramatic: in 1969 forty-two percent of kids between the ages of five and eighteen walked or biked to school; in 2001 only sixteen percent did.[3] Concurrently, the percent of children who are overweight has nearly doubled.[4] Promoting walking and cycling to school will establish in children the lifelong knowledge and habits of health and fitness and enable them to incorporate physical activity into everyday activities.

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[1] EPICenter, Pedestrian injuries in California, 2004, available from http://www.applications.dhs.ca.gov/epicdata/content/ST_pedestrian.htm; Internet; accessed 9 December 2009.
[2] EPICenter, Bicycle-related injuries in California, 2004, available from http://www.applications.dhs.ca.gov/epicdata/content/ST_bicycle.htm; Internet; accessed 9 December 2009.
[3] U.S. Centers for Disease Control and Prevention, Kids Walk-To-School: Then and Now--Barriers and Solutions, 25 February 2008, available from http://www.cdc.gov/nccdphp/dnpa/kidswalk/then_and_now.htm; Internet; accessed 18 April 2011
[4] U.S. Centers for Disease Control and Prevention, Prevelance of Overweight Among Children and Adolescents: United States, 2003-2004, 6 April 2010, available from http://www.cdc.gov/nchs/data/hestat/overweight/overweight_child_03.htm; Internet; accessed 18 April 2011.

FUNDING SAFE ROUTES TO SCHOOL

There are two distinct Safe Routes to School funding sources: the California SR2S program and the federal SRTS program. Both programs are intended to increase the number of children walking and bicycling to school by making it safer for them to do so. Differences between the two programs are outlined in below.

PROGRAM FEATURES	STATE SR2S	FEDERAL SRTS
ELIGIBLE PROJECTS	Infrastructure	Infrastructure and non-infrastructure
LOCAL MATCH	10% Required	None
TARGETED BENEFICIARIES	Grades K-12	Grades K-8
MAX PROJECT FUNDING AWARD	$500,000 to $1 million (including. 10% match)	$500,000 to $1 million

The state (SR2S) and federal (SRTS) grant funding cycles have historically opened up every one to three years to receive grant applications. The pool of funding available statewide is generally in the range of $20-50 million. The high demand for funds that can be used for physical infrastructure makes the applications very competitive. Local jurisdictions are limited to submitting three grant applications per funding cycle, with no guarantee of any being awarded. For convenience, this audit report uses SRTS generically to denote either the state (SR2S) or federal (SRTS) grant programs.

THE IMPORTANCE OF THE FIVE E'S

Research has shown that the most successful way to increase walking and biking among school children is through a comprehensive approach. Therefore, SacDOT has chosen to supplement the SRTS Program with another program known as the "Five E's". The Five E's Program helps to emphasize the importance and safety aspects of walking and biking to school.

The Sacramento County Safe Routes to School Five E's (County Five E's) project takes its name from the five E's used to identify the different approaches used in creating Safe Routes to School: Evaluation, Engineering, Education, Encouragement, and Enforcement.

Evaluation establishes an understanding of the current conditions. This can involve examining transportation facilities as well as identifying attitudes and behaviors related to walking and bicycling. Evaluation focuses how the other four E's can be used to increase walking and bicycling to school. Evaluation should be repeated after implementation of other E's to determine the effectiveness of improvements.

Engineering modifies streetscapes to make them safer for walking and bicycling. Often, facilities such as sidewalks, crosswalks, bike lanes, signage, and lighting can be provided to encourage more pedestrians and bicyclists.

Education provides pedestrians and cyclists as well as drivers with knowledge that makes them safe and courteous users of the road. It is important for children to learn their rights and responsibilities.

Encouragement makes walking and bicycling fun for kids. This is often done through providing incentives such as goodie bags, prizes, or class parties to those who walk or bike to school. Getting kids excited about walking and biking can increase the numbers wanting to do so.

Enforcement utilizes the law and law enforcement professionals to remind people of their responsibilities. This approach often targets drivers in school zones to remind them to drive the speed limit, watch for pedestrians, and yield to pedestrians in crosswalks.

Used individually or in combination, the five E's approach results in safer and more frequent walking and biking.

SACRAMENTO COUNTY'S SAFE ROUTES TO SCHOOL FIVE E'S PROGRAM

The County Five E's is a three-year (2008-2011) grant program sponsored by the Sacramento County Department of Transportation (SacDOT), funded by a $500,000 federal SRTS grant. The purpose of the project is to provide support for increasing walking and biking to elementary and middle schools throughout the unincorporated county.

To assist with implementing the scope of the grant, SacDOT contracted the services of WALKSacramento in June 2008. WALKSacramento is a community-based non-profit organization that promotes safe walkable communities. WALKSacramento works with community organizations, public agencies, and individuals on policy change, public education, and review of commercial and residential development to create a pedestrian-friendly environment.

The primary objectives of the County Five E's grant program are to:

- Conduct walkability and bikeability audits to identify barriers preventing students from walking or biking to school at fifteen K-8 schools within unincorporated Sacramento County
- Encourage schools to initiate walking and bicycling events and programs
- Hold regional conferences and workshops to encourage, educate and support the development of the Five E's and SRTS programs at the school and school district levels
- Create a Safe Routes Resource Advisory Committee to provide support and technical assistance for the project
- Prepare a "toolkit" that schools can use as a reference to better understand the process for developing their own SRTS grant application and walking/biking programs

SELECTION OF SCHOOL

There are approximately 160,000 students enrolled at 302 K-8 schools in unincorporated Sacramento County. Because project funding is limited to assessing fifteen schools, SacDOT and WALKSacramento developed a ranking worksheet to prioritize schools that have expressed interest in the Five E's grant program walk/bike audit project (see Appendix A).

Each interested school had to pre-qualify for an audit with a high ranking score resulting from having strong school district and parent and/or teacher support. The schools were scored on a variety of other factors including the percentage of students living within one mile of the school, the strength of the school community's connections with the neighborhood residents, the importance of improvements to the school district, and status as a Safe Routes to School Capital Improvement Program project in Sacramento County's Pedestrian Master Plan.

Schools were also given points for the degree to which they have the following pedestrian and bicycle deterrents: a high-traffic arterial within the attendance boundary, recent vehicle collisions with pedestrians and/or cyclists near the school, missing sidewalks, an intersection nearby that is not pedestrian- and bicycle-friendly, and need for pick-up/drop-off improvements. Additionally, schools with existing Safe Routes to Schools activities were given points for each "E" (of the Five "E") approach being utilized.

Howe Avenue Elementary scored high (60 out of 70, see Appendix A) because:

- At least 50% of students live within one mile of the school
- The school has strong partnerships with the community
- The school has strong parent involvement, a motivated principal, and supportive district leadership
- The school is a high district priority based on discussion with school district facilities staff
- There are high volume traffic arterials within the attendance zone
- There have been recent pedestrian and bicycle collisions and a student fatality nearby
- There are missing sidewalks near the school
- There is at least one intersection that is in need of improvement nearby
- There are pick-up/drop-off concerns at the school

LOCATION AND NEIGHBORHOOD

Howe Avenue Elementary is located at 2404 Howe Avenue in Sacramento between El Camino Avenue and Cottage Way. Howe Community Park borders the south of the school.

Howe Avenue Elementary is a kindergarten through fifth grade school in the San Juan Unified School District. Approximately 536 students were enrolled for the 2011-2012 school year. SJUSD eliminated district school bus transportation to Howe Avenue Elementary at the start of the school year. As a result, there has been an increase in the number of students walking, biking, and being driven to school.

Howe Avenue Elementary's attendance area is approximately bounded by Ethan Avenue, Arden Way, Fulton Avenue, and Marconi Avenue, though students come from as far as Pope Avenue at Morse Avenue (see Appendix B for attendance boundary map).

Image 1: Map of the area around Howe Avenue Elementary; the campus is outlined in red.

PARENT AND STUDENT SURVEY RESULTS

Surveys were used to collect data on students' current transportation modes to school and on parent attitudes toward walking and biking to school. These surveys were created by the National Center for Safe Routes to School and are available for download on the National Center website. Student and parent survey results for Howe Avenue Elementary have been entered into the National Center for Safe Routes to School database at www.saferoutesinfo.org.

Student survey results

An in-class survey collected data on how students traveled to school for a period of three days (see Appendix C). Surveys were conducted on days with weather conditions suitable for walking. Counts do not include school staff or faculty.

Student travel mode surveys were completed the week of November 14, 2011. Results are shown below.

MODE	FAMILY VEHICLE	WALK	BIKE	SCHOOL BUS	CARPOOL OR OTHER
MORNING TRIP	69%	15%	2%	0%	13.4%
AFTERNOON TRIP	63%	24%	3%	0%	10.4%

Parent survey results

To obtain information on parental attitudes toward walking and biking to school, a two-page survey was provided to Howe Avenue Elementary parents (see Appendix D). There were 113 parent surveys returned. Key findings of the parent surveys are shown below. Respondents were allowed multiple responses for most questions, so totals may not add up to 100.

- 55% of respondents report living within one-half mile of school; 79% live within one mile
- The top three reasons parents do not allow their children to walk or bike to school are
    - Speed of traffic along route (75% of respondents)
    - Safety of intersections and crossings (68% of respondents)
    - Amount of traffic along route (55% of respondents)
- 73% of respondents think the school neither encourages nor discourages walking and biking to school
- 66% of respondents think walking and biking to school is healthy or very healthy for their children
- Many write-in comments expressed concern for the safety of children walking alone and for the need for pedestrian safety education

WALK AUDIT FINDINGS

The walk audit was held November 2, 2011. Participants included WALKSacramento staff, Sacramento County Department of Transportation staff, the Howe Avenue Elementary principal and parents, and San Juan Unified School District staff including Safe Schools Manager Tony Oddo, Grants and Special Programs Manager Nina Mancina, and Safe Routes to School Coordinator Dan Allison. Participants walked Howe Avenue north and south of the school and through Howe Park.

1. Sidewalks and walkways

a. There are sidewalk gaps and limited paved shoulders that discourage students from walking to school along Howe Avenue north of El Camino Avenue. A large sidewalk gap exists fronting two apartment complexes along the west side of Howe Avenue between El Camino Avenue and Marconi Avenue where many students live. Also, a few parcels without sidewalks have fencing that protrudes to nearly the edge of the roadway, offering limited space for pedestrians.

b. The separated asphalt path through Howe Park along Howe Avenue serves as the sidewalk along the east side of Howe Avenue adjoining the southern boundary of the school. Parents report that the path floods during rainy conditions. The path is below the elevation of Howe Avenue, and pedestrians feel vulnerable with no vertical barrier between cars and walkers. The path connects to the attached sidewalk on Howe Avenue immediately south of the school's southernmost driveway. Students walking to school then cut across the parking lot to the school's walkway. A fence between the parking lot and the park prevents pedestrians from being able to take a more direct route straight from the park path to the school walkway. Consideration could be given to providing a new "preferred path of travel" to a new opening in the parking lot fence to access an existing pathway that would avoid traversing the parking lot (see Image 2 below).

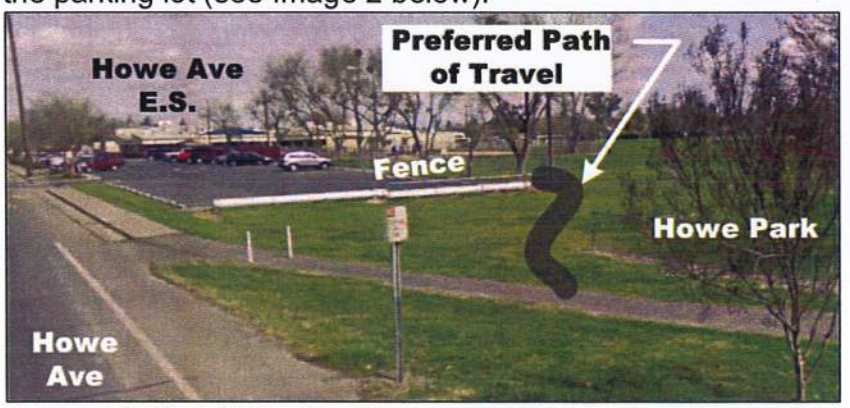


Image 2: Preferred path of travel

c. Sidewalk infill at 2419 Wyda Way would complete the sidewalk between Alta Arden Way and Bell Street, a key route to school.

2. Intersections and crossings

a. The intersection of Howe Avenue at Delma Way is controlled by a pedestrian-activated signal crossing Howe Avenue, but Delma Way is only controlled by a stop sign. When vehicles on Howe Avenue have a red light and pedestrians are crossing, southbound and northbound drivers on Howe Avenue have been observed and reported to continue to turn into the Howe Avenue Elementary parking lot. Drivers on Delma Way have been observed and reported to take advantage of the stopped traffic on Howe Avenue to turn left onto Howe Avenue, a maneuver which can lead to conflicts with pedestrians and vehicles. Parents and school staff have requested to have a crossing guard at this crosswalk. Consideration could also be given to possibly integrating a signal on Delma Way with the pedestrian signal crossing Howe Avenue.

b. Pedestrian signal heads with countdown signals could be considered at the intersections of Howe Avenue at Delma Way, Howe Avenue at Cottage Way, Howe Avenue at Wyda Way, and Cottage Way at Bell Street. Pedestrian countdown signals alert pedestrians to how much time remains for them to cross the street.

c. The curb ramps on all corners of Howe Avenue at Cottage Way could be updated to current ADA standards.

d. Many people who live in the apartments on Cottage Way between Howe Avenue and Bell Street cross illegally to Howe Park at midblock.

e. Students using the sidewalk fronting Howe Avenue walk across the school driveway and through the queue of vehicles of parents dropping off or picking up children.

f. The limit lines at the intersection of Wyda Way and Wright Street are marked in a location that causes vehicles to stop in the unmarked crosswalks. This intersection is on a main route to school, and parents requested that the crosswalks be marked.

3. Bike facilities

a. Continuous Class II bike lanes would be helpful on Cottage Way between Ethan Way and Howe Avenue and on Ethan Way between Cottage Way and El Camino Avenue.

b. The bicycle rack on campus is a grid style rack which is not recommended because it cannot be used with all locking devices and has only one point of contact with the bicycle.

4. Traffic speeds

The speed limit on Howe Avenue in front of school is 40 MPH, or 25 MPH when children are present. The school speed limit sign for northbound Howe Avenue traffic is posted at the beginning (south end) of the school parking lot. Children walk north on Howe Avenue from as far south as Wyda Way. Consideration could be given to relocating the school speed limit sign further south on Howe Avenue.

Staff of Sacramento Area Bicycle Advocates (SABA) independently conducted a bicycle audit of the cyclist facilities in the vicinity of Howe Elementary in June 2011. See SABA's full report in Appendix E.

RECOMMENDATIONS FOR ENGINEERING IMPROVEMENTS

1. Sidewalks

1.1 Provide sidewalk infill on nine parcels on the west side of Howe Avenue between El Camino Avenue and Red Robin Lane.

Image 3: West side of Howe Avenue north of El Camino Avenue looking north

1.2 Consider constructing a separated sidewalk on the east side of Howe Avenue between Howe Avenue Elementary and Cottage Way.

Image 4: Howe Avenue south of Howe Avenue Elementary looking south

1.3 Provide sidewalk infill on 14 parcels on the east side of Howe Avenue between El Camino Avenue and Tallac Street.

Image 5: East side of Howe Avenue north of El Camino Avenue looking north

1.4 Provide sidewalk infill on ten parcels on the west side of Howe Avenue between El Camino Avenue and 350 feet south of Delma Way.

Image 6: Howe Avenue north of Delma Way looking northwest

1.5 Provide sidewalk infill at the corner of Bell Street and Wyda Way.

Image 7: Wyda Way west of Bell Street looking east

1.6 Provide sidewalk infill on Wyda Way across from Jerron Place.

Image 8: Wyda Way at Jerron Place looking west

2. Intersections and crossings

2.1 Upgrade the pedestrian signal head at Howe Avenue and Delma Way to include a pedestrian countdown signal. Review signal timing to ensure elementary-aged students have adequate time to cross. Install school crossing signs on the mast arms. Consider installing a signal on Delma Way and integrating it with the pedestrian signal crossing Howe Avenue.

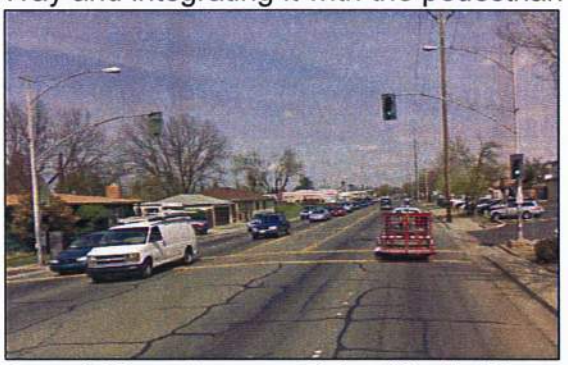


Image 9: Howe Avenue at Delma Way looking north

2.2 Upgrade the pedestrian signal heads to include pedestrian countdown signals at Howe Avenue at Cottage Way, Howe Avenue at Wyda Way, and Cottage Way at Bell Street.

Image 10: Howe Avenue at Cottage Way looking northeast (left) and Cottage Way at Bell Street looking north (right)

2.3 Improve all corners of Howe Avenue at Cottage Way to current ADA standards.

Image 11: Southwest corner of Howe Avenue and Cottage Way

2.4 Consider providing a midblock crossing on Cottage Way between Howe Avenue and Bell Street to Howe Park if it is warranted.

Image 12: Cottage Way west of Bell Street looking west

3. Bike facilities

3.1 Install Class II bike lanes on Cottage Way between Ethan Way and Howe Avenue and on Ethan Way between El Camino Avenue and Cottage Way. This recommendation is consistent with the proposed bikeway network in the Sacramento County Bicycle Master Plan, Chapter Five: Recommended Bicycle Network (Existing and Planned Bicycle Facilities, Maps B6 and B7).

Image 13: Ethan Way south of Delma Way looking south

4. Traffic Speed

4.1 Consider relocating the school speed limit sign and the school warning sign for northbound drivers on Howe Avenue to 500 feet south of current location.

Image 14: Howe Avenue immediately south of school parking lot, looking north

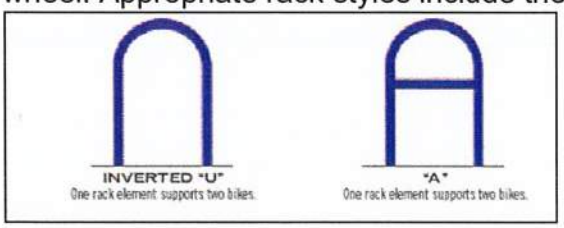
4.2 Consider implementing traffic calming measures on Howe Avenue between El Camino Avenue and Marconi Avenue, if warranted. Include improved pedestrian crossings in any traffic calming implementation.

RECOMMENDATIONS FOR SCHOOL SITE AND PROGRAM IMPROVEMENTS

In addition to engineering improvements, school site and program improvements can encourage more walking and biking to school. The following recommendations are for consideration of Howe Avenue Elementary and San Juan Unified School District.

1. School site recommendations

- Consider reconfiguring the school parking lot so that vehicles enter and exit more efficiently and safely.
- Along the east side of the school parking lot, consider constructing a sidewalk with a vertical curb to provide a physical barrier between pedestrians and vehicles.
- Coordinate with the Fulton-El Camino Recreation and Park District to improve connections to school through Howe Community Park.
    - Improve the path along Howe Avenue so that it does not flood during rainy conditions.
    - Pave a path from the Howe Community Park parking lot off Bell Street south of La Paloma Way through the park and school fields to Howe Avenue Elementary's blacktop
    - Add a spur to the park path along Howe Avenue to connect to the walkway on the east side of the school/park parking lot
    - Construct a fence between Howe Avenue and the park path
    - Improve the asphalt path along Howe Avenue. The improved path should be similar to the concrete paths in the park along Cottage Way and elsewhere in the park.
- Replace the bike rack with an Association of Pedestrian and Bicycle Professionals-recommended bicycle rack. The APBP Bicycle Parking Guidelines recommends racks that support the frame in two places, prevent the front wheel from tipping, and allow for securing both the frame and a wheel. Appropriate rack styles include the inverted "U" and the "A."



2. School program recommendations

- Consider options for providing a crossing guard at Howe Avenue and Delma Way.
- Educate parents on safe walking, biking, and driving. Parents should be reminded to use marked crosswalks and obey traffic laws.
- Organize a parent-led walk- and bike-to-school program.

- Develop walking and bicycling maps to encourage parents to allow their children to walk down streets with lower speeds, less traffic, and more sidewalks and safe crossings. These maps can include walking school bus and bike train routes and stops.
- Provide pedestrian and bike safety training for students.

CONCLUSION

There is great potential to increase the numbers of students walking and bicycling to Howe Avenue Elementary. Key factors include completion of sidewalks, installing pedestrian countdown signals, and starting a walk- and bike-to-school program. The responsibility for increasing numbers of children walking and biking to school does not fall on one group. Improvements to walking and biking are achievable through the partnership of community and school leaders, parents, SacDOT, San Juan Unified School District, and partner organizations. Partners are encouraged to pursue funding to implement the recommendations provided in this report as opportunities become available.

APPENDIX A: RANKING WORKSHEET

Sacramento County
Safe Routes 5 E's

School Assessment
Selection Form

School: Howe Elementary

Address: 2404 Howe Avenue (**Street**) Sacramento (**City**)

School District: San Juan

Supervisor: Peters

Initial Qualifications *(must score "Yes" in all categories)*

__X__ YES - The school district leadership is committed to support the project

__X__ YES - The school site leadership is committed to the project

__X__ YES - The school site has strong parent and/or teacher support for the project

Ranking and Selection Criteria

Q1. Describe the school's community context (max. **25 pts.**)

Q1a. Do a significant number of students live within walking and biking distance of the school? (**max 10 pts.**)

__X__ If 50% or more within 1 mile (10 pts)
_____ If 20 % or more within 1 mile (4 pts.)

__X__ Q1b. Does the school site have strong organizational, programmatic or physical links with other community resources; e.g. public park, community center, Boy or Girl Scouts, neighborhood association. (Yes = **5 pts**)

_____ Q1c. Is school currently listed on the Capital Improvement Program project list? .(**10 pts**)

Q2. School district priority (**max. 10 pts.**)

__X__ 1st priority (10 pts)
_____ 2nd priority (7 pts)
_____ 3rd priority (4 pts.)

Page 1

Q3. What are the Pedestrian and/or Bicyclist problems to be addressed? **(max. 20 pts.)**

__X__ High traffic arterial within school attendance zone (4 pts)
__X__ Recent pedestrian/bicycle collisions near school (4 pts)
__X__ Missing sidewalks near school (4 pts.)
__X__ A problem intersection is nearby (4 pts)
__X__ Pick up/drop off problems (4 pts)

Q4. Are there current Safe Routes 5 E's activities under way? **(max. 15 pts.)**

__X__ Education – i.e. pedestrian/bicycle safety instruction. (5 pts)

__X__ Encouragement – i.e. Walk to School programs (5 pts.)

__X__ Enforcement – i.e. traffic guards, law enforcement (5 pts.)

__60__ **TOTAL points**

Is this school a candidate for a Walk to School toolkit?

Yes_____X_____

No_____

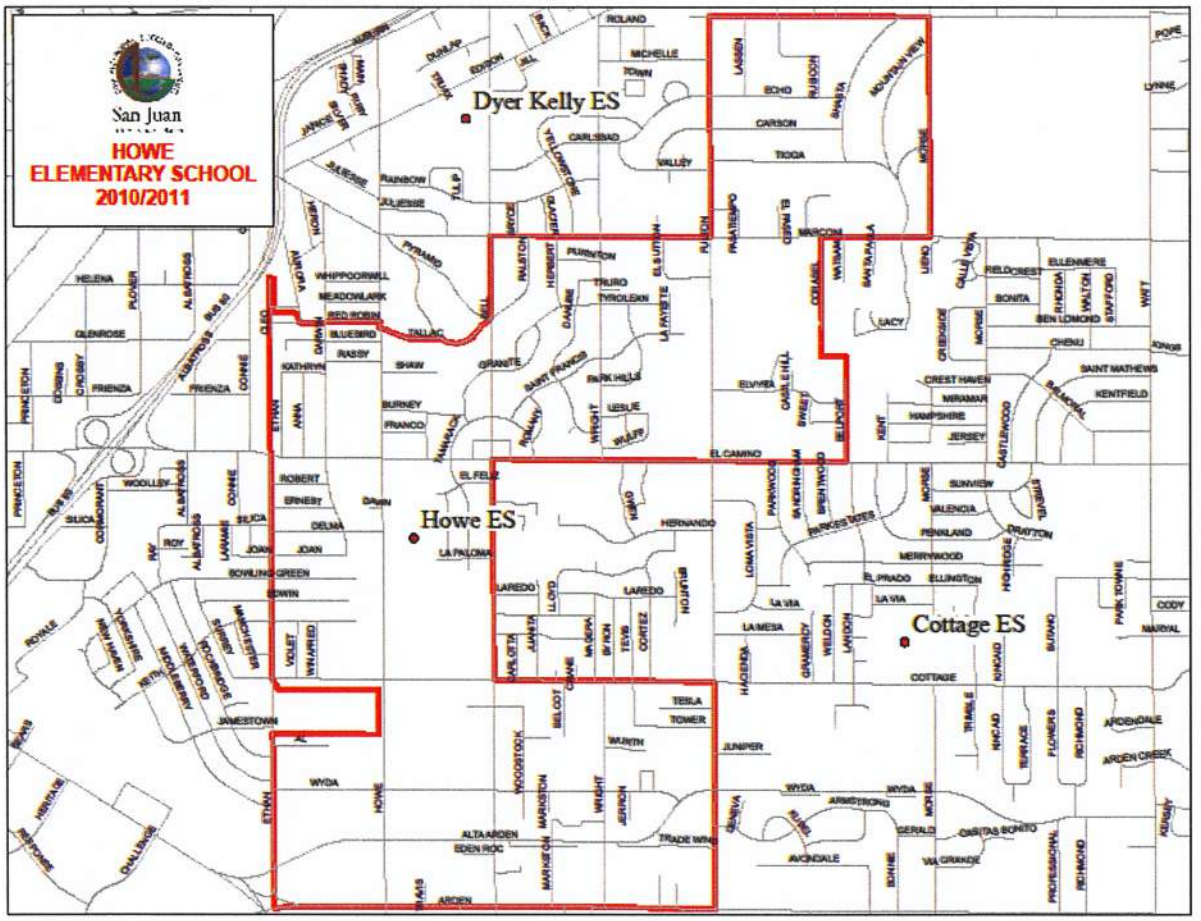
Reviewed by:

Terry Preston, Complete Streets Coordinator, WALK Sacramento
Name

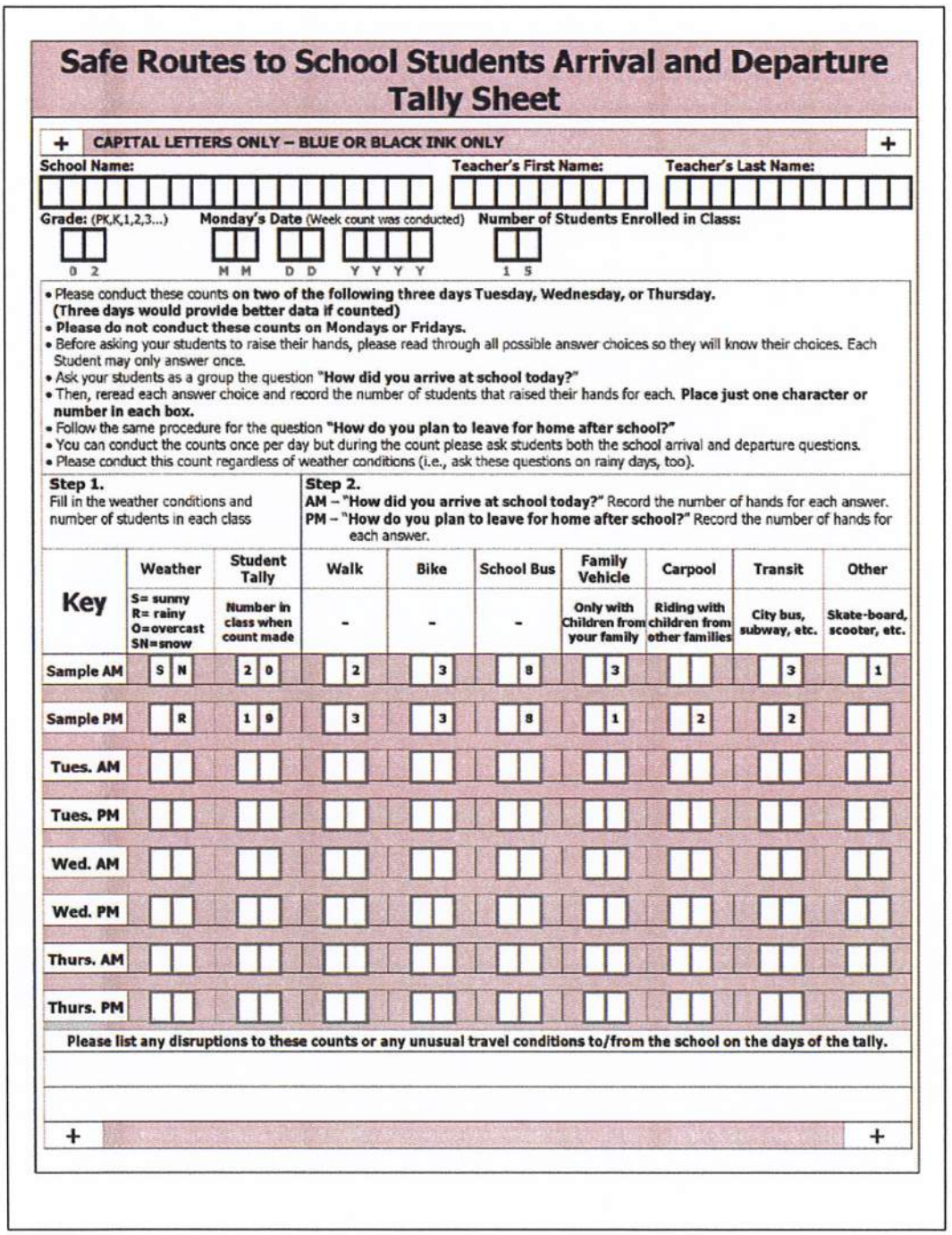
Sept 19, 2011
Submitted

Page 2

APPENDIX B: ATTENDANCE BOUNDARY



APPENDIX C: IN-CLASS STUDENT TRAVEL MODE SURVEY FORM[5]



Safe Routes to School Students Arrival and Departure Tally Sheet

+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +

School Name: | Teacher's First Name: | Teacher's Last Name:

Grade: (PK,K,1,2,3...) 0 2 | Monday's Date (Week count was conducted) M M D D Y Y Y Y | Number of Students Enrolled in Class: 1 5

- Please conduct these counts **on two of the following three days Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted)**
- **Please do not conduct these counts on Mondays or Fridays.**
- Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each Student may only answer once.
- Ask your students as a group the question **"How did you arrive at school today?"**
- Then, reread each answer choice and record the number of students that raised their hands for each. **Place just one character or number in each box.**
- Follow the same procedure for the question **"How do you plan to leave for home after school?"**
- You can conduct the counts once per day but during the count please ask students both the school arrival and departure questions.
- Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).

Step 1. Fill in the weather conditions and number of students in each class

Step 2. **AM – "How did you arrive at school today?"** Record the number of hands for each answer. **PM – "How do you plan to leave for home after school?"** Record the number of hands for each answer.

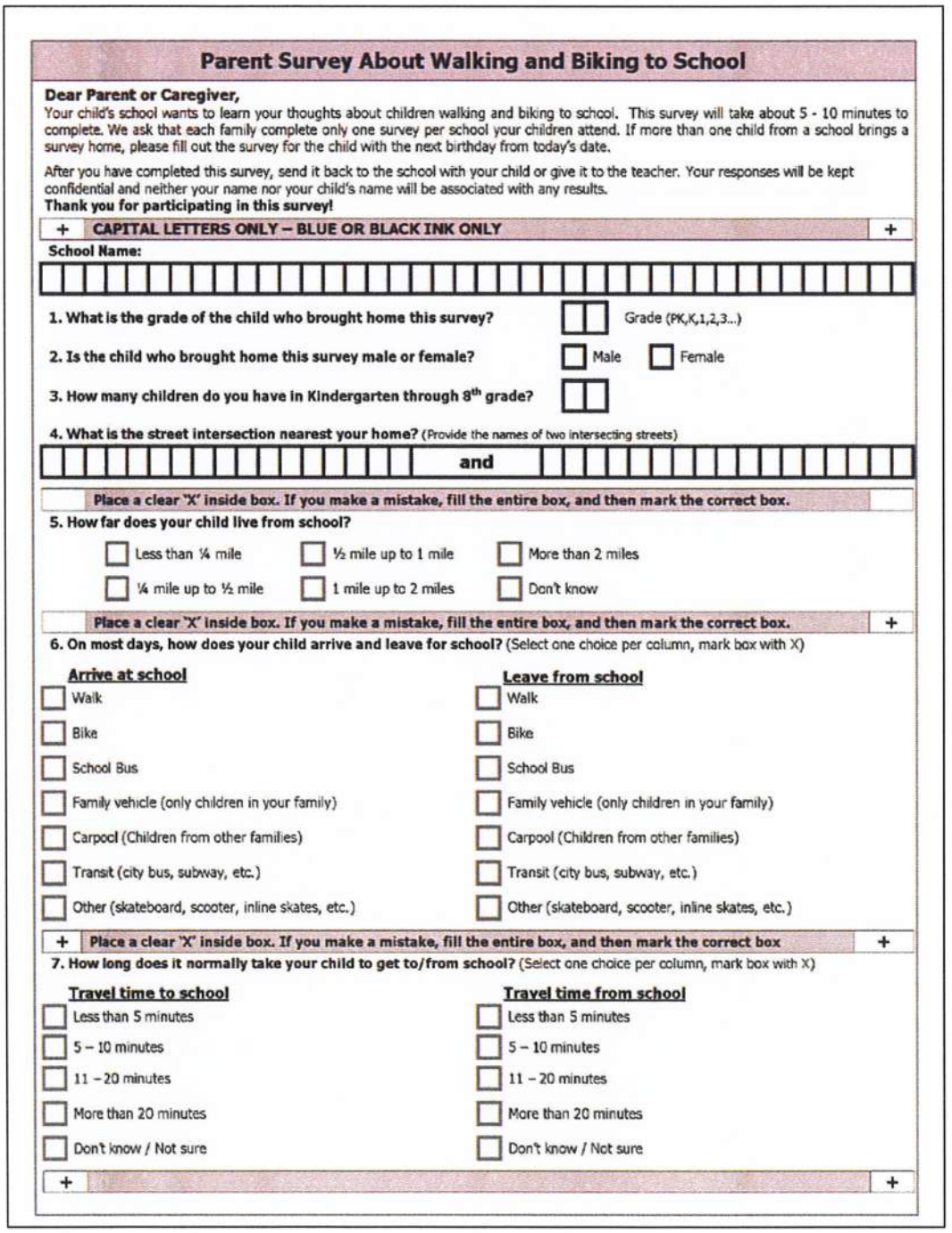
Key	Weather	Student Tally	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
	S= sunny R= rainy O=overcast SN=snow	Number in class when count made	-	-	-	Only with Children from your family	Riding with children from other families	City bus, subway, etc.	Skate-board, scooter, etc.
Sample AM	S N	2 0	2	3	8	3		3	1
Sample PM	R	1 9	3	3	8	1	2	2	
Tues. AM									
Tues. PM									
Wed. AM									
Wed. PM									
Thurs. AM									
Thurs. PM									

Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.

+ +

[5] National Center for Safe Routes to School, Evaluation: Student In-Class Travel Tally, 2009, available from http://www.saferoutesinfo.org/resources/evaluation_student-in-class-travel-talley.cfm; Internet; accessed 20 April 2011

APPENDIX D: PARENT SURVEY FORM[6]



Parent Survey About Walking and Biking to School

Dear Parent or Caregiver,

Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school your children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.

After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results.

Thank you for participating in this survey!

+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +

School Name:

1. What is the grade of the child who brought home this survey? ☐☐ Grade (PK,K,1,2,3...)

2. Is the child who brought home this survey male or female? ☐ Male ☐ Female

3. How many children do you have in Kindergarten through 8th grade? ☐☐

4. What is the street intersection nearest your home? (Provide the names of two intersecting streets)

and

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.

5. How far does your child live from school?

☐ Less than ¼ mile ☐ ½ mile up to 1 mile ☐ More than 2 miles
☐ ¼ mile up to ½ mile ☐ 1 mile up to 2 miles ☐ Don't know

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box. +

6. On most days, how does your child arrive and leave for school? (Select one choice per column, mark box with X)

Arrive at school	Leave from school
☐ Walk	☐ Walk
☐ Bike	☐ Bike
☐ School Bus	☐ School Bus
☐ Family vehicle (only children in your family)	☐ Family vehicle (only children in your family)
☐ Carpool (Children from other families)	☐ Carpool (Children from other families)
☐ Transit (city bus, subway, etc.)	☐ Transit (city bus, subway, etc.)
☐ Other (skateboard, scooter, inline skates, etc.)	☐ Other (skateboard, scooter, inline skates, etc.)

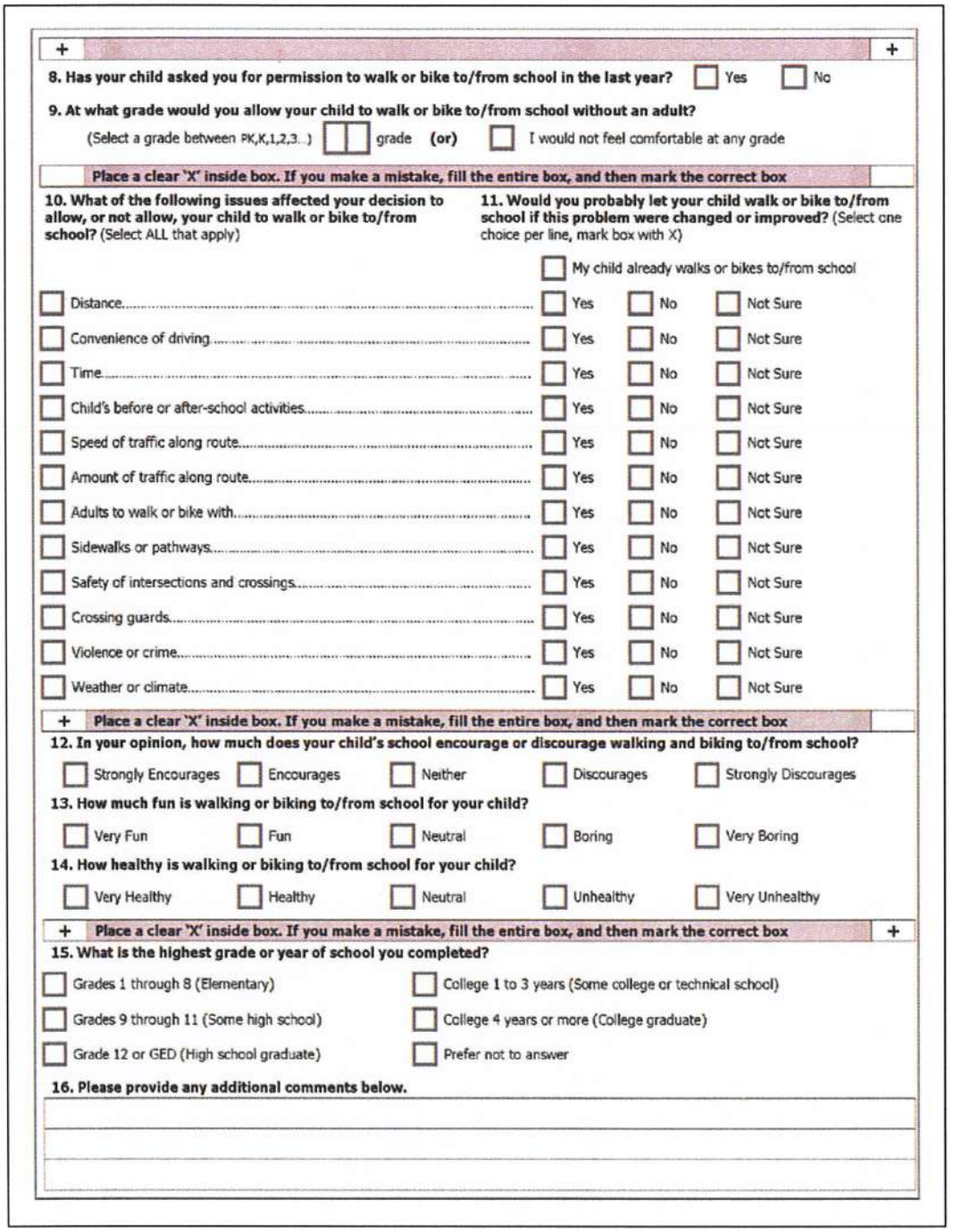
+ Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box +

7. How long does it normally take your child to get to/from school? (Select one choice per column, mark box with X)

Travel time to school	Travel time from school
☐ Less than 5 minutes	☐ Less than 5 minutes
☐ 5 – 10 minutes	☐ 5 – 10 minutes
☐ 11 – 20 minutes	☐ 11 – 20 minutes
☐ More than 20 minutes	☐ More than 20 minutes
☐ Don't know / Not sure	☐ Don't know / Not sure

+ +

[6] National Center for Safe Routes to School, Evaluation: Parent Survey, 2009, available from http://www.saferoutesinfo.org/resources/evaluation_parent-survey.cfm; Internet; accessed 20 April 2011.



8. Has your child asked you for permission to walk or bike to/from school in the last year? ☐ Yes ☐ No

9. At what grade would you allow your child to walk or bike to/from school without an adult?
(Select a grade between PK,K,1,2,3...) ☐☐ grade **(or)** ☐ I would not feel comfortable at any grade

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box

10. What of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school? (Select ALL that apply)

11. Would you probably let your child walk or bike to/from school if this problem were changed or improved? (Select one choice per line, mark box with X)

☐ My child already walks or bikes to/from school

☐ Distance	☐ Yes	☐ No	☐ Not Sure
☐ Convenience of driving	☐ Yes	☐ No	☐ Not Sure
☐ Time	☐ Yes	☐ No	☐ Not Sure
☐ Child's before or after-school activities	☐ Yes	☐ No	☐ Not Sure
☐ Speed of traffic along route	☐ Yes	☐ No	☐ Not Sure
☐ Amount of traffic along route	☐ Yes	☐ No	☐ Not Sure
☐ Adults to walk or bike with	☐ Yes	☐ No	☐ Not Sure
☐ Sidewalks or pathways	☐ Yes	☐ No	☐ Not Sure
☐ Safety of intersections and crossings	☐ Yes	☐ No	☐ Not Sure
☐ Crossing guards	☐ Yes	☐ No	☐ Not Sure
☐ Violence or crime	☐ Yes	☐ No	☐ Not Sure
☐ Weather or climate	☐ Yes	☐ No	☐ Not Sure

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box

12. In your opinion, how much does your child's school encourage or discourage walking and biking to/from school?
☐ Strongly Encourages ☐ Encourages ☐ Neither ☐ Discourages ☐ Strongly Discourages

13. How much fun is walking or biking to/from school for your child?
☐ Very Fun ☐ Fun ☐ Neutral ☐ Boring ☐ Very Boring

14. How healthy is walking or biking to/from school for your child?
☐ Very Healthy ☐ Healthy ☐ Neutral ☐ Unhealthy ☐ Very Unhealthy

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box

15. What is the highest grade or year of school you completed?

☐ Grades 1 through 8 (Elementary)
☐ Grades 9 through 11 (Some high school)
☐ Grade 12 or GED (High school graduate)
☐ College 1 to 3 years (Some college or technical school)
☐ College 4 years or more (College graduate)
☐ Prefer not to answer

16. Please provide any additional comments below.

APPENDIX E: SACRAMENTO AREA BICYCLE ADVOCATES BIKE AUDIT REPORT

June 27, 2011

Howe Avenue Elementary School
2404 Howe Avenue, Sacramento, California, 95825

On-site evaluation was done on June 22, 2011 from 3:30-6:30 pm. School was already released for summer vacations when audit was performed.

Key Findings

Howe Elementary is located on and surrounded by wide, high-speed major arterial streets with rudimentary or no bicycle facilities and discontinuous sidewalks. The alignment of the attendance boundary requires students to cross at least one of these arterials on their route to the school site. Bicycling on these arterials is extremely inadvisable.

Low and mid-density residential neighborhoods are within the network of these major arterials. Streets within these neighborhoods have mostly 25-mile per hour speed limits and low traffic volumes, making bicycling a feasible transportation option. Exiting these neighborhoods, however, requires crossing highway-like arterials.

Howe Community Park– adjacent to Howe Elementary to the south– has footpaths along Howe Avenue, Cottage Way and Bell Street. These paths provide the best routes for bicycles to access the school site from the neighborhoods to the north and south.

Existing Conditions

General Setting: Howe Elementary is located just off the corner of El Camino Avenue and Howe Avenue in the Arden Arcade area of Sacramento County. It is adjacent to Howe Community Park, which has playing fields, walking paths and picnic areas. This park is well maintained and well used, and provides a valuable resource for bicycles and pedestrians to avoid high-trafficked streets in the immediate area.

Howe Avenue is a four lane arterial street with a center turn lane, posted speed limit of 40-miles per hour and an average daily traffic volume of 22,400 vehicles. The speed limit is reduced to 25-miles an hour in the school zone; however, vehicles did not visibly reduce speed in this area when children were present for summer camp activities at the school. There are no bicycle facilities or shoulder on the stretch of Howe in front of the school site. High vehicle speeds and lack of shoulder and facilities makes bicycling on this road extremely uncomfortable and potentially hazardous.

Howe Avenue Elementary is 1000 feet south ofEl Camino Avenue. El Camino is a five lane arterial with a center turn lane, posted speed of 40-miles per hour and an average daily traffic volume of 25,000 vehicles. It has no bicycle facilities and a discontinuous shoulder. Bicycling on this roadway is also uncomfortable and potentially hazardous.

Bell Street is the first thoroughfare to the east of the school site. It is two lanes with a posted speed of 35-miles per hour and a wide, continuous shoulder. A small frontage road is separated by a drainage canal at many locations along Bell, allowing a direct along the road route that is removed from traffic. This design feature should be utilized as bicycle route to the Howe Avenue campus.

Other arterials within the attendance boundary are Marconi Avenue, Fulton Avenue, Alta Arden Expressway and Arden Way. These streets are four lanes with center turn lanes, have posted speeds of 35- or 40-miles per hour and no continuous shoulder or bicycle facilities. Average daily traffic volumes are approximately 25,000 vehicles for these streets, except Arden Way which carries an average of 36,000 vehicles per day.

School Campus: Howe Avenue provides the only vehicle access to the campus. A parking lot, running almost a quarter mile along Howe Avenue, separates the school buildings from the street and has two entrance driveways. A well-marked and signalized crosswalk crosses Howe at Delma Way, immediately in front of the primary school entrance. A crosswalk within the parking lot connects the pedestrian crossing across Howe to the school buildings.

Other Access: There is a gate at the backside of campus that opens onto the end of El Feliz Way. This gate is kept closed and locked; however, this gate has been kept open in the past, according to neighbors and former parents of the school, which allowed students to better avoid Howe Avenue and other high traffic streets. There is a gate between La Paloma Avenue and the ball fields in Howe Community Park, and another gate connecting the ball fields with the school parking lot. This provides a connection for bicycles and pedestrians between these eastern neighborhoods and the school site that minimized conflict with traffic.

A footpath within Howe Community Park runs along the length of Howe Avenue and outlets into the school parking lot. This path is removed from traffic and is the only bicycle or pedestrian facility on northbound Howe that connects with the school campus.

Drop-off and Pick-up: Neither drop-off nor pick-up was observed, but vehicles are allowed to enter the parking lot during these morning and afternoon rushes. Vehicles enter the parking lot at the traffic signal at Delma Way and can turn either left or right to exit through the northern or southernmost driveways. The primary drop-off point is immediately south of the entrance at Delma Way on the left-hand side. Vehicles then flow clockwise through the parking lot to exit at the southernmost driveway.

Bicycle Parking: Three grid-style racks are located in an interior corridor within the school grounds. They are positioned against a building, which decreases their capacity

to about 30 bicycles. These racks are located on concrete surfaces and are visible from the surrounding classrooms, but it was not clear if these racks are currently in their permanent location. Grid-style racks are not recommended because they cannot be used with all locking devices and have only one point of contact with the bicycle, usually only a wheel.

Bicycle Commuting by Faculty and Staff: Unknown.

Access from the North: Accessing the campus from the north requires crossing several large arterials which have few signalized crossings and are extremely hostile to bicyclists. Residents in the northern areas of the attendance boundary must cross at least Marconi, Fulton and El Camino Avenues to reach the school site. Neighborhoods within this northern area have residential streets with low traffic speeds and volumes and good connectivity, but are faced with multiple highway-esque barriers surrounding these areas.

Access from the East: Accessing the campus from the east is best done via the footpaths within Howe Community Park that lead to the southern corner of the school parking lot. This park can be reached from several locations on Bell Street, which has a separated residential right of way, removed from the main roadway by a drainage canal. This second right of way carries only residential traffic and should be encouraged as a bicycle route.

Access from the South: Neighborhoods accessing Howe Avenue Elementary from the south are primarily medium-density apartments from the area between Bell Street and Fulton Avenue, south of Cottage Way. The internal streets in this area are residential with low vehicle speeds and traffic volumes. Residents accessing the school site from this area would travel Cottage Way to Bell Avenue. Cottage Way has a posted speed of 35-miles per hour, average daily traffic volume of 11,000 vehicles and an irregular shoulder.

Access from the West: Neighborhoods west of the campus must cross Howe Avenue to reach the school site. Poor connectivity in these neighborhoods requires bicyclists to ride along Ethan Way to access Delma, where they are able to cross to the school site. Ethan Way is two lanes with a center turn lane, a 35-miles per hour speed limit, no bicycle facilities and an exceptionally large right of way.

Recommendations

Informational programs are a crucial measure at Howe Avenue Elementary given its location and surrounding infrastructure. Safe-bicycling workshops and intensive route planning are necessary to inform students and parents of ideal methods to reach their school by bicycle. Bike-pooling programs should be encouraged.

Traffic-calming measures should be implemented on the main arterials to reduce speeds and reallocate right of way for bicycles and pedestrians.

Realignment of the attendance boundary should be considered to reduce the number of arterials that act as barriers to bicycling to school.

Make the separated right of way on Bell Street continuous between El Camino Avenue and Cottage Way. Upgrade this to a Class III bicycle route with appropriate signage and markings.

Lower the speed limit of Bell Street to 25-miles per hour and improve the Class II bicycle lanes with more signage and pavement markings, promoting it as the north-south bicycle route through the area.

Lower the speed limit of Cottage Way to 25-miles per hour and upgrade the bicycle facilities to standard Class II bicycle lanes.

Implement traffic calming measures on Ethan Way. Reduce speed limit to 25-miles per hour, sign and stripe with standard Class II bicycle lanes and install vegetated medians.

Upgrade pavement quality of the footpaths within Howe Community Park and improve its connection to school parking lot.

Open the gate at the end of El Feliz Way to allow bicycles and pedestrians to access campus from the residential streets behind the campus.

Prepared by: Amy Lee, Safe Routes to School Site Analyst
Sacramento Area Bicycle Advocates

San Juan Unified School District

Kent Kern, Superintendent of Schools

3738 Walnut Avenue, Carmichael, California 95608
P.O. Box 477, Carmichael, California 95609-0477
Telephone (916) 971-7104; FAX (916) 971-7070
Internet Web Site: www.sanjuan.edu

CALTRANS
Division of Local Assistance, MS-1
Attn: Office of Active Transportation and Spec. Prog.
PO Box 942874
Sacramento, CA 94274-0001

The San Juan Unified School District welcomes the opportunity to continue working in partnership with the Sacramento County Department of Transportation (SAC DOT) as part of their Active Transportation Program application in support of Howe Avenue and Dyer-Kelly Elementary Schools. Providing a safe environment for students to succeed is a component of San Juan's mission statement and is an essential aspect of a student's education.

Howe Avenue and Dyer-Kelly are located on the west end of the San Juan Unified School District. The proposed project would support students walking to school at both campuses. Dyer-Kelly serves a diverse population of 436 students and has a free and reduced lunch rate of 97.6%. Howe Avenue serves 642 students and has a free and reduced lunch rate of 98%. Neither school is identified for closure. The neighborhood surrounding these schools has a high number of apartment buildings and single family homes resulting in a large number of students who walk and bike to school across hazardous roads and intersections. This makes both schools a high priority for both the Sacramento County Department of Transportation and the San Juan Unified School District.

At San Juan Unified, a safe environment extends further than the bell schedule and stretches beyond the front gates of the school. We are committed to working closely with the Sacramento County DOT to support evaluation, education, and encouragement activities at both schools and have included them in our non-infrastructure ATP application. We believe this will maximize the benefits of the infrastructure upgrades detailed in this application.

San Juan Unified School District strongly supports this application and looks forward to continuing to work with Sacramento County to improve the safety or our students.

Sincerely,

Kent Kern
Superintendent

San Juan Unified School District

Howe Avenue Elementary
2404 Howe Ave., Sacramento, CA 95825
Telephone (916) 566-2165; FAX (916) 566-2180
Internet Web Site: www.sanjuan.edu

Yvonne Wright, Principal
Kirsten Thomas-Acke, Vice-Principal

May 08, 2014

Caltrans District 3
Attn: Mr. Jim Day, ATP Coordinator
703 B Street
Marysville CA, 95901

Mr. Day,

As the Principal of Howe Avenue Elementary School, I am in strong support of the proposed Active Transportation Program/Safe Routes To School Project being proposed by the Sacramento County Department of Transportation (Sac DOT).

Funding of this proposed project will provide much needed sidewalks and bike lanes along the final segment of Howe Avenue between El Camino Avenue and Marconi Avenue where many of our students live, play and commute to school. One of the students from Howe Avenue Elementary School was struck and killed by a vehicle along this segment of Howe Avenue on his way home from school in October 2011. It means a lot to the community to improve the pedestrian and bicycle access along our streets so we can encourage more of our students to walk and bike to school when possible.

Thank you for your hopeful award of this grant application so that Sac DOT can move forward with these much needed improvements to allow more of our students to walk or bike to school.

Best regards,

Yvonne Johns Wright
Principal, Howe Avenue Elementary School

San Juan Unified School District
Dyer-Kelly Elementary School
[2236 Edison Avenue, Sacramento, CA 95821
Telephone (916)566-2150 FAX (916) 566-2156
Sue Hulsey, Principal

May 09, 2014

Caltrans District 3
Attn: Mr. Jim Day, ATP Coordinator
703 B Street
Marysville CA, 95901

Mr. Day,

As the Principal of Dyer-Kelly Elementary School, I am in strong support of the proposed Active Transportation Program/Safe Routes To School Project being proposed by the Sacramento County Department of Transportation (Sac DOT).

Funding of this proposed project will provide much needed sidewalks and bike lanes along the final northerly segment of Howe Avenue between El Camino Avenue and Marconi Avenue where many of our students live, play and commute to school. One of the students from the neighboring Howe Avenue Elementary School was struck and killed by a vehicle along this segment of Howe Avenue on his way home from school in October 2011. It will mean a lot to the community to improve the pedestrian and bicycle access along our streets so we can encourage more of our students to walk and bike to school when possible.

Thank you for your hopeful award of this grant application so that Sac DOT can move forward with these much needed improvements to allow more of our students to walk or bike to school.

Best regards,

Susan M. Hulsey

Susan M. Hulsey
Interim Principal
Dyer Kelly Elementary School

Sacramento County

Howe Avenue Sidewalk Infill and Bike Lane Improvements

Index for Section IX - Additional Documentation

1. **Additional Doc. #1 – 24 Hr Traffic Count (2 pages)**
2. **Additional Doc #2 – Student Fatality TV Report (1 page)**
3. **Additional Doc #3 - Bike and Pedestrian Accidents (1 page)**
4. **Additional Doc #4 – Deadly Stretch of Howe Ave Takes Another Life And Accident Report of the Fatality (2 pages)**
5. **Additional Doc #5 – Vehicle to Vehicle Accidents (1 page)**
6. **Additional Doc #6 – Road Diet Countermeasure (2 pages)**
7. **Additional Doc #7 – Road Diet Case Study (1 page)**
8. **Additional Doc #8 – Ped Master Plan Priority Map (2 Pages)**
9. **Additional Doc #9 – Benefit/Cost Analysis & Project and Const. Costs (3 pages)**
10. **Additional Doc #10 – Local Health Risk Factors (1 page)**

SACRAMENTO COUNTY

DEPARTMENT OF TRANSPORTATION

24 HOUR TRAFFIC COUNT

DATE: 9/11/13 START TIME: 12:00 AM DAY: WEDNESDAY

ZONE: 3 COUNTER NO: 517 LOC ID: 426864A

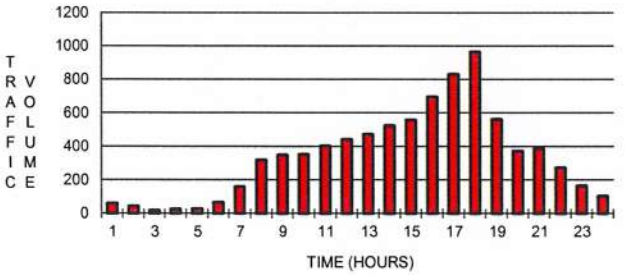
OBSERVER: NBE CHECKED BY: NBE TYPE: ANNUAL COUNT

COUNT TAKEN ON: **HOWE AV**

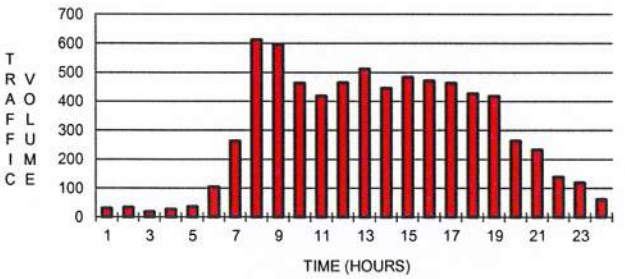
NORTH OF **EL CAMINO AV**

DIRECTION	N/B	S/B	N/B+S/B
NO. OF LANES	2	2	4
TIME	HOURLY TOTAL	HOURLY TOTAL	HOURLY TOTAL
0-1	58	30	88
1-2	42	34	76
2-3	18	18	36
3-4	25	27	52
4-5	27	36	63
5-6	66	104	170
6-7	159	263	422
7-8	317	612	929
8-9	349	595	944
9-10	352	462	814
10-11	403	419	822
11-12	440	464	904
12-13	470	511	981
13-14	522	445	967
14-15	557	483	1040
15-16	694	471	1165
16-17	829	462	1291
17-18	963	426	1389
18-19	560	418	978
19-20	371	264	635
20-21	385	233	618
21-22	271	139	410
22-23	165	119	284
23-24	102	62	164
24 HOUR TOTAL	8145	7097	15242

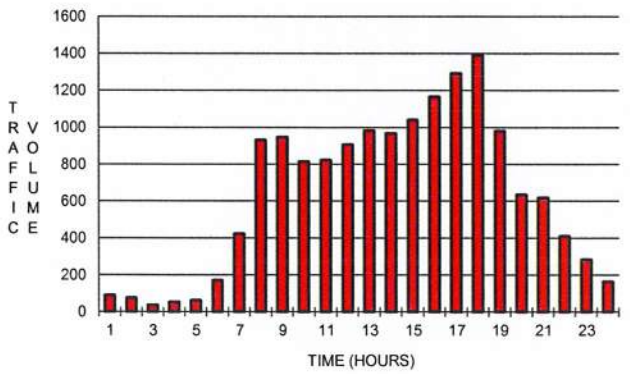
DIRECTION: N/B



DIRECTION: S/B



BOTH DIRECTIONS



County of Sacramento

Traffic Volume Report

LOCATION : HOWE AV
CROSS ST : EL CAMINO AV
DIRECTION : N/B+S/B

Date: 9/11/13
WEDNESDAY

24 Hour Volume

INTERVAL BEGIN	N/B	S/B	COMBINED	INTERVAL BEGIN	N/B	S/B	COMBINED
12:00 AM	21	10	31	12:00 PM	107	115	222
12:15 AM	19	6	25	12:15 PM	143	141	284
12:30 AM	7	9	16	12:30 PM	116	124	240
12:45 AM	11	5	16	12:45 PM	104	131	235
1:00 AM	12	7	19	1:00 PM	117	120	237
1:15 AM	7	8	15	1:15 PM	139	109	248
1:30 AM	14	7	21	1:30 PM	134	114	248
1:45 AM	9	12	21	1:45 PM	132	102	234
2:00 AM	7	4	11	2:00 PM	133	125	258
2:15 AM	4	5	9	2:15 PM	134	132	266
2:30 AM	3	4	7	2:30 PM	149	111	260
2:45 AM	4	5	9	2:45 PM	141	115	256
3:00 AM	5	1	6	3:00 PM	159	124	283
3:15 AM	5	9	14	3:15 PM	161	109	270
3:30 AM	10	7	17	3:30 PM	201	122	323
3:45 AM	5	10	15	3:45 PM	173	116	289
4:00 AM	4	4	8	4:00 PM	199	122	321
4:15 AM	6	6	12	4:15 PM	220	128	348
4:30 AM	9	13	22	4:30 PM	200	111	311
4:45 AM	8	13	21	4:45 PM	210	101	311
5:00 AM	11	19	30	5:00 PM	243	105	348
5:15 AM	7	20	27	5:15 PM	253	122	375
5:30 AM	17	37	54	5:30 PM	264	112	376
5:45 AM	31	28	59	5:45 PM	203	87	290
6:00 AM	26	47	73	6:00 PM	176	115	291
6:15 AM	38	61	99	6:15 PM	148	109	257
6:30 AM	36	64	100	6:30 PM	129	98	227
6:45 AM	59	91	150	6:45 PM	107	96	203
7:00 AM	63	112	175	7:00 PM	106	67	173
7:15 AM	76	144	220	7:15 PM	99	66	165
7:30 AM	95	175	270	7:30 PM	81	59	140
7:45 AM	83	181	264	7:45 PM	85	72	157
8:00 AM	104	149	253	8:00 PM	107	76	183
8:15 AM	76	150	226	8:15 PM	101	60	161
8:30 AM	78	148	226	8:30 PM	96	48	144
8:45 AM	91	148	239	8:45 PM	81	49	130
9:00 AM	99	133	232	9:00 PM	81	36	117
9:15 AM	97	115	212	9:15 PM	75	35	110
9:30 AM	78	112	190	9:30 PM	66	33	99
9:45 AM	78	102	180	9:45 PM	49	35	84
10:00 AM	93	96	189	10:00 PM	56	25	81
10:15 AM	102	113	215	10:15 PM	44	42	86
10:30 AM	98	98	196	10:30 PM	39	28	67
10:45 AM	110	112	222	10:45 PM	26	24	50
11:00 AM	108	119	227	11:00 PM	26	17	43
11:15 AM	116	101	217	11:15 PM	28	17	45
11:30 AM	109	113	222	11:30 PM	26	15	41
11:45 AM	107	131	238	11:45 PM	22	13	35
24 HR TOTALS	8145	7097	15242				

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Weather
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Homepage > SACRAMENTO NEWS

Family Of Sacramento Boy Killed In Traffic Keeps Vigil

Relatives Say Officials Should Create Crosswalk For Children

POSTED: 10:50 pm PDT October 29, 2011
UPDATED: 11:20 pm PDT October 29, 2011

SACRAMENTO, Calif. -- Along Howe Avenue, family and friends of 7 year-old Tay'Von Webb kept an evening vigil in Bellview Park again Saturday in his memory.

The boy was stuck by a car and killed Thursday afternoon while trying to cross busy Howe Avenue going back to his home in an apartment complex across from the park.

At the base of a tree there is a growing memorial of candles, flowers, balloons and messages. A little league picture of Webb sits in the center with his baseball glove resting below.

Webb's family said their vigil is an effort to gain the attention of Sacramento County officials, regarding the need for safety improvements for children in the area.

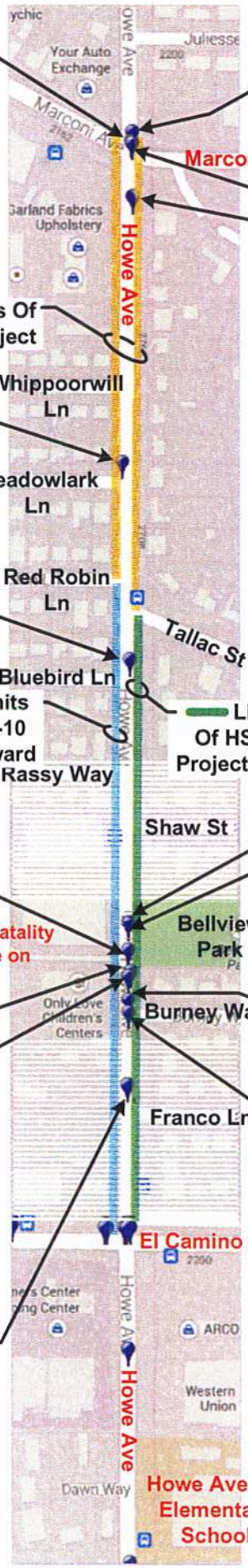
"There should be a crosswalk for these children," said Cookie Potts, the boy's stepmother. She said the nearest crosswalk is two blocks away from apartments, the park and nearby schools.

Neighbors said traffic on the section of road where Webb died often far exceeds the 35 mph speed limit. They also complain there are a narrow bike paths and no safe walking area along the park.

"There's no sidewalks," said Alton Dixon, Webb's grandfather. "It's really bad."

A funeral service for Webb is scheduled for Friday.

TIMS – SWITRS Bike & Ped Accidents 01/01/2003 – 12/31/12



CaseID: 3393807

Collision Details
Year: 2007 Bicycle: N
Severity: 4 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: MARCONI AV
Secondary: HOWE AV St Highway: N
Intersection: N Route: 0
Offset Distance: 5 PostMile: 0
Offset Direction: W

CaseID: 2286419

Collision Details
Year: 2005 Bicycle: Y
Severity: 3 Motorcycle: N
Pedestrian: N Truck: N

Collision Location
Primary: HOWE AV
Secondary: MARCONI AV St Highway: N
Intersection: Y Route: 0
Offset Distance: 0 PostMile: 0
Offset Direction: N

CaseID: 5721083

Collision Details
Year: 2012 Bicycle: Y
Severity: 3 Motorcycle:
Pedestrian: Truck:

Collision Location
Primary: MEADOWLARK LN
Secondary: HOWE AV St Highway: N
Intersection: N Route: 0
Offset Distance: 25 PostMile: 0
Offset Direction: W

CaseID: 0632043

Collision Details
Year: 2003 Bicycle: N
Severity: 4 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: MARCONI AV
Intersection: N
Offset Distance: 106
Offset Direction: S

CaseID: 4855889

Collision Details
Year: 2010 Bicycle: N
Severity: 4 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: MARCONI AV
Intersection: N
Offset Distance: 5
Offset Direction: S

CaseID: 4660282

Collision Details
Year: 2010 Bicycle: N
Severity: 4 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: BLUE BIRD LN
Secondary: HOWE AV St Highway: N
Intersection: Y Route: 0
Offset Distance: 0 PostMile: 0
Offset Direction: N

CaseID: 2016454

Collision Details
Year: 2005 Bicycle: N
Severity: 2 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: N Route: 0
Offset Distance: 190 PostMile: 0
Offset Direction: N

CaseID: 5402923 Fatality

Collision Details
Year: 2011 Bicycle: N
Severity: 1 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: N Route: 0
Offset Distance: 122 PostMile: 0
Offset Direction: N

Note: Another ped fatality occurred here on 3/28/2013

CaseID: 1400047

Collision Details
Year: 2004 Bicycle: N
Severity: 3 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: N Route: 0
Offset Distance: 188 PostMile: 0
Offset Direction: N

CaseID: 5498722

Collision Details
Year: 2012 Bicycle:
Severity: 3 Motorcycle:
Pedestrian: Y Truck:

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY
Intersection: N
Offset Distance: 70
Offset Direction: N

CaseID: 2011487

Collision Details
Year: 2005 Bicycle: Y
Severity: 3 Motorcycle: N
Pedestrian: N Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY
Intersection: N
Offset Distance: 60
Offset Direction: N

CaseID: 3168570

Collision Details
Year: 2007 Bicycle: Y
Severity: 3 Motorcycle: N
Pedestrian: N Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: Y Route: 0
Offset Distance: 0 PostMile: 0
Offset Direction: N

CaseID: 1036810

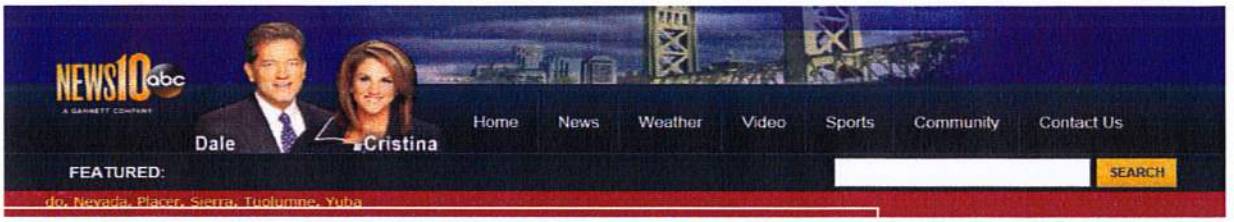
Collision Details
Year: 2003 Bicycle: Y
Severity: 3 Motorcycle: N
Pedestrian: N Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: N Route: 0
Offset Distance: 194 PostMile: 0
Offset Direction: S

CaseID: 3232784 Fatality

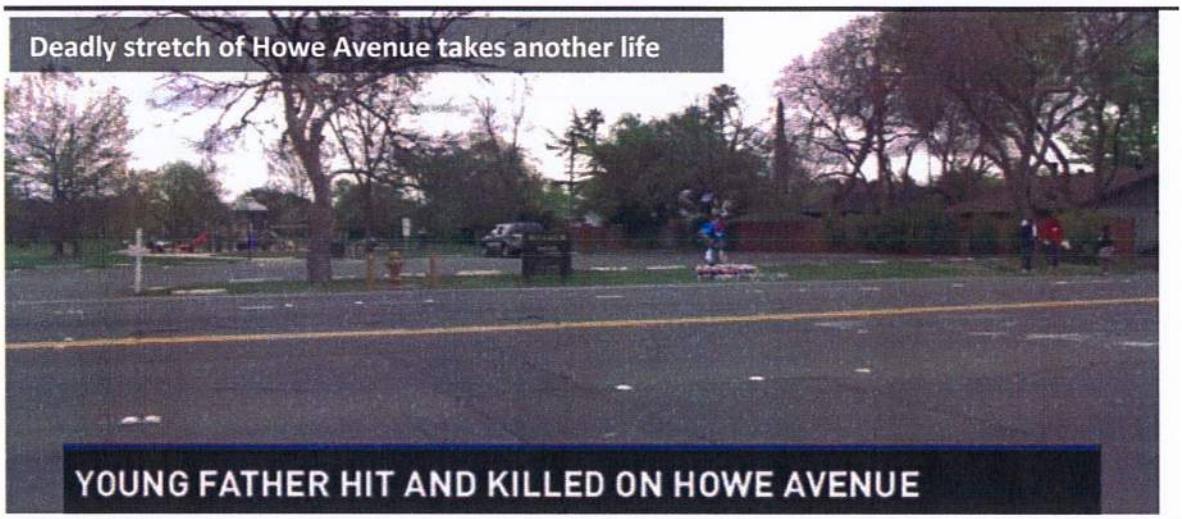
Collision Details
Year: 2007 Bicycle: N
Severity: 1 Motorcycle: N
Pedestrian: Y Truck: N

Collision Location
Primary: HOWE AV
Secondary: BURNEY WY St Highway: N
Intersection: N Route: 0
Offset Distance: 30 PostMile: 0
Offset Direction: S



Deadly stretch of Howe Ave. takes another life

1:56 AM, Mar 29, 2013 | 0 comments



SACRAMENTO, CA - A deadly stretch of Howe Avenue has seen another fatal accident and again left neighbors demanding a crosswalk and sidewalks.

Cecilia Lee was watching her brother cross the street Wednesday afternoon as a truck seemed to come out of nowhere and hit 18-year-old Jevone Lee.

"Everything happened in slow motion to me. I just ran to my brother and I saw my brother being dragged under the car," said Lee as she stood beside a memorial of candles and balloons in Jevone's memory.

Residents who live in apartments along the stretch of Howe Avenue between El Camino Avenue and Marconi Avenue acknowledge that no one should cross the street without a crosswalk. However, they quickly add the temptation is irresistible to nearly everyone, because the nearest crosswalks are a quarter of a mile away in both directions.

"How many people are gonna have to die and pass away for them to have to get the picture?" Lee questioned.

In October 2011, 7-year-old Tay-Von Webb was walking home from school when he tried to cross Howe Avenue and was hit by a car.

"There's apartment complexes, there's two schools. So why is there still people getting killed out here?" asked Webb's grandmother Shazzan Cason.

To make matters worse, Bellview Park is just across the street, with a playground that tempts kids to ignore parental warnings not to cross the street.

It was not clear if anyone has actually taken their concerns to Sacramento County. It was too late Thursday to have phone calls or emails returned by county officials.

Family members said this time, they will keep pushing for a safer street until something gets done.

"How many people gotta get killed before they put a crosswalk here?" Cason asked as she looked a memorial put up beside Lee's in memory of her grandson.

News10/KXTV http://archive.news10.net/news/article/238441/2/Deadly-stretch-of-Howe-Avenue-takes-another-life

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

TRAFFIC COLLISION REPORT

CHP 555 PAGE 1 (REV. 04-11) OPI 060

HQ DOT CR Coroner Misc.
((((

RQ

SPECIAL CONDITIONS: FATAL	NUMBER INJURED: 0	HIT & RUN FELONY: ☐	CITY: UNINCORPORATED	JUDICIAL DISTRICT: SACRAMENTO SUPERIOR	LOCAL REPORT NUMBER: 2013030442
	NUMBER KILLED: 1	HIT & RUN MISDEMEANOR: ☐	COUNTY: SACRAMENTO	REPORTING DISTRICT / BEAT: 041	DAY OF WEEK: WEDNESDAY / TOW AWAY: ☐ YES ☒ NO

LOCATION

COLLISION OCCURRED ON: HOWE AVE.	MO DAY YEAR: 03/27/2013	TIME (2400): 1555	NCIC #: 9250	OFFICER I.D.: 015423
MILEPOST INFORMATION:	GPS COORDINATES: LATITUDE / LONGITUDE		PHOTOGRAPHS BY: ☐ NONE — OFC. D. LONGO #14188	
☐ AT INTERSECTION WITH: ☒ OR: 197 FEET NORTH OF BURNEY WAY		STATE HWY REL: ☐ YES ☒ NO		

PARTY 1

DRIVER'S LICENSE NUMBER	STATE	CLASS	AIR BAG	SAFETY EQUIP.
			P	P

NAME (FIRST, MIDDLE, LAST): JEVON DORSELL LEE

STREET ADDRESS: 2621 HOWE AVE. APT. #219

CITY / STATE / ZIP: SACRAMENTO CA 95801

SEX	HAIR	EYES	HEIGHT	WEIGHT	BIRTHDATE (MO DAY YEAR)	RACE
M	BLK	BRN	6-0	170	05/16/1994	B

HOME PHONE: (916)289-9506 — BUSINESS PHONE: NONE

INSURANCE CARRIER: N/A — POLICY NUMBER:

DIR OF TRAVEL: W — ON STREET OR HIGHWAY: HOWE AVE. — SPEED LIMIT: 40

VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER	STATE

OWNER'S NAME: ☐ SAME AS DRIVER

OWNER'S ADDRESS: ☐ SAME AS DRIVER

DISPOSITION OF VEHICLE ON ORDERS OF: ☐ OFFICER ☐ DRIVER ☐ OTHER

PRIOR MECH. DEFECTS: ☐ NONE APP. ☐ REFER TO NARRATIVE

VEHICLE IDENTIFICATION NUMBER:

VEHICLE TYPE: 60 — DESCRIBE VEHICLE DAMAGE: ☐ UNK ☐ NONE ☐ MINOR ☐ MOD ☐ MAJOR ☐ ROLL-OVER — SHADE IN DAMAGED AREA

CA ____ DOT ____

CAL-T ____ TCP/PSC ____ MC/MX ____

PARTY 2

DRIVER'S LICENSE NUMBER	STATE	CLASS	AIR BAG	SAFETY EQUIP.
N2426915	CA	C	M	G

NAME (FIRST, MIDDLE, LAST): OSCAR GARCIA PORRAS

STREET ADDRESS: 11 GRANVILLE CT.

CITY / STATE / ZIP: SACRAMENTO CA 95838

SEX	HAIR	EYES	HEIGHT	WEIGHT	BIRTHDATE (MO DAY YEAR)	RACE
M	BLK	BRN	5-7	195	10/31/1954	H

HOME PHONE: (916)296-5670 — BUSINESS PHONE: NONE

INSURANCE CARRIER: 21ST CENTURY — POLICY NUMBER: 21187986

DIR OF TRAVEL: S — ON STREET OR HIGHWAY: HOWE AVE. — SPEED LIMIT: 40

VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER	STATE
1994	DODGE RAM 2500 WHT	8R75874	CA

OWNER'S NAME: ☒ SAME AS DRIVER

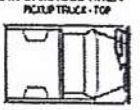
OWNER'S ADDRESS: ☒ SAME AS DRIVER

DISPOSITION OF VEHICLE ON ORDERS OF: ☐ OFFICER ☒ DRIVER ☐ OTHER — DRIVEN AWAY

PRIOR MECHANICAL DEFECTS: ☒ NONE APP. ☐ REFER TO NARRATIVE

VEHICLE IDENTIFICATION NUMBER:

VEHICLE TYPE: 22 — DESCRIBE VEHICLE DAMAGE: ☐ UNK ☐ NONE ☒ MINOR ☐ MOD ☐ MAJOR ☐ ROLL-OVER — SHADE IN DAMAGED AREA (PICKUP TRUCK - TOP)



CA ____ DOT ____

CAL-T ____ TCP/PSC ____ MC/MX ____

PARTY 3

DRIVER'S LICENSE NUMBER	STATE	CLASS	AIR BAG	SAFETY EQUIP.

NAME (FIRST, MIDDLE, LAST):

STREET ADDRESS:

CITY / STATE / ZIP:

SEX	HAIR	EYES	HEIGHT	WEIGHT	BIRTHDATE (MO DAY YEAR)	RACE

HOME PHONE: — BUSINESS PHONE:

INSURANCE CARRIER: — POLICY NUMBER:

DIR OF TRAVEL: — ON STREET OR HIGHWAY: — SPEED LIMIT:

VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER	STATE

OWNER'S NAME: ☐ SAME AS DRIVER

OWNER'S ADDRESS: ☐ SAME AS DRIVER

DISPOSITION OF VEHICLE ON ORDERS OF: ☐ OFFICER ☐ DRIVER ☐ OTHER

PRIOR MECHANICAL DEFECTS: ☐ NONE APP. ☐ REFER TO NARRATIVE

VEHICLE IDENTIFICATION NUMBER:

VEHICLE TYPE: — DESCRIBE VEHICLE DAMAGE: ☐ UNK ☐ NONE ☐ MINOR ☐ MOD ☐ MAJOR ☐ ROLL-OVER — SHADE IN DAMAGED AREA

CA ____ DOT ____

CAL-T ____ TCP/PSC ____ MC/MX ____

PREPARER'S NAME: B. BEWS 015423

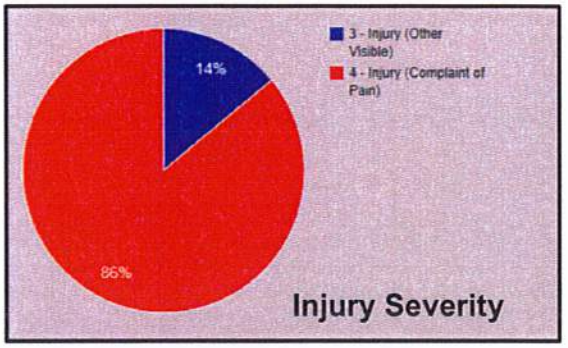
DISPATCH NOTIFIED: ☒ YES ☐ NO ☐ N/A

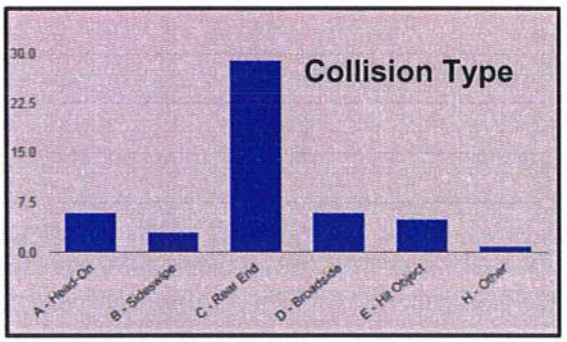
REVIEWER'S NAME: D. JIMENEZ 16244

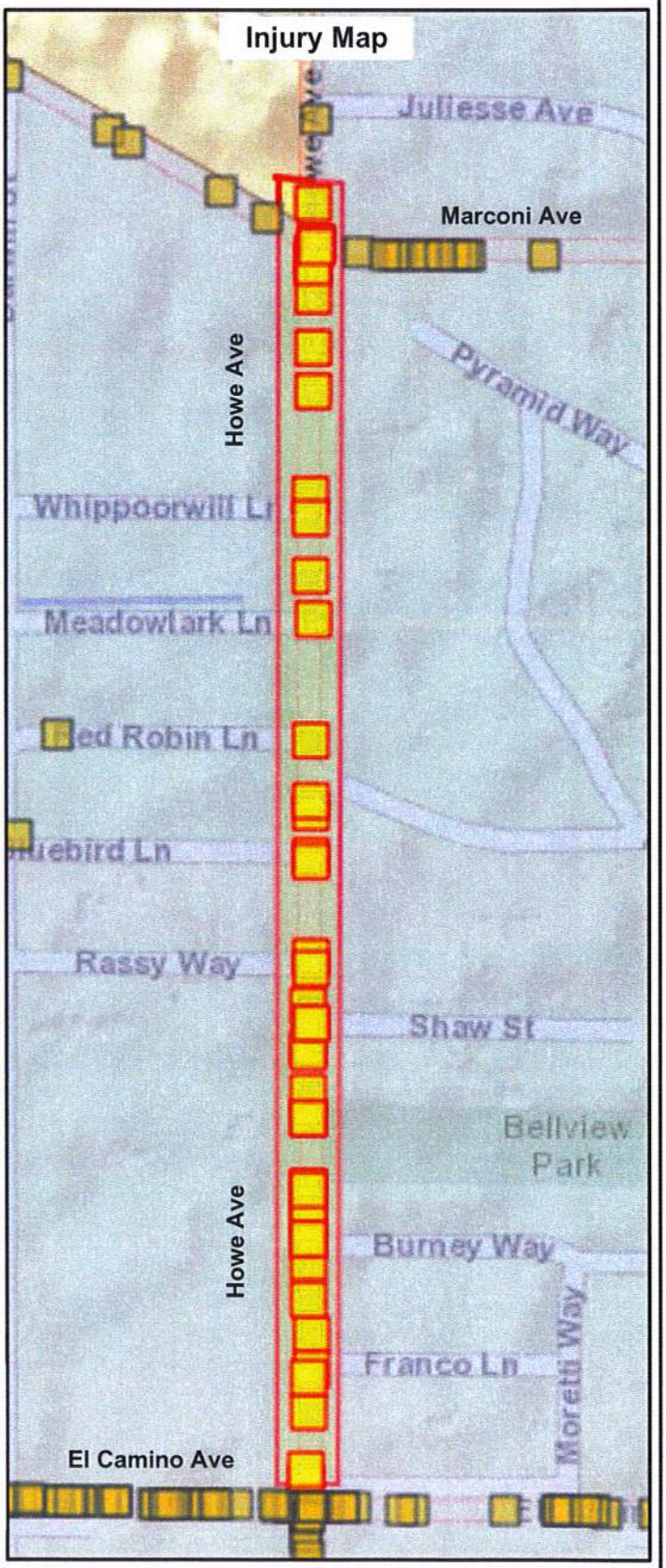
DATE REVIEWED: 07-16-13

Vehicle Accidents Not Involving a Pedestrian or Bicyclist

From Jan. 1, 2003 thru Dec. 31, 2012







Primary Collision Factor

Primary Collision Factor	Collisions	Percentage
01 - Driving or Bicycling Under the Influence of Alcohol or Drug	5	10%
03 - Unsafe Speed	23	46%
04 - Following Too Closely	2	4%
05 - Wrong Side of Road	2	4%
07 - Unsafe Lane Change	3	6%
08 - Improper Turning	1	2%
09 - Automobile Right of Way	7	14%
12 - Traffic Signals and Signs	3	6%
21 - Unsafe Starting or Backing	3	6%
22 - Other Improper Driving	1	2%
Total Collisions =	**50**	

Vehicle Collision Involved With ...

Motor Vehicle Involved With	Collisions	Percentage
C - Other Motor Vehicle	45	90%
I - Fixed Object	5	10%

Source: TIMS/SWITRS at http://tims.berkeley.edu/tools/gismap/index.php#

Source: http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.pdf

Proven Safety Countermeasures

"Road Diet" (Roadway Reconfiguration)

The classic roadway reconfiguration, commonly referred to as a "*road diet*," involves converting an undivided four lane roadway into three lanes made up of two through lanes and a center two-way left turn lane. The reduction of lanes allows the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands, and/or parking. Road diets have multiple safety and operational benefits for vehicles as well as pedestrians, such as:

- Decreasing vehicle travel lanes for pedestrians to cross, therefore reducing the multiple-threat crash (when one vehicle stops for a pedestrian in a travel lane on a multi-lane road, but the motorist in the next lane does not, resulting in a crash) for pedestrians,
- Providing room for a pedestrian crossing island,
- Improving safety for bicyclists when bike lanes are added (such lanes also create a buffer space between pedestrians and vehicles),
- Providing the opportunity for on-street parking (also a buffer between pedestrians and vehicles),
- Reducing rear-end and side-swipe crashes, and
- Improving speed limit compliance and decreasing crash severity when crashes do occur.

Background

Midblock locations tend to experience higher travel speeds, contributing to increased injury and fatality rates. More than 80 percent of pedestrians hit by vehicles traveling at 40 mph or faster will die, while less than 10 percent will die when hit at 20 mph or less. When appropriately applied, road diets have generated benefits to users of all modes of transportation, including bicyclists, pedestrians, and motorists. The resulting benefits include reduced vehicle speeds, improved mobility and access, reduced collisions and injuries, and improved livability and quality of life. When modified from four travel lanes to two travel lanes with a two-way left-turn lane, roadways have experienced a 29 percent reduction in all roadway crashes. The benefits to pedestrians include reduced crossing distance and fewer midblock crossing locations, which account for more than 70 percent of pedestrian fatalities.

Road Before

Road After

Guidance

Road diets can be low cost if planned in conjunction with reconstruction or simple overlay projects, since a road diet mostly consists of restriping. Roadways with Average Daily Traffic (ADT) of 20,000 or less may be good candidates for a road diet and should be evaluated for feasibility. It has been shown that roads with 15,000 ADT or less had very good results in the areas of safety, operations, and livability. Driveway density, transit routes, the number and design of intersections along the corridor, as well as operational characteristics are some considerations to be evaluated before deciding to implement a road diet.

It is a good practice for someone in an agency to know well in advance of when road reconstruction and overlay projects will be initiated so an evaluation can be conducted. It is important to analyze and understand the effects of the proposed change, obtain input from the community stakeholders, and ensure the appropriate elements are included in the project. Improvements to intersection turn lanes, signing, pavement markings, traffic control devices, transit stops, and pedestrian and bicyclist facilities may be needed to support this concept. It should be noted that the classic four-to-three-lane road diet is very compatible with single-lane roundabouts.

Key Resources

Pedsafe: Pedestrian Safety Guide and Countermeasure Selection System, p. 62
http://www.walkinginfo.org/pedsafe/pedsafe_downloads.cfm

Pedestrian Facility User's Guide: Providing Safety and Mobility, p. 53
http://drusilla.hsrc.unc.edu/cms/downloads/PedFacility_UserGuide2002.pdf

Guide for the Planning, Design, and Operation of Pedestrian Facilities, American Association of State Highway and Transportation Officials, 2004 [Available for purchase from AASHTO]
https://bookstore.transportation.org/item_details.aspx?id=119

Pedestrian Road Safety Audits and Prompt List
http://www.walkinginfo.org/library/details.cfm?id=3955

FHWA Office of Safety Bicycle and Pedestrian Safety
http://safety.fhwa.dot.gov/ped_bike/

Road Diet Handbook: Setting Trends for Livable Streets [Available for purchase from ITE]
http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=LP-670

Comparison of empirical Bayes and full Bayes approaches for before-after road safety evaluations
http://www.cmfclearinghouse.org/study_detail.cfm?stid=192

Crash Reduction Factors for Traffic Engineering and ITS Improvements
http://www.cmfclearinghouse.org/study_detail.cfm?stid=23

The Safety and Operational Effects of Road Diet Conversion in Minnesota
http://www.cmfclearinghouse.org/study_detail.cfm?stid=68

AASHTO Highway Safety Manual (available for purchase)
http://www.highwaysafetymanual.org/pages/default.aspx

FHWA Traffic Analysis Toolbox, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach"
http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-036A-E

FHWA Contacts

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FHWA Web site: http://safety.fhwa.dot.gov/ped_bike

FHWA-SA-12-013

Road Diet Case Studies

Case Study	Location	Street Class	ADT	Posted Speed	Primary Adjacent Land Use	Date of Conversion / Time Since Conversion	Project Length	Road Diet Project Elements	Estimated Project Cost
Grand Boulevard - 4 lane undivided roadway	Vancouver, Washington	Principal Arterial	12,000	30 mph / 25 mph	Commercial, Residential, Industrial	*Not converted - waiting for funding*	1.5 miles (2.4 km)	To be re-striped to two lanes, two-way center turn lane, bike lanes	$50,000 (2003 US)
Fourth Plain Boulevard	Vancouver, Washington	Principal Arterial	17,000	30 mph	Residential with commercial	2002 / 2 years	1 mile	Conversion to two lanes, two-way center turn lane, bike lanes, ADA ramps, underground utility work	$1.26 million (2002 US)
Baxter Street	Athens-Clarke County, Georgia	Arterial	20,000	35 mph	Commercial with residential & university	1999 / 5 years	1.9 miles	Conversion to two lanes, two-way center turn lane, bike lanes, signal modifications	$190,000 (2000 US)
US 18	Clear Lake, Iowa	State Highway	12,000	45 mph	Commercial with residential	2003 / 1 year	1.1 miles	Interim project - re-striping to two lanes, two-way center turn lane, shoulders, temporary signal	$105,000 (2003 US)
St. George Street	Toronto, Ontario, Canada	Minor Arterial	7,400	25 mph (40 km/hr)	University	1993 & 1996 / 11 & 8 years	0.65 miles (1.04 km)	1993 - lanes reduced to two lanes and bike lanes added with median, 1996 - lanes narrowed, new curbs, added landscaping, widened sidewalks	$ 4 million (1996 Canadian)
Kaikorai Valley Road	Dunedin, New Zealand	Arterial	10,000	30 mph / 45 mph (50 & 70 km/hr)	Commercial with residential	2003 / 1 year	1.5 miles (2.4 km)	Conversion to two lanes with on-street parking, added cycle lanes, and improved median landscaping, turn lanes, pedestrian crossings	$180,000 (2003 New Zealand)
Howe Ave	**Sacramento**	**Arterial**	**15,200**	**35 mph**	**Residential with Commercial**	**Pending ATP/SRTS Funding**	**0.5 miles (Marconi to El Camino)**	**Conversion to two lanes & center turn lane, added bike lanes and sidewalks**	**TBD**

Road Diet Result Summaries

Case Study	Safety Effects	Operational Effects	Livability Effects	Recommend Road Diet to Other Streets	Respondents suggested improvements
Grand Boulevard - 4 lane undivided roadway					Slow speeds, change street character, more police, widen sidewalks, better maintenance, add bike lanes, add street trees and planter strips
Fourth Plain Boulevard	Number of crashes decreased by 52 %, Traffic speeds decreased by 18 %, Pedestrian safety improvements	No queuing blocking access, increased pedestrian activity, improved bicycle conditions, no traffic diversion impacts	Redevelopment and renovation work at quicker pace, economic growth in adjacent and nearby businesses, easier to cross street, street feels safer	**67% Yes, 21% Maybe,** 12% No	Slow speeds, prohibit trucks, reduce traffic, improve pedestrian crossings, more street trees and curb side planters
Baxter Street	Overall number of crashes decreased by 53 %, crashes at unsignalized locations decreased by 60%, rear-end crashes reduced by 45%	No significant changes to traffic volumes, traffic diversion only about 4 %	Easier to cross street, slower speeds, several home and business improvements, perceived number of lanes and street width is "just right"	***47% Yes, 33% Maybe,*** 20% No	Improve street maintenance, slow speeds, new street trees and curb side planters, more police
US 18	Number of crashes decreased by 65 %, Aggressive speeding reduced by 52%, vehicles over speed limit decreased by 32%	Adequate traffic operation, good mobility, more uniform traffic speeds closer to speed limit	Mixed perceptions on street, striping confusing, Phase 2 of project to address community concerns, livability benefits still to be realized	***24% Yes, 28% Maybe,*** 49% No	widen street, add bike lanes, improve pedestrian crossings, slow speeds, more traffic signals
St. George Street	Number of crashes decreased by 40 %, improved safety for pedestrians and bicycles	No traffic volume changes, no traffic diversion impacts, adequate traffic operation, good mobility	Easier to cross street, slower speeds, street feels safer, perceived increase in pedestrians and bicyclists	***81% Yes, 12% Maybe,*** 6% No	More pedestrian crossings, reduce traffic, more street trees and curb side planters, prohibit trucks, slow speeds
Kaikorai Valley Road	Number of crashes reduced by 10 %, aggressive speeding reduced by 76%, improved safety for pedestrians and bicyclists	No traffic volume changes, no traffic diversion impacts, adequate traffic operation, good mobility	Perceived number of lanes and street width is "just right," yards and buildings kept up, several home and business improvements	***42% Yes, 31% Maybe,*** 27% No	Improve street maintenance, slow speeds, reduce traffic, more police, OK as is

Source: http://www.oregonite.org/2007D6/paper_review/D4_201_Rosales_paper.pdf

COUNTY OF SACRAMENTO DEPARTMENT OF TRANSPORTATION

Pedestrian MASTER PLAN

APRIL 2007

Prepared for
County of Sacramento Department of Transportation

Prepared by
Dowling Associates, Inc.
Moore Iacofano Goltsman, Inc.

In Association with
All Traffic Data
Sprinkle Consulting, Inc.
The Hoyt Company

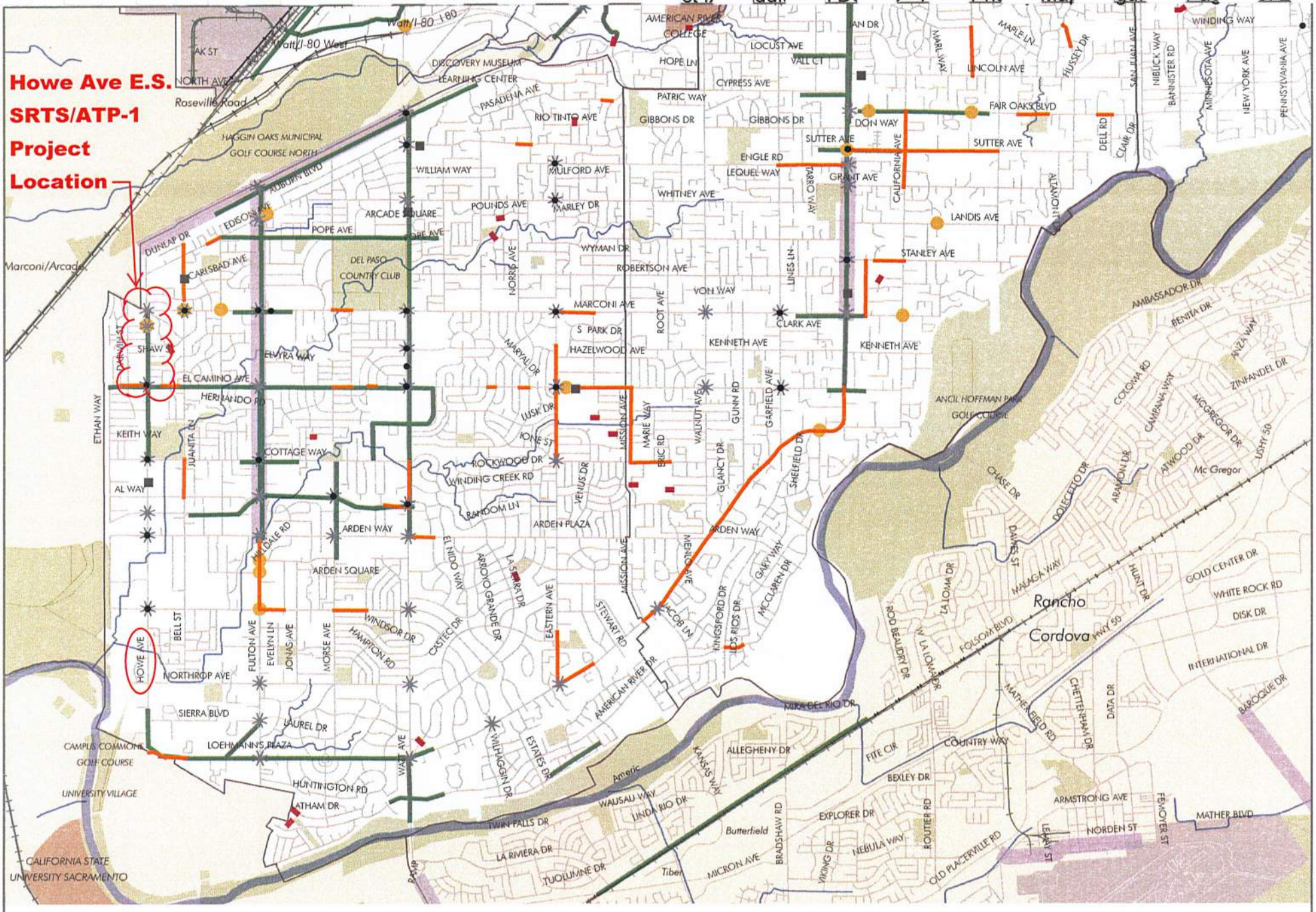


Fig. 1: High Priority Pedestrian Projects

Arden Arcade

Benefit / Cost Calculation Result

1. Project Information

Application ID	SacramentoCounty- Howe Ave-01	Version	1

2. Countermeasures and Crash Data

Crash Data Time Period	01/01/2003	to	12/30/2012	Years	10

• Road diet (reduce travel lanes from 4 to 3 and add a two way left-turn lane)

CM Number	Project Type	Crash Type	CRF	Life
R15	Geometric Mod.	All	30	20

Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain	Property Damage Only	Total
All	0	7	43	0	0	50

Annual Benefit	$ 147,270	Cost	$ 1,070,622
Life Benefit	$ 2,945,400	B/C Ratio	2.75

• Install sidewalk / pathway (to avoid walking along roadway)

CM Number	Project Type	Crash Type	CRF	Life
R37	Ped and Bike	Ped & Bike	80	20

Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain	Property Damage Only	Total
Ped & Bike	2	1	7	4	0	14

Annual Benefit	$ 717,312	Cost	$ 782,378
Life Benefit	$ 14,346,240	B/C Ratio	18.34

3. Benefit Cost Result

Total Benefit	$ 17,291,640
Total Cost	$ 1,853,000
B/C Ratio	9.33

Safety Practitioner / Engineer: Bill Irving

Signature: Bill Irving

By signing this B/C Calculation Result, you are attesting to your authority / responsibility at your local agency for this work and you are attesting to the accuracy of the values on this page and that they have been entered into the HSIP Application Form correctly, **DO NOT SIGN** if any of this is not the case.

Project Cost Summary
Sacramento County Department of Transportation
Howe Avenue Sidewalk Infill & Bike Lane Improvements

Phase	Total Cost	SRTS/ATP-1 Funding Request
Preliminary Engineering (PE)		
Environmental	$0	$0
PS&E	$280,000	$280,000
PE Sub Total	**$280,000**	**$280,000**
Right-of-Way (R/W)		
Temp. Const. Ease. (TCE) Engr	$10,000	$10,000
T.C.E. Acquisition	$30,000	$30,000
TCE Sub Total	**$40,000**	**$40,000**
Construction Engineering & Construction		
Construction Engineering	$200,100	$200,100
Construction	$1,332,900	$1,332,900
Construction Sub Total	$1,533,000	$1,533,000
Non-Infrastructure (NI)		
NI Elements	$0	$0
Total Project Cost	**$1,853,000**	**$1,853,000**

Detailed Engineer's Estimate and Cost Breakdown by Countermeasure

For Construction Items Only

Agency:	Sacramento County	Application ID:	Dept. Of Transp.	Prepared by:	Heather Yee	Date:	4/14/2014

Project Description: Reduce travel lanes from 4 to 3 and add a two-way left-turn lane (Road Diet), install sidewalk and bike lanes, and modify traffic signal.

Project Location: Howe Avenue between Tallac Street and Marconi Avenue

Engineer's Estimate (for Construction Items Only)						Cost Breakdown									
						Safety-Related Costs								Non Safety-Related Costs	
						Countermeasure #1		Countermeasure #2		Countermeasure #3		Other Safety-Related			
Item No.	Item Description	Quantity	Units	Unit Cost	Total	%	$	%	$	%	$	%	$	%	$
1	Clearing and Grubbing	1	LS	$30,000.00	$30,000							100	$30,000		
2	SWPPP Preparation	1	Allow	$10,000.00	$10,000							100	$10,000		
3	Water Pollution Control	1	Allow	$10,000.00	$10,000							100	$10,000		
4	Mobilization	1	LS	$15,000.00	$15,000							100	$15,000		
5	Traffic Control	1	LS	$25,000.00	$25,000							100	$25,000		
6	Roadway Excavation	896	CY	$40.00	$35,840			100	$35,840						
7	Pavement Repair	1500	SF	$25.00	$37,500	100	$37,500								
8	Aggregate Base, Class 2	701	TN	$50.00	$35,050			100	$35,050						
9	Asphalt Concrete, Type A	372	TN	$170.00	$63,240			100	$63,240						
10	P.C.C. Curb & Gutter Type 2	2055	LF	$30.00	$61,650			100	$61,650						
11	P.C.C. Curb & Gutter Type 2 Reinforced	307	LF	$35.00	$10,745			100	$10,745						
12	P.C.C. Sidewalk & Ramps	12949	SF	$10.00	$129,490			100	$129,490						
13	Minor median Immprovements	738	LF	$45.00	$33,210	100	$33,210								
14	Driveway Conform	12	EA	$2,500.00	$30,000			100	$30,000						
15	Detectable Warning Surface	15	EA	$750.00	$11,250			100	$11,250						
16	Slurry Seal	130000	SF	$0.50	$65,000	100	$65,000								
17	Modify Striping	2500	LF	$9.50	$23,750	100	$23,750								
18	Drainage Modifications	1	LS	$80,000.00	$80,000			100	$80,000						
19	Pedestrian Lighting	6	EA	$5,000.00	$30,000							100	$30,000		
20	Howe Avenue/Marconi Avenue Modification	1	LS	$475,000.00	$475,000	100	$475,000								
Sub Total of Construction Items:					$1,211,725		$634,460		$457,265				$120,000		
	% of "Construction Items only" Cost per Countermeasure (Yellow fields - To be entered in TIMS B/C Calculator)					**52%**	**CM #1**	**38%**	**CM #2**		**CM #3**	**10%**	**Other Safety**		**Non Safety**

Construction Item Contingencies (% of Con Items): **Enter in the cell to the right**	**10.00%**	**121,173**
Total (Construction Items & Contingencies):		**1,332,900** (Rounded up to the nearest hundreds)

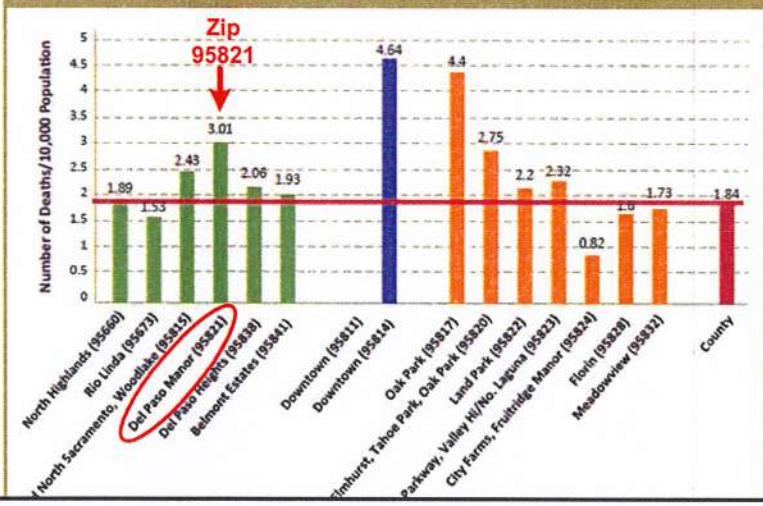
Vulnerable Health and High Risk Factors In This SRTS/APT-1 Project Area

Note: The Zip Code of This SRTS/ATP-1 Project Segment is 95821

Diabetes-Related Mortality, Emergency Department Visits and Hospitalizations

Source: http://www.sierrahealth.org/assets/HSC/HSC_CHNA_2013.pdf

Figure 3. Diabetes-Related Mortality



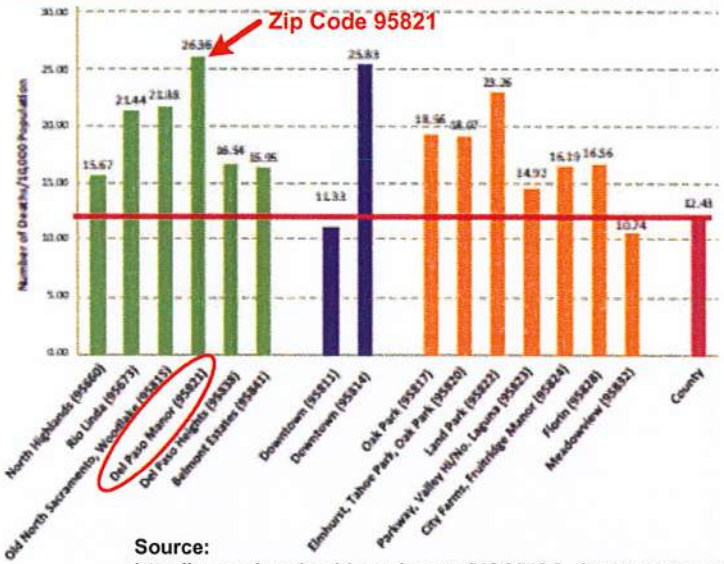
ACTIVE LIVING AND HEALTHY EATING: HEALTH OUTCOMES, BEHAVIORS AND ENVIRONMENTAL CHARACTERISTICS

Many of the neighborhoods in the Focus Communities experienced high rates of negative health outcomes related to the areas of active living and healthy eating. This section describes the diabetes outcomes and prevalence of overweight and obesity and discusses the environmental factors related to these negative health outcomes.

Health Outcomes

Diabetes is one of the immediate consequences of inactive living and poor nutrition habits. The following charts present data on diabetes-related mortality, emergency department visits and hospitalizations in the 15 neighborhoods and is followed by findings on overweight and obesity, a common precursor to diabetes.

Figure 6. Heart Disease-Related Mortality



Source: http://www.sierrahealth.org/assets/HSC/HSC_CHNA_2013.pdf

Mortality due to Heart Disease, Hypertension and Stroke

The Sacramento County Department of Health and Human Services reports that stroke is the fourth leading cause of death in the county and hypertension is the ninth. Cardiovascular disease, which includes stroke, heart disease and heart failure, is the first. The following charts show the rates of mortality due to heart disease, hypertension and stroke in the 15 neighborhoods.

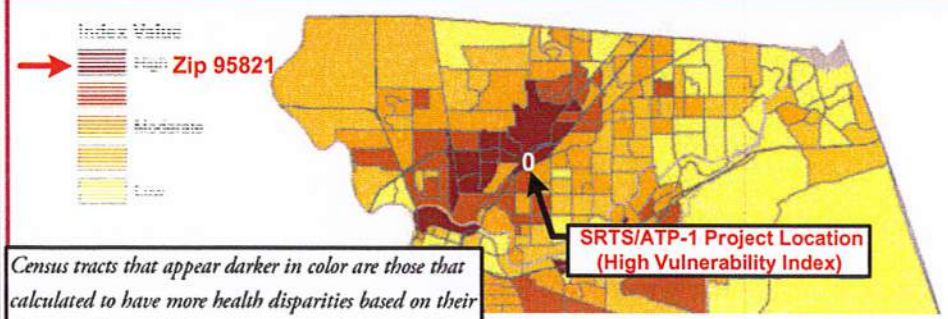
Overweight and Obesity

At the zip code level, the proportion of residents who are overweight or obese is based on estimates calculated from 2003 and 2005 CHIS data, so the following results are outdated, but still shed some light on the health conditions experienced in the Focus Communities:

- In the North Sacramento Focus Community, Old North Sacramento/Woodlake (95815), Del Paso Manor (95821) and North Highlands (95660) had the highest proportions of obesity and overweight residents age 12 and over at 54-56%.

Source: http://www.sierrahealth.org/assets/HSC/HSC_CHNA_2013.pdf

Vulnerability Index Sacramento County



Census tracts that appear darker in color are those that calculated to have more health disparities based on their demographic profile.

Step 1: Mapping Sacramento County's Social Determinants of Health

The first step in the process was to examine socio-demographic data in order to identify areas of the county with high vulnerability to chronic disease disparities and poor mental health outcomes. A map was developed that included race/ethnicity, household composition, income, and age of residents in each census tract in the county. These variables were combined into an index that assigned a level of "vulnerability" to each census tract.

The tract-level vulnerability index is based on measurements of populations within each Census tract that correspond to disadvantaged groups who are expected to experience greater health disparities. These populations include members of minority groups, single parent households, the very young, the elderly population, and those in poverty.