TRANSPAC Transportation Partnership and Cooperation

Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and Contra Costa County
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TRANSPAC TAC MEETING NOTICE AND AGENDA

THURSDAY, MARCH 27, 2014
9:00 A.M. to 11:00 A.M.
COMMUNITY ROOM
CITY OF PLEASANT HILL CITY HALL
100 GREGORY LANE
PLEASANT HILL

1. **Review/Revise Accept/Minutes of the February 27, 2014 TAC Meeting**

Attachment: TAC Minutes from February 27, 2014 meeting

ACTION: Accept February 27, 2014 TAC minutes and/or as determined.

2. **Draft Report on Contra Costa Safe Routes to School Assessment Presented by Brad Beck, Senior Transportation Planner CCTA.** Comments on this report are requested to be sent to Mr. Beck by April 15, 2014.

Attachment: Draft Report on Contra Costa Safe Routes to School Assessment

3. **Lawrence Way to Northbound I-680 HOV Direct Ramp.** CCTA is looking at solutions for closing the HOV lane gap on northbound I-680. Matt Kelly, Associate Transportation Planner for CCTA will present a very preliminary schematic for TAC discussion and consideration for inclusion in the TRANSPAC Action Plan.

Attachment: Preliminary concept drawing of Lawrence Way to N/B I-680 HOV Direct Ramp

ACTION: As determined.

4. **Additional Action Plan Discussion to Consider Inclusion of the Iron Horse Trail as a Route of Regional Significance (it is included in the TVTC Action Plan as a RORS), and also to Include BART as a RORS (Lamorinda includes BART as a RORS in its Action Plan), Prior to Final Comments/Discussions at the April TRANSPAC TAC Meeting.** The TAC will review received comments at its April 24, 2014 meeting in anticipation of TRANSPAC review and Action Plan approval at its May 8, 2014 meeting.

ACTION: As determined.

5. **Electric Vehicle Charging Program – Lynn Overcashier, 511 Contra Costa, Status Update and Summary of Activities Report**

Attachment: Electric Vehicle Charging Program Report

6. Update on TRANSPAC Discussion Regarding Formation of a Joint Powers Authority (JPA) as an Administrative Construct

ACTION: As determined.

7. The next TAC meeting is scheduled for April 24, 2014 at 9:00 A.M. in the City of Pleasant Hill Community Room unless otherwise determined.

TAC 3 27 2014

TRANSPAC Technical Advisory Commission (TAC) Meeting Summary Minutes

MEETING DATE:	February 27, 2014
MEMBERS PRESENT:	Laramie Bowron, County Connection; John Cunningham, Contra Costa County; Corinne Dutra-Roberts, 511 Contra Costa; Jeremy Lochirco, Walnut Creek; and Lynn Overcashier, 511 Contra Costa Program Manager
GUESTS/PRESENTERS:	Deborah Dagang, CH2MHill; Peter Engel, Program Manager, Contra Costa Transportation Authority (CCTA); Elena Idell, Dyett and Bhatia; Matthew Kelly, Associate Transportation Planner, CCTA; and Rick Ramacier, General Manager, County Connection
MINUTES PREPARED BY:	Anita Tucci-Smith

The meeting was convened at 9:05 A.M. Self introduction followed.

1. Peter Engel, CCTA and Rick Ramacier, CCCTA with Presentation on the County Connection Mobility Management Plan

Peter Engel, Program Manager for the CCTA, reported that the Contra Costa Mobility Management Plan had been produced by a consultant hired by County Connection with the idea that the plan would cover the entire county. It had been initiated by the Transportation Alliance, an informal group of transit providers in the county along with social services agencies and Contra Costa County to create a work plan and produce some small projects to improve mobility for seniors, disabled, and low-income individuals in the county. Summits had been held around the county to get a mobility management program started. As part of the initial process, it had been agreed that County Connection would be the lead in managing the planning process for the development of a mobility management plan and a Consolidated Transportation Services Agency (CTSA) would be formed to provide the vehicle through which the list of desired services could be deployed. The creation of a Mobility Management Oversight Committee had been recommended to undertake the tasks associated with the establishment of the CTSA. He explained that the CCTA had taken the plan to the Authority Board in January. The Board liked the concept but did not want to adopt the plan without more input from the subregions, which was why it had been submitted for consideration at this time. The intent was to submit the proposal to TRANSPAC to move the plan forward.

Rick Ramacier, General Manager, County Connection, explained that the goal was to develop a Countywide Mobility Management Plan since Measure J, without identifying who should do it, required the CCTA to support a mobility management function. It had been included in Measure J because advocates had asked for the concept. He stated that in 2007 County Connection had volunteered to be the lead in managing the planning process and in 2012 a consultant had been hired to produce a plan.

Mr. Ramacier explained that County Connection had looked at the trends for paratransit and senior transportation, noted the challenges involved, and described the struggle for seniors when they reached that point in their life when they were unable to drive. While social service providers offered a very high level of service for the services they provided, and the cheapest thing to do would be to keep people in their homes, those paratransit and ADA services were stretched financially and the New Freedom grants used to fund those programs were limited and not financially sustainable. As a result, the CCTA was considering whether the mobility management plan should be financed in the next measure in a separate way.

Mr. Ramacier stated there were many social service/non-profit paratransit services being delivered throughout Contra Costa County and he referenced some of those programs explaining that in Contra Costa and Alameda counties they delivered as many people as County Connection did on the Link. If the funding for those programs was cut, he suggested those people would seek Americans with Disabilities Act (ADA) Link service from County Connection which would require a huge increase in paratransit monies and less for fixed routes. He suggested therefore the need to support social service and non-profit providers who provided a higher level of service at a lesser cost than County Connection could provide.

Mr. Ramacier reported that two levels of recommendations had been produced by the study for a mobility management plan; one level was for the creation of a CTSA to bring funding sources, services and efficiencies together. He referenced a CTSA in Sacramento County and an outreach CTSA program in Santa Clara and noted that the outreach program was not allowed to claim Transportation Development Act (TDA) funds. The plan did not call for a CTSA to claim TDA funds; rather, it assumed that the operators would turn their TDA funds over to provide paratransit to the CTSA because it could be cheaper and more efficient.

A number of service strategies had been suggested to respond to the transportation needs identified in the planning process including travel training to create a program to teach bus riding skills on all County transit systems; a refined Countywide ADA eligibility process to improve the accuracy of the eligibility determinations; working with human service agencies to provide transportation to their clients who currently used the ADA paratransit service operated by the transit agencies; evaluating the viability of a centralized maintenance program to serve the unique needs of the human service community operating a variety of vehicles in their programs; expanding the volunteer driver programs throughout the County as an inexpensive means of servicing difficult medical and other trip needs for seniors and persons with disabilities; expanding information availability by making meaningful resource information available through a central referral mechanism; determining the level of advocacy appropriate for a new CTSA in Contra Costa County and including the new agency in all transportation planning processes; including technical support as one of the services of the newly created CTSA to assist the human service community and other agencies in planning, grant management, and other technical functions; and establishing a professional and consistent driver training program for human service agencies.

Mr. Ramacier stated that those things could be done right away in that there were grants available now to move a mobility management plan forward in the County.

Mr. Ramacier added that there would be a committee to advise the CCTA how to spend a mobility management budget with funds that would be identified in the next year or two. The idea was that after a couple of years as grants ran out the mobility management plan would identify its value and people would find ways to fund it. He suggested that as a good way to move forward.

Corinne Dutra-Roberts spoke to her experience in working to assist someone seeking paratransit services where the application for eligibility was a long and difficult process and where many of those seeking services were elderly, had not previously used buses, and were having difficulty navigating through that difficult process. While she supported a coordinated plan, she emphasized the need to make the application more user friendly.

Mr. Ramacier acknowledged that the ADA application could be arduous. His ultimate vision for a mobility management plan was to have a program for everyone although he recognized it would take some time to get there. He advised that Anne Muzzini at County Connection was a resource to help seniors in the application process.

Mr. Engel emphasized the importance of travel training, noted that the first trip for most seniors was a huge barrier, and explained that many would rather stay home than attempt to use the bus. He stated there was a current grant process with the Metropolitan Transportation Commission (MTC) and a New Freedom grant being scored with six of the seven top projects being mobility management projects. MTC had an expressed desire to fund mobility management projects, and he expressed concern that if not proceeding with a mobility management plan Contra Costa County could lose out on funding. He urged proceeding now to avoid being left behind.

In response to Jeremy Lochirco as to the funding opportunities if the New Freedom grants currently being used by the private and public service providers were to be phased out, Mr. Ramacier stated that consultants who specialized in funding availability could be brought on through the oversight committee and the CCTA.

Mr. Lochirco referred to the Line 20a Call for Programs and asked if those monies could also be used to help fund a portion of a mobility management plan and the implementation strategies noted in the plan, to which Mr. Ramacier stated that could be done although there should be a conversation with the other entities that had a desire for those funds.

Mr. Lochirco agreed that there was not a huge amount of money available and the TAC would have to discuss recommendations to prioritize the use of the funds and whether those funds would fit into the larger framework.

Lynn Overcashier stated it would be important for those using Line 20a funds to be reporting in and providing data to a mobility management plan to start that coordination effort as one of the criterion for receiving any funds that would be allocated. She verified with Mr. Ramacier that County Connection had applied for Cycle 5 New Freedom grant funds that would be held and saved for the mobility management plan.

As to how the other RTPCs had received the plan, Mr. Ramacier reported that the transit operators in Contra Costa County were supportive of the plan although AC Transit had some reluctance and was not openly supportive of the plan at this point given the talk of consolidation. He characterized the plan as a roadmap to sustainability.

Ms. Overcashier commented that since they were dealing with schools and senior transportation there should be an opportunity for funding under a reauthorization of Measure J. She advised that the Contra Costa Mobility Management Plan would be on the agenda for the TRANSPAC meeting scheduled for March 13, 2014.

2. Continued Discussion of Action Plan Update Including Comments on the 2009 Actions and Revisions to Match Actions, Goals, and to Identify New Projects

Deborah Dagang, CH2MHill and Elena Idell of Dyett and Bhatia, presented the latest draft of the Action Plan along with an updated schedule for the adoption of a Draft Action Plan. She verified that TAC members had received the Draft Action Plan that she had recently emailed, reported that comments on the Draft Action Plan were due by March 3, 2014, and that the Draft Action Plan and comments would be submitted to TRANSPAC at its meeting on March 13, 2014. TRANSPAC would be asked at that time to release the Draft Action Plan to the other RTPCs and the CCTA for a 30-day review period. The Draft Action Plan would return to the TAC at its April 24, 2014 meeting, with a revised Draft Action Plan to return to the TAC on May 8, 2014, and be forwarded to the CCTA for incorporation into the Draft Countywide Transportation Plan (CTP) and Draft CTP Environmental Impact Report (EIR). She explained that the CCTA was expected to release the Draft 2014 CTP Update in June and provide comments on the Draft Action Plans to the RTPCs in September. The TRANSPAC TAC would review the comments in September and the RTPCs would prepare a proposal for adoption of the Action Plans in November. The CTP was to be completed in December 2014 with a final adoption of the Action Plans by January 2015.

Ms. Dagang emphasized that the current focus was to get a Draft Action Plan together with a focus on some of the details, and she reiterated the need for comments by March 3 which could be incorporated during the 30-day review period.

When asked, Matt Kelly of the CCTA verified for Mr. Lochirco that the Action Plans would be posted on the CCTA's website during the 30-day review period for public review and comment.

Ms. Dagang explained that the Draft CTP would also be posted and allow for public comment as well. She noted that significant portions of the Action Plan had already been reviewed by the TAC in that the vision, goals, and tenets had previously been discussed. The two things that were either new or needed feedback were how the goals corresponded to the corridors and the Traffic Impact Table in the back of the Draft Action Plan that discussed fees. She asked each jurisdiction to look at that table and provide any comments. She added that when asking TRANSPAC on March 13 to release the draft for circulation it would be up to each jurisdiction as to how it wanted that to be done and she expressed the willingness to make a presentation to the city councils if desired. No actions would be requested at those times.

Ms. Dagang advised that Ray Kuzbari had provided comments and she would include those comments if there was a consensus to do so. There were no remarks.

Ms. Dagang also noted that there was one more project that had the potential to be a marquee project for a potential reauthorization of Measure J to add to the Central County Action Plan; the Northbound HOV Lane Gap Closure on I-680 with a recommendation to extend HOV lanes from Livorna Road to North Main Street. She explained that there was no dollar amount for that project identified at this time.

Mr. Kelley affirmed that the CCTA was actively seeking funding for the Northbound HOV Lane Gap Closure on I-680 project and it would be helpful if included in the Draft Action Plan. He verified, when asked by Mr. Lochirco, that the project would be identified for HOV lanes and not HOT (toll) lanes.

By consensus, the TAC recommended the placement of the Northbound HOV Lane Gap Closure on I-680 project on the list for the Draft Action Plan.

3. Appointment(s) to Countywide Bicycle and Pedestrian Advisory Committee

Ms. Overcashier referred to the letter from CCTA Executive Director Randy Iwasaki related to the appointments to the Countywide Bicycle and Pedestrian Advisory Committee, and advised that the TAC's current representative was Jeremy Lochirco with Corinne Dutra-Roberts as the alternate.

Mr. Kelly advised that the Countywide Bicycle and Pedestrian Plan would be updated in 2014 in a parallel process with the update of the CTP.

By consensus, the TAC recommended that Jeremy Lochirco continue to serve as its representative with Corinne Dutra-Roberts to continue to serve as the alternate on the Countywide Bicycle and Pedestrian Advisory Committee.

4. Initial Discussion/Consideration of, and if yes, how to structure a Call for Programs for Line 20a money for the next fiscal year

Ms. Overcashier introduced the item and noted that it had been discussed in October 2013 when the third allocation of 20a funds had been approved by TRANSPAC, and when the development of additional criteria or trying to determine what basis to recommend to TRANSPAC for the process of 20a money had been discussed. She asked if the TAC wanted to move forward with the discussion or defer the discussion until the next meeting.

Mr. Lochirco suggested that the discussion be tabled to the next meeting when more members would be present. He noted that the topic of travel training had been discussed for funding in the future and in light of the mobility management plan and the aging population it would be important to do that. He was in favor of continuing the discussion to determine whether to limit the amount of monies for travel training and suggested it should be considered as an eligible project.

John Cunningham expressed a desire for a conversation with more people in the room with travel training to be an eligible expense and sought more travel options before investing heavily, but suggested it was a potential benefit and should be an eligible expense.

Ms. Overcashier reported that two jurisdictions had applied for travel training funds. She explained that $1,176,000 was currently available in the line item for consideration with approximately $375,000 a year deducted for the three cycles approved thus far. Last year's request was $435,000 and $288,000 had been allocated. She suggested the jurisdictions that had received funding last year should be in the room to advise of the status of that funding with a further discussion of earmarking a portion or a limit of travel training funding. She had read over the notes of the last three cycles and advised that one of the grant recipients the first year had identified an emergency and would not request ongoing funding although that turned out not to be the case.

The item was tabled for further discussion next month and Ms. Overcashier urged comments at that item.

5. Update on 511 Contra Costa and TRANSPAC Discussion Regarding Formation of a Joint Powers Authority (JPA) as an Administrative Construct

Ms. Overcashier reported that there was nothing new to add to the formation of a JPA. When asked by Mr. Lochirco at what point the jurisdictions would be advised of the situation to be submitted for council approval, she did not have a timeline, had not been privy to the discussions, but knew that Best Best & Krieger was working on some kind of language and talking points. An update was expected at the March 13, 2014 TRANSPAC meeting.

Mr. Cunningham cautioned that County Counsel typically had a lot of comments and any legal documents to be submitted to the jurisdictions would require a significant amount of time to be returned.

Referring to the notice for comments related to County Connection's request for comments on its Interactive Service Plan and the proposed service changes to routes in Walnut Creek and Martinez to improve performance and service quality, Mr. Lochirco stated that based on Walnut Creek's discussions with respect to Route 5, it was supportive of that concept. He asked how Walnut Creek's comments should be provided.

Mr. Bowron suggested that a letter of support or advising that the City had been made aware of the changes would be appropriate to take to the County Connection Board.

6. Adjournment

The meeting was adjourned at 10:10 A.M. The next meeting of the TAC is scheduled for March 27, 2014 at 9:00 A.M.

CONTRA COSTA
transportation
authority

MEMORANDUM

Date March 6, 2014

To RTPC Managers

From Brad Beck, Senior Transportation Planner

RE **Transmittal of Draft Report on Contra Costa Safe Routes to School Assessment**

Working closely with the Safe Routes to School (SR2S) Oversight Committee, a consultant team led by Fehr & Peers has developed a preliminary assessment of the cost of comprehensively addressing SR2S capital project and program needs at all public schools in Contra Costa. The Authority's Planning Committee received a presentation on the draft needs assessment report at their meeting on March 5, 2014, and authorized the release of the draft report to the RTPCs and the public for review. The *Draft Contra Costa Safe Routes to School Needs Assessment* is attached to this transmittal.

Action Requested

We are asking that the Technical Advisory Committee of each RTPC review the draft report and submit comments to the Authority. A TAC may also decide to forward the Draft Report to their RTPC Board for their review and comment.

Please submit all comments to Brad Beck at bbeck@ccta.net by April 15, 2014.

2999 Oak Road, Suite 100, Walnut Creek CA 94597
Phone 925 256 4700 | Fax 925 256 4701 | www.ccta.net

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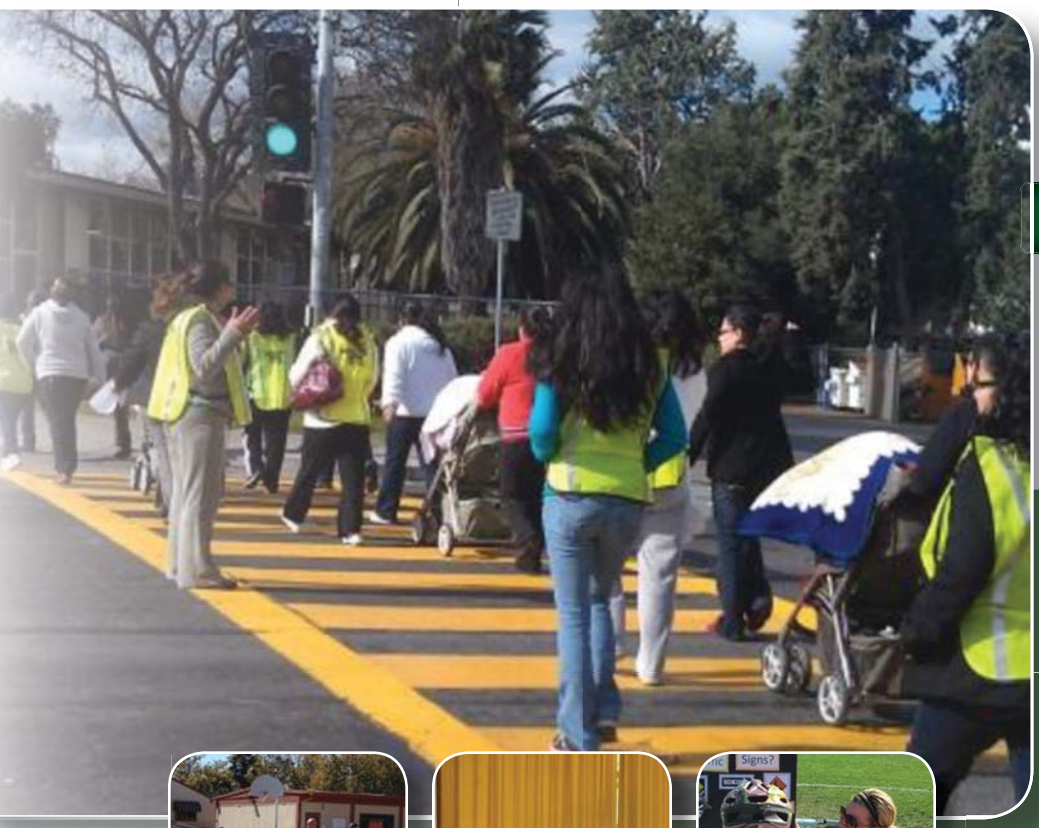
Draft Report

Contra Costa Safe Routes to School Needs Assessment



Prepared for:

Contra Costa
Transportation Authority (CCTA)

February 2014

FEHR & PEERS

SF12-0657

Draft Report:
Contra Costa Safe Routes to School Needs Assessment

Prepared for:
Contra Costa Transportation Authority (CCTA)

Prepared by:
FEHR PEERS

February 2014

SF12-0657

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INTRODUCTION

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

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

PURPOSE OF THIS STUDY

The Contra Costa Transportation Authority (CCTA, or the Authority) has sponsored this study to gain greater understanding of the current SR2S activities occurring throughout Contra Costa, and to estimate the needs for future SR2S funding in both the capital and programmatic categories. The purpose of this needs assessment exercise is to estimate the amount of funding that would be required to comprehensively address SR2S needs for Contra Costa's public schools; private schools were not included in this assessment. The results of this needs assessment may be used as a basis for establishing new funding programs or advocating for new funding sources.

This study has, of necessity, been limited by the time available to conduct the effort and the amount of information available about current efforts and future needs. Given the size and complexity of the County and the diversity of its needs, this effort has necessarily required many assumptions and simplifications in order to complete the needs assessment within the available time and resources. This countywide SR2S needs assessment presents an order-of-magnitude estimate of costs for both capital and programmatic categories, unconstrained by available funding levels.

It is very important to note that the cost estimates developed in this exercise will not be used to limit or otherwise determine available funding for particular projects. In other words, the purpose of developing these generalized cost estimates is to inform the assessment of countywide needs, and not to estimate the specific cost of any particular future project.

The remainder of this report presents the methodology used to estimate the needs and associated costs for both capital and programmatic elements of SR2S activities in Contra Costa County. As noted above,

this needs assessment focuses on the 217 public elementary, middle, and high schools around the County; private schools are outside the scope of this current effort, but they could be added at a later time using a similar approach.

SR2S CAPITAL PROJECTS

The basic approach used to estimate the need for capital SR2S projects was to assemble information from recently completed local SR2S infrastructure projects and to extrapolate that information across all public school locations countywide. Example projects were categorized based on the type of improvements involved, an average cost was calculated for each project type, and that cost was applied to an estimated proportion of schools. The following section provides an explanation of this approach, along with tables summarizing the results. Further detail is given in Appendix A.

Costs of Recent Typical Capital Projects

Jurisdictions across Contra Costa County provided information on typical SR2S capital projects recently implemented or currently underway at their local schools. Capital project data included the location of the school, the scope of the project, and a breakdown of project costs. These projects were first classified into four categories, based on major project features. Project cost estimates were standardized to ensure that all costs were captured (i.e., that the estimate included "soft" costs such as planning, design, and environmental review, and not just "hard" construction costs), and then an average cost for each project type was calculated.

1. Classify projects by type

Projects were classified into the following four types, based on their major features; they are listed in descending order of complexity and cost. Note that this is not intended to be an exhaustive list of all of the possible SR2S capital projects that could be contemplated; rather, these are intended to be a rational way to group a varied set of projects into a reasonable number of categories that can then be carried forward into a countywide needs assessment.

A. Major roadway/sidewalk improvements: these typically involve building a completely new sidewalk with curb and gutter, and often require widening a roadway, building retaining walls, or other substantial physical changes in order to accommodate the new sidewalk.

B. Streetscape improvements: these may involve a number of streetscape features such as adding crosswalks, installing bulbouts or medians to shorten pedestrian crossing distances, or adding traffic signals, flashing beacons or other traffic control devices to improve pedestrian safety.

C. Basic sidewalk improvements: these may involve widening an existing sidewalk to achieve current design standards, or adding curb ramps at an intersection.

D. Basic safety enhancements: these tend to be fairly quick and low-cost enhancements such as improved signage and/or roadway markings at a school's major access points, or installation of bicycle racks.

2. Standardize comprehensive project costs

Some of the cost information provided by the project sponsors included only the cost of construction, while others presented a comprehensive total cost that included supporting elements such as planning, design, and environmental review. To ensure consistency, when a project cost estimate only included construction costs, an adjustment factor was applied to that cost estimate to capture all of the non-construction cost elements. The adjustment factor was calculated from projects where both types of costs (construction and non-construction) were available. The adjustment factors calculated for each project type are shown in **Table 1**. For those projects where only construction costs were available, this adjustment factor was applied to the construction cost to calculate a final comprehensive cost.

TABLE 1: COST ADJUSTMENT FACTOR BY PROJECT TYPE

Project Type	Adjustment Factor
A. Major Roadway/Sidewalk Improvements	1.43
B. Streetscape Improvements	1.36
C. Basic Sidewalk Improvements	2.18
D. Basic Safety Enhancements	1.00

Source: Fehr & Peers, 2014.

3. Determine average cost by project type

Table 2 presents the average cost of a capital improvement project within each of the four categories, based on the set of example projects provided by the local agencies.

TABLE 2: AVERAGE TYPICAL CAPITAL COST BY PROJECT TYPE

Project Type	Average Cost
A. Major Roadway/Sidewalk Improvements	$1,000,000
B. Streetscape Improvements	$500,000
C. Basic Sidewalk Improvements	$100,000
D. Basic Safety Enhancements	$10,000

Source: Fehr & Peers, 2014.

Costs of Unusual Capital Projects

The list of sample projects provided by local agencies did not include any examples of very large-scale capital improvements, such as a bicycle/pedestrian bridge. Nevertheless, it is understood that some schools in Contra Costa need an unusual level of investment, in addition to the more typical capital projects described above. For example, the City of Walnut Creek has identified a need to add sidewalks along Walnut Boulevard to better serve the student population of Walnut Creek Intermediate School. Because of the current configuration of that street, adding a sidewalk will require extensive work on drainage systems and roadway widening at a cost (estimated at $6 million) that far exceeds the cost for more typical roadway/sidewalk improvement projects shown in Table 2 above. Similarly, some schools need a bike/pedestrian bridge across an adjacent barrier (such as a canal or major roadway) to improve access for their students; from a review of the Authority's Comprehensive Transportation Project List, the average cost of a bike/ped bridge is about $7 million. For the purposes of this needs assessment, we have assumed that "unusual" capital projects would cost on average about $6.5 million, and we have applied that average cost to a small percentage of schools countywide (as described in more detail below).

Calculation of Countywide Capital Project Needs

Typical Capital Projects

Once average costs for the four types of typical capital improvement projects were determined, they were applied to a percentage of schools, as shown in **Table 3**. First, it was assumed that all schools would benefit from the basic safety enhancements that are described as project type D, so those costs were applied to 100% of Contra Costa's public schools. Then, percentages for project types A, B, and C were estimated based on the frequency with which projects of each type appeared in the set of example projects provided by local jurisdictions. In that example project list, there were about 25% Type A projects, 25% Type B, and 50% Type C. However, it should be recognized that this list of example projects reflects those projects that have been successful in getting funded, which is not necessarily the same as the projects that are needed. It is generally easier to secure funding for lower-cost projects than for higher-cost projects, so it could be presumed that any list of completed projects would be somewhat skewed toward the lower-cost end of the cost spectrum. In an attempt to correct for this effect, we have increased the percentages for the higher-cost projects (Types A and B) and reduced the percentage for the lower-cost projects (Type C); each project type now is applied to one-third (33.3%) of all schools.

TABLE 3: TOTAL COUNTYWIDE TYPICAL CAPITAL PROJECT COSTS

Project Type	Average Cost	% of Schools Needing each Project Type	# of Schools with each Project Type[1]	Countywide Typical Capital Project Costs[2]
A. Major Roadway/Sidewalk Improvements	$1,000,000	33.3%	72	$72,300,000
B. Streetscape Improvements	$500,000	33.3%	72	$36,200,000
C. Basic Sidewalk Improvements	$100,000	33.3%	72	$7,200,000
D. Basic Safety Enhancements	$10,000	100%	217	$2,200,000
TOTAL				**$117,900,000**

Notes:
1. Calculated as '% of Schools' multiplied by 217 total schools in Contra Costa County.
2. Calculated as 'Average Cost' multiplied by '# of Schools'.
Source: Fehr & Peers, 2014.

Some SR2S capital improvement projects have already been implemented in Contra Costa, and the costs of these completed projects should be subtracted from the estimate of total countywide costs in order to determine the remaining need. To calculate the cost of completed projects, we looked at the list of example projects provided by the local jurisdictions, as well as the Authority's inventory of projects funded under the state and federal Safe Routes to School programs from 2001 to 2011. The total expended on all of those projects combined has been about $16.2 million. By subtracting $16.2 million from the total of about $117.9 million in Table 3 above, we calculate a remaining need of approximately $101.7 million, shown in **Table 4**.

TABLE 4: REMAINING COUNTYWIDE TYPICAL CAPITAL PROJECT COSTS

	Countywide Comprehensive Cost
Total Cost for Typical Capital Projects	$117,900,000
Completed Capital Projects	($16,200,000)
Total Remaining Countywide Need	**$101,700,000**

Source: Fehr & Peers, 2014.

Unusual Capital Projects

It is assumed that only a small percentage of schools in Contra Costa County will require an unusual capital project such as those described previously. The average cost of an unusual project ($6.5 million) was applied to just 10 percent of all public schools (or 22 schools), resulting in an estimated cost of $141.1 million.

Total Countywide Need for SR2S Capital Projects

The combined cost estimates for the remaining typical capital projects and the unusual capital projects generated an estimate of the total need for SR2S capital projects for all public schools of almost $243 million, as shown in **Table 5**.

TABLE 5: ESTIMATED COUNTYWIDE COST OF ALL CAPITAL PROJECTS

	Countywide Cost
Total Remaining Cost for Typical Capital Projects	$101,700,000
Total Cost for Unusual Capital Projects	$141,100,000
TOTAL	**$242,800,000**

Source: Fehr & Peers, 2014.

SR2S PROGRAMS

There are currently three organizations in Contra Costa that provide SR2S programs: Contra Costa Health Services, San Ramon Valley Street Smarts, and Street Smarts Diablo. Each organization provides services in a specific area: Contra Costa Health Services conducts programs at some schools in West County, San Ramon Valley Street Smarts conducts programs at all schools in the San Ramon Valley school district, and Street Smarts Diablo conducts programs at some schools in Central and East County. Staff from these three organizations were critical in providing essential information to inform the understanding of current SR2S programs and the determination of future needs.

The needs assessment for SR2S programs involved three steps. First, all currently active programs were identified and divided into categories by program type, and an average cost to provide each type of program to an individual school was calculated based on the experiences of the current program providers. Second, the stakeholders identified a series of new programs that could be implemented to augment the current offerings and provide additional benefits to local schools; the cost per school of each new program was also calculated. Combining the existing and new programs created an unconstrained list of desired SR2S programs and associated costs at the individual school level. Finally, the average annual cost per school for each program type was applied to all of the schools countywide to calculate an annualized cost of providing all of the programs throughout Contra Costa. The result is an order-of-magnitude estimate of providing a financially-unconstrained set of SR2S programs countywide. The following section gives more explanation about each step in this process, along with tables summarizing the results. Further detail is provided in Appendix B.

Identification of Existing Programs

A list of existing safety and educational programs for each school type (elementary, middle, and high) was generated from information provided by the three current program providers. The service providers gave descriptions of each program, the types of schools where that program is offered, and the typical costs of providing that program, including both one-time costs (for example, to purchase a specialized piece of equipment that could then be used many times at different schools) and costs for the materials and staff time necessary to plan and deliver each program.

Identification of New Programs

Potential new SR2S programs that could augment the current offerings were identified through suggestions from the local program providers and the SR2S Oversight Committee. Most of the potential new programs are supplemental safety and educational programs that would augment current offerings. There are two additional programs that would directly offer transportation choices and services to the student population: namely, a program to provide subsidized transit tickets to students and a yellow

school bus program. Both of these transportation programs are in use in certain parts of Contra Costa, but they are not broadly available countywide.

Countywide Annual Programmatic Cost

Existing Programs

The average per-school cost for each existing program was applied to all public schools in Contra Costa to calculate a total annual cost for offering the current set of SR2S programs to all schools countywide. Several adjustments were made to account for economies of scale and assumptions about the appropriate level of investment across all schools; these adjustments were vetted with the current program providers. For example:

- One-time costs for equipment such as robotic cars for traffic safety assemblies or safety equipment for Walk-to-School Day were annualized over five years.
- Direct costs of conducting programs were applied to two-thirds of schools, to account for the fact that not all programs need to be offered at every school every year.
- Some programs are applicable at the community level instead of at specific schools, and these costs are noted as "general." General program costs were applied to one-third of schools, as the benefits of these programs are typically shared among multiple schools.

The summary of annual countywide costs for the existing program types is shown in **Table 6**.

TABLE 6: ESTIMATED COUNTYWIDE ANNUAL COSTS FOR EXISTING PROGRAMS

Program Type	Annual Cost
School-Specific Programs	$3,550,000
General Programs	$315,200
TOTAL	***$3,865,200***

Source: Fehr & Peers, 2014.

New Programs

The per-school costs for potential new programs were identified from examples elsewhere in the Bay Area where those programs are being offered and from information available from the local program providers. As with the existing programs, similar assumptions were made about economies of scale and the applicability of costs across all schools. Specific to the new transportation programs, the following assumptions were made:

- The countywide annual cost of the Transit Ticket Program assumes that ten percent of all middle and high school students would participate in the program. This would reflect a somewhat increased level of bus usage compared to the six percent public bus mode share determined by CCTA in its 2011 SR2S school survey.

- The countywide annual cost of the Yellow School Bus Program assumes that 19 percent of all students in Contra Costa would participate in the program. This is similar to the average student participation rates currently observed in the Lamorinda and TRAFFIX (San Ramon Valley) school bus programs.

The summary of annual countywide costs for the new program types is shown in **Table 7**.

TABLE 7: ESTIMATED COUNTYWIDE ANNUAL COSTS FOR NEW PROGRAMS

Program Type	Annual Cost
New Programs – Safety and Education	*$5,230,000*
New Programs – Transportation	*$48,535,400*
TOTAL	***$53,765,400***

Source: Fehr & Peers, 2014.

The combined cost estimates for existing and new programs generated an estimated total annual need for SR2S programs of about $57.6 million countywide, as shown in **Table 8**.

TABLE 8: ESTIMATED COUNTYWIDE COST OF ALL PROGRAMS

	Countywide Annual Cost
Cost of Existing Programs	$3,865,200
Cost of New Safety and Education Programs	$5,230,000
Cost of New Transportation Programs	$48,535,400
TOTAL	**$57,630,600**

Source: Fehr & Peers, 2014

SUMMARY AND NEXT STEPS

This countywide SR2S needs assessment represents a high-level, order-of-magnitude estimate of capital and program costs to comprehensively address SR2S needs throughout Contra Costa. The results of the needs assessment indicate that the costs of needed SR2S capital improvement projects at public schools throughout Contra Costa would be about **$243 million**. The costs to provide comprehensive SR2S safety, educational and transportation programs would be about **$58 million annually**.

This needs assessment has been reviewed with the SR2S Oversight Committee, and will be forwarded to the Authority's Planning Committee and the Authority Board for review and consideration. The results of this assessment provide a baseline for quantifying SR2S needs for Contra Costa, and could be incorporated into the 2014 Countywide Transportation Plan as part of the financially unconstrained Comprehensive Transportation Project List (CTPL).

APPENDIX A:
CAPITAL PROJECTS

Needs Assessment for CCTA SR2S Capital Projects: Summary of Recent Typical and Unusual Capital Project Rollout by Project Type

Estimated Cost of Rollout of Recent Typical Capital Projects

Average Cost of Recent Typical Capital Projects Project Type (based on sample project list)

Project Type	Average Typical Capital Project Cost (observed)	Estimated % of Schools with Typical SR2S Capital Needs	# of Schools with Typical Needs	Total Typical Capital Project Costs (estimated)
	[1]	[2]	[3]=[2]*Schools in County	[4]=[1]*[3]
A Major roadway/sidewalk improvements (e.g., road widening, retaining walls)	$1,000,000	33%	72	$72,300,000
B Streetscape improvements (e.g., sidewalks, bulbouts, medians)	$500,000	33%	72	$36,200,000
C Basic sidewalk improvements (e.g., sidewalks, curb ramps)	$100,000	33%	72	$7,200,000
D Basic safety enhancements (e.g., striping, signage, barricades, bike racks)	$10,000	100%	217	$2,200,000
SUBTOTAL (Rollout)				**$117,900,000**
Number of Schools in County				217

Total Cost of Completed Typical Capital Projects

Completed Typical Capital Project Source	Total Completed Typical Capital Project Cost (observed)	Estimated % of Completed Typical Capital Projects Captured	Total Completed Typical Capital Project Costs (estimated)
	[1]	[2]	[4]=[1]/[2]
Sample Project List	$12,300,000		
SR2S State/Federal Funding Program 2000-2011	$3,900,000		
SUBTOTAL (Completed)	$16,200,000	100%	**$16,200,000**

Total Typical Capital Project Cost = SUBTOTAL (Rollout) - SUBTOTAL (Completed) **$101,700,000**

Estimated Cost of Unusual Capital Projects

Unusual Capital Project Type	Average Unusual Capital Project Cost (observed)	Estimated % of Schools with Unusual SR2S Capital Needs	# of Schools with Unusual Needs	Total Unusual Capital Project Costs (estimated)
	[1]	[2]	[3]=[2]*Schools in County	[4]=[1]*[3]
Ped/Bike Bridge	$7,000,000			
Major Sidewalk/Drainage	$6,000,000			
SUBTOTAL (Unusual)	$6,500,000	10%	22	**$141,100,000**

Total Capital Project Cost = SUBTOTAL (Rollout) - SUBTOTAL (Completed) + SUBTOTAL (Unusual) **$242,800,000**

Note: The estimated percentages of schools with typical capital needs for project types A-D are calculated as the percentage of projects in the sample project list provided by local jurisdictions that fall within each project type category A-D.

Needs Assessment for CCTA SR2S Capital Projects: Summary of Recent Projects

School	School Type	Jurisdiction	Jurisdiction Type	Project Type ID	Total Project Cost
Springhill Elementary School	ES	Lafayette	Suburban	A	$1,232,169
Stone Valley Middle School (Miranda Avenue)	MS	Alamo	Rural	A	$510,000
Alamo Elementary School	ES	Alamo	Rural	B	$233,500
Discovery Bay Elementary School (Willow Lake Road)	ES	Discovery Bay	Rural	C	$151,000
Rancho Romero Elementary School (Hemme Ave AC Path)	ES	Alamo	Rural	C	$133,000
Bel Air Elementary School (Canal Road)	ES	Bay Point	Suburban	A	$1,668,000
New Vistas Christian School, Las Juntas Elementary School, and others (Pacheco Boulevard)	ES	Martinez	Suburban	A	$1,103,000
Walnut Heights Elementary School	ES	Walnut Creek	Suburban	A	$1,037,000
Rio Vista Elementary School, Shore Acres Elementary School, and Riverview Middle School (Pacifica Avenue)	ES/MS	Bay Point	Suburban	A	$1,160,000
Adams Middle School and Heritage High School	MS/HS	Brentwood	Suburban	B	$246,000
Cambridge Elementary School	ES	Concord	Suburban	C	$42,957
Marsh Creek Elementary School	ES	Brentwood	Suburban	C	$60,000
Monte Gardens Elementary and Shadelands/Sunrise Schools	ES	Concord	Suburban	C	$476,325
Murwood Elementary School	ES	Walnut Creek	Suburban	C	$72,848
Pioneer Elementary School	ES	Brentwood	Suburban	C	$69,000
Wren Avenue Elementary School	ES	Concord	Suburban	C	$163,015
Ygnacio Valley Elementary School	ES	Concord	Suburban	C	$193,700
Bristow Middle School and Montessori School	MS	Brentwood	Suburban	C	$68,000
Walnut Creek Intermediate School	MS	Walnut Creek	Suburban	C	$27,764
Bancroft Elementary School	ES	Walnut Creek	Suburban	D	$3,696
Bel Air Elementary School	ES	Bay Point	Suburban	D	$9,908
Buena Vista Elementary School	ES	Walnut Creek	Suburban	D	$3,372
Cambridge Elementary School (511)	ES	Concord	Suburban	D	$8,055
Diablo Vista Elementary School	ES	Antioch	Suburban	D	$1,183
Disney Elementary School	ES	San Ramon	Suburban	D	$8,100
El Monte Elementary School	ES	Concord	Suburban	D	$4,012
Indian Valley Elementary School	ES	Walnut Creek	Suburban	D	$3,385
Jack London Elementary School	ES	Antioch	Suburban	D	$1,183
Lone Tree Elementary School	ES	Antioch	Suburban	D	$1,183
Monte Gardens Elementary School	ES	Concord	Suburban	D	$4,485
Parkmead Elementary School	ES	Walnut Creek	Suburban	D	$3,087
Rio Vista Elementary School	ES	Bay Point	Suburban	D	$7,184
Strandwood Elementary School	ES	Pleasant Hill	Suburban	D	$8,311
Sutter Elementary School	ES	Antioch	Suburban	D	$1,894
Valhalla Elementary School	ES	Pleasant Hill	Suburban	D	$3,865
Walnut Heights Elementary School (511)	ES	Walnut Creek	Suburban	D	$3,561
Westwood Elementary School	ES	Concord	Suburban	D	$2,080
Heritage High School	HS	Brentwood	Suburban	D	$14,372
Hillview Junior High School	HS	Pittsburg	Suburban	D	$3,904
Martinez Junior High School	HS	Martinez	Suburban	D	$6,582
Northgate High School	HS	Walnut Creek	Suburban	D	$2,557
Pittsburg High School	HS	Pittsburg	Suburban	D	$2,000
Antioch Middle School	MS	Antioch	Suburban	D	$5,197
Dallas Ranch Middle School	MS	Antioch	Suburban	D	$3,904
El Dorado Middle School	MS	Concord	Suburban	D	$2,617
J. Douglas Adams Middle School	MS	Brentwood	Suburban	D	$2,000
Oak Grove Middle School	MS	Concord	Suburban	D	$7,692
Park Middle School	MS	Antioch	Suburban	D	$1,183
Pleasant Hill Middle School	MS	Pleasant Hill	Suburban	D	$1,670
Riverview Middle School	MS	Bay Point	Suburban	D	$7,605
Sequoia Middle School	MS	Pleasant Hill	Suburban	D	$6,310
Murphy Elementary School	ES	Richmond	Urban	B	$144,625
Peres Elementary School	ES	Richmond	Urban	B	$308,225
Nystrom Elementary School	ES	Richmond	Urban	B	$727,595
Cesar Chavez Elementary School	ES	Richmond	Urban	C	$73,325
Sheldon Elementary School	ES	Richmond	Urban	C	$66,725
		25th percentile	$3,517	SUM	**$10,113,907**
		50th percentile	$8,078	AVG	**$180,605**
		75th percentile	$146,219	MIN	**$1,183**
		85th percentile	$292,669	MAX	**$1,668,000**

Project Type ID	Project Type
A	Major roadway/sidewalk improvements (e.g., road widening, retaining walls)
B	Streetscape improvements (e.g., sidewalks, bulbouts, medians)
C	Basic sidewalk improvements (e.g., sidewalks, curb ramps)
D	Basic safety enhancements (e.g., striping, signage, barricades, bike racks)

APPENDIX B:
PROGRAMS

CCTA SR2S Program Descriptions and Cost Assumptions

Program Descriptions	Cost Assumptions
Existing School-Specific Programs	
Assembly	
Educational traffic safety assemblies for elementary and middle school students with interactive tools and props.	Direct costs: materials, curricula, giveaways, maintenance of supplies Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys One-time costs: interactive tools and props (e.g., robotic cars)
Walk to School Day	
Students from many communities walk to school on a single day as part of a movement promoting year-round safe routes to school.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage One-time costs: safety vests, clipboards, etc.
Walking School Bus	
Groups of children walking to school together supervised by one or more adults.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage One-time costs: safety vests, stop signs, clipboards, etc.
Bike to School Day	
Students from many communities bike to school on a single day as part of a movement promoting year-round safe routes to school.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage
Classroom Video	
Videos shown in classrooms about traffic safety.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys
Contest/Campaign	
School-wide competitive events such as poster contests to depict traffic safety messages, video contests to create public service announcements, walking/biking participation competitions, and campaigns to encourage safe driving.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys
High School Traffic Safety and Education Program	
Road rules training for high school students.	Direct costs: printed materials, curricula, giveaways, road rules training instructor Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys One-time costs: bike blenders, etc.
Safety Training	
Certified bicycle training for students.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys
Road Simulation	
Clinic to teach students the skills and precautions needed to ride a bicycle safely.	Direct costs: materials, curricula, giveaways, maintenance of supplies Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys One-time costs: bikers, trailers, mock city supplies
Helmet Giveaway	
Free helmets given to elementary and middle school students.	Direct costs: materials, helmets Indirect costs: staff time for outreach and coordination, promotion, mileage
Curricula	
Set of courses taught to students about safety and leadership on the roads.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys One-time costs: curricula and toolkit development
Existing General Programs	
Infrastructure (indirect costs only)	
Coordination, planning and outreach materials for infrastructure projects such as ground striping, signage, bicycle and scooter racks, and fencing.	Indirect costs: staff time for outreach and coordination, promotion, mileage
Large Community Event	
Collaborative community walking events.	Direct costs: materials, giveaways Indirect costs: staff time for outreach and coordination, promotion, mileage, evaluation surveys

CCTA SR2S Program Descriptions and Cost Assumptions

Program Descriptions	Cost Assumptions
New Programs - Education and Safety	
Parent education night Meeting for parents to encourage walking/bicycling to school and promote safe practices.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion, mileage
Teen bicycling promotion (HS only) Increased bicycling promotion for teens, including rides outside of school or bike repair classes/workshops.	Direct costs: materials, contractor Indirect costs: staff time for outreach and coordination, promotion, mileage
Traffic safety ad campaign Expanded advertising campaigns with traffic safety messages.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion
Increased outreach event presence Increased presence at walking/bicycling to school outreach events.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion, mileage
Outreach campaigns with police/CHP Additional outreach campaigns with police/CHP, such as awards for children who wear helmets or providing senior citizen driving courses.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion, mileage
Air quality public education and outreach Public education and outreach to raise awareness of how changes in travel behavior can reduce emissions and improve air quality.	Direct costs: materials Indirect costs: staff time for outreach and coordination, promotion, mileage
Traffic calming program + enforcement Analysis of local and national survey data on traffic and speeding to inform traffic calming and enforcement program.	Direct costs: materials, analysis Indirect costs: staff time for outreach and coordination, promotion
Walking and bicycling rates Tracking changes in walking and bicycling rates over time across jurisdictions.	Direct costs: materials, analysis Indirect costs: staff time for outreach and coordination, promotion
BikeMobile Vehicle that visits schools to help students repair bikes, teach mechanics and safety, and provide accessories and decoration supplies.	Direct costs: vehicle rental, materials Indirect costs: staff time for outreach and coordination, promotion, evaluation surveys
Crossing Guard Program Adult crossing guards stationed at key locations near schools to help children safely cross the street.	Direct costs: materials, contractor Indirect costs: staff time for outreach and coordination, promotion
Increased full-time staff Additional full-time staff members to lead and coordinate programs.	Indirect costs: staff time
New Programs - Transportation	
Transit Ticket Program Free public transit tickets for middle and high school students at the start of every school year.	Direct costs: transit pass Indirect costs: staff time for outreach and coordination, promotion, evaluation surveys
Yellow School Bus Program Home-to-school bus transportation for elementary, middle and high school students.	Direct costs: contractor Indirect costs: staff time for outreach and coordination, promotion, evaluation surveys

Needs Assessment for CCTA SR2S Programs: Summary of Existing and New Program Components

	Total Annual Costs for Countywide Roll-Out of Existing Programs				Annual Costs per Schools for Existing Programs					
					Elementary School		Middle School		High School	
	Direct Cost	Indirect Cost	One-Time Cost	Annual Cost	Direct Cost	Indirect Cost	Direct Cost	Indirect Cost	Direct Cost	Indirect Cost
Existing School-Specific Programs										
Assembly	$118,311	$59,690	$13,515	**$191,500**	$843	$316	$1,326	$331	$0	$0
Walk to School Day	$31,293	$39,907	$30	**$71,200**	$322	$273	$0	$0	$0	$0
Walking School Bus	$274,267	$888,250	$400	**$1,162,900**	$2,200	$4,750	$2,200	$4,750	$0	$0
Bike to School Day	$3,909	$6,362	$0	**$10,300**	$0	$0	$143	$155	$0	$0
Classroom Video	$57,331	$81,820	$0	**$139,200**	$460	$438	$460	$438	$0	$0
Contest/Campaign	$268,510	$201,402	$0	**$469,900**	$1,736	$515	$1,513	$1,158	$2,908	$2,625
High School Traffic Safety and Education Program	$93,120	$30,061	$885	**$124,100**	$0	$0	$0	$0	$4,656	$1,002
Safety Training	$176,870	$63,881	$0	**$240,800**	$694	$438	$4,000	$0	$0	$0
Road Simulation	$109,768	$78,680	$2,000	**$190,400**	$847	$424	$1,000	$410	$0	$0
Helmet Giveaway	$187,000	$50,958	$0	**$238,000**	$1,500	$273	$1,500	$273	$0	$0
Curricula	$37,400	$672,265	$2,000	**$711,700**	$300	$3,595	$300	$3,595	$0	$0
Existing General Programs					**All School Types**					
Infrastructure (indirect costs only)	$0	$30,756	$0	**$30,800**	$0	$425				
Large Community Event	$265,029	$19,349	$0	**$284,400**	$5,496	$268				

# of Schools / Students			
Elementary School	Middle School	High School	TOTAL
146	41	30	217
79,511	34,067	47,168	160,746

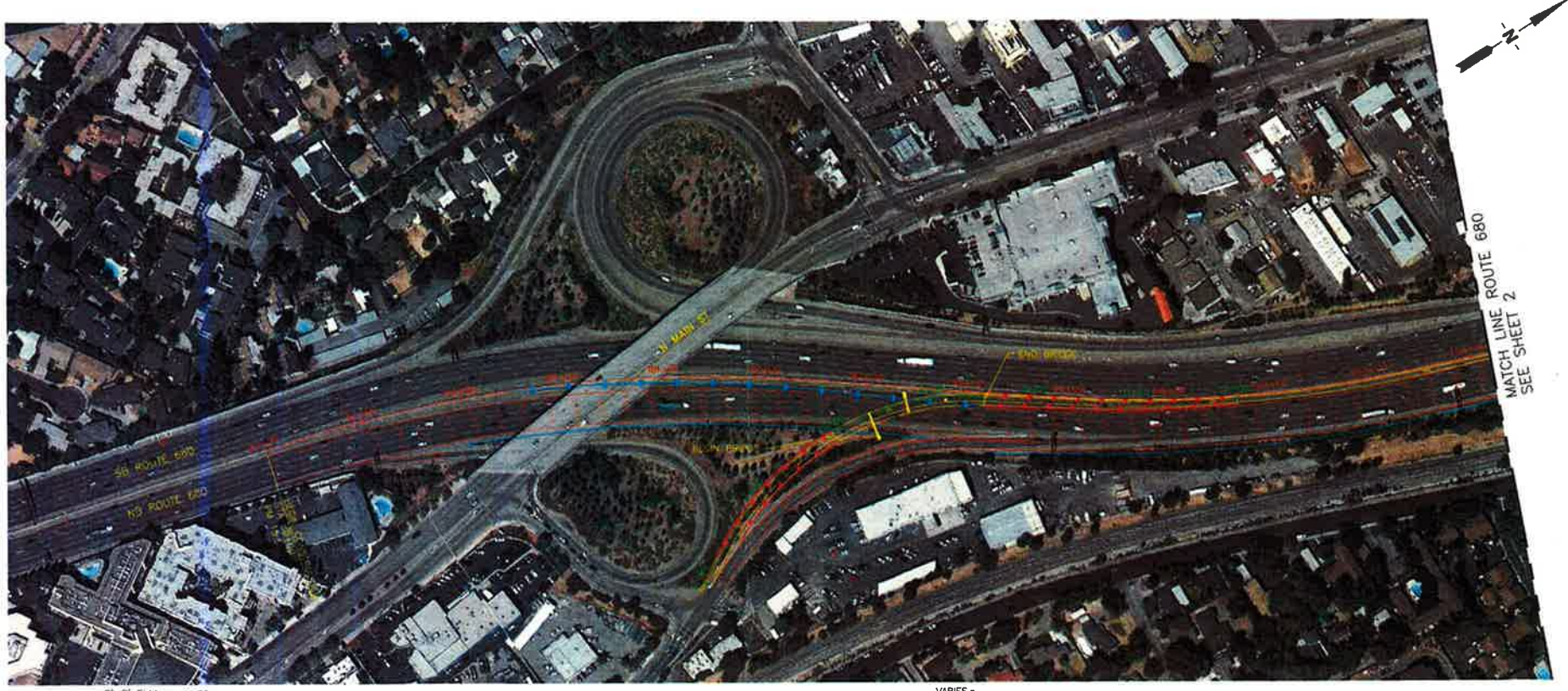
TOTAL ANNUAL COST (estimated countywide roll-out of existing programs)	**$1,600,000**	**$2,200,000**	**$19,000**	**$3,865,200**	**ES total / school**	**$20,000**	**MS total / school**	**$24,000**	**HS total / school**	**$11,000**
					General program total / school	**$4,000**				

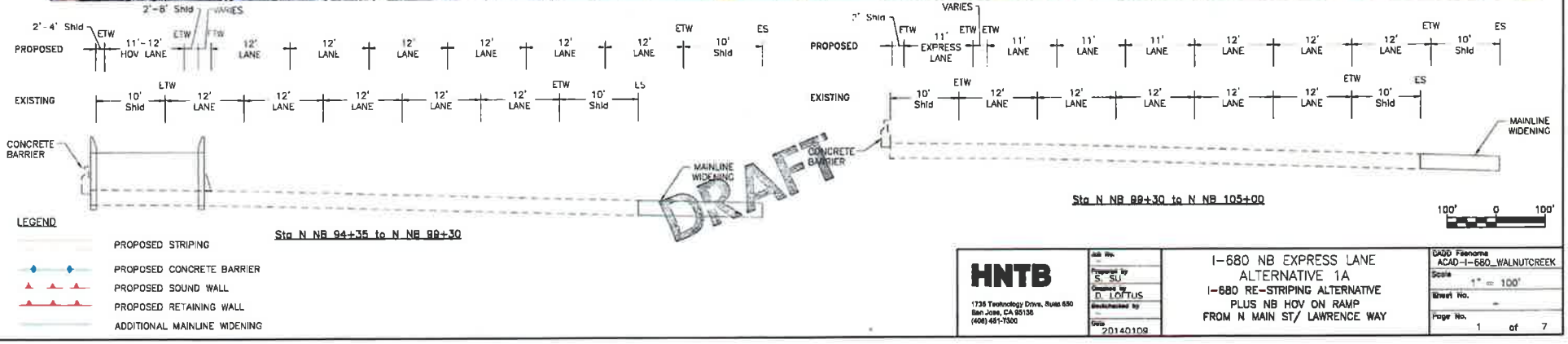
Needs Assessment for CCTA SR2S Programs: Summary of Existing and New Program Components

Countywide Costs for New Programs to Supplement Current Offerings		
New Programs - Safety and Education		
	Cost per School	**Annual Countywide Cost**
Parent education night	$600	$80,000
Teen bicycling promotion (HS only)	$3,800	$70,000
Traffic safety ad campaign	$1,200	$150,000
Increased outreach event presence	$600	$80,000
Outreach campaigns with police/CHP	$500	$60,000
Air quality public education and outreach	$500	$60,000
Traffic calming program + enforcement, based on local and national survey data on traffic and speeding	$400	$50,000
Program to track walking and bicycling rates over time across jurisdictions	$500	$60,000
BikeMobile (ACTC) - mobile bicycle repair vehicle that regularly visits schools, recreation centers, and other applicable sites	$2,600	$330,000
Crossing Guard Program	$17,700	$3,850,000
	Cost per RTPC	**Countywide Cost**
Increased full-time staff (assumes 1.5 per RTPC)	$110,000	$440,000
SUBTOTAL ANNUAL COST (Education and Safety)		**$5,230,000**
New Programs - Transportation		
	Cost per Student	**Annual Countywide Cost**
Transit Ticket Program (assumes participation by 10% of MS and HS students)	$600	$4,870,000
Yellow School Bus Program (assumes participation by 19% of all students)	$1,400	$43,665,400
SUBTOTAL ANNUAL COST (Transportation)		**$48,535,400**
TOTAL ANNUAL COST (Existing+New Programs)		**$57,630,600**

Notes:
1. Existing program one-time cost assumed to serve entire county.
2. One-time costs and infrastructure (indirect) costs annualized over 5 years.
3. Indirect costs reduced by 50% to account for efficiencies gained through increased scale of programming.
4. Direct costs applied to two thirds of county schools to account for program roll-out to fraction of schools in given year.
5. General program costs attributed to one third of county schools.
6. New programs cost per school rounded to the nearest $100 and annual cost rounded to the nearest $10k.
7. New programs annual cost assumes half of the cost per school is direct and half indirect - indirect costs reduced by 50% and direct costs applied to two thirds of schools
8. Transit Ticket Program annual cost assumes 10% of middle and high school students will participate in the program - rounds up 6% public bus mode share in 2011 CCTA survey.
9. Yellow School Bus Program annual cost assumes 19% of all students will participate in the program - average of participation rates in Lamorinda and TRAFFIX programs.

DRAFT - Preliminary - for discussion only





LEGEND

- PROPOSED STRIPING
- PROPOSED CONCRETE BARRIER
- PROPOSED SOUND WALL
- PROPOSED RETAINING WALL
- ADDITIONAL MAINLINE WIDENING

DRAFT

HNTB	1736 Technology Drive, Suite 650 San Jose, CA 95136 (408) 481-7500
Job No.	-
Prepared by	S. SU
Checked by	D. LOFTUS
Submitted by	-
Date	20140109

I-680 NB EXPRESS LANE
ALTERNATIVE 1A
I-680 RE-STRIPING ALTERNATIVE
PLUS NB HOV ON RAMP
FROM N MAIN ST/ LAWRENCE WAY

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Sheet No.	-
Page No.	1 of 7

Status Update and Summary of Activities
TRANSPAC TAC Meeting: March 27, 2014

ELECTRIC VEHICLE CHARGING PROGRAM

1. Program Background

In the spring of 2009, 511 Contra Costa conducted an online poll to test the Contra Costa commuting public's interest in electric vehicles after seeing unveilings of EV charging stations in San Jose and San Francisco. Of the 232 respondents, 51 % indicated an interest in their next vehicle being an electric vehicle. 511 Contra Costa then put out a *countywide* call for projects to provide mini grants towards the purchase of electric vehicle charging stations. Since then, 511 Contra Costa's *Electric Vehicle Charging Program* has assisted local jurisdictions to coordinate, fund, and install electric vehicle charging stations for fleet/public use. According to the California Center for Sustainable Energy, 35% of all Plug-In Electric Vehicles purchased are from California residents, and this program supports local cities and residents by creating a network of electric vehicle charging stations along major Contra Costa County corridors. In addition to improving air quality through emissions reductions, these electric vehicle charging stations also help to promote economic development in the County. The following status update highlights the program's achievements over the past four years as well as ongoing work with City staff.

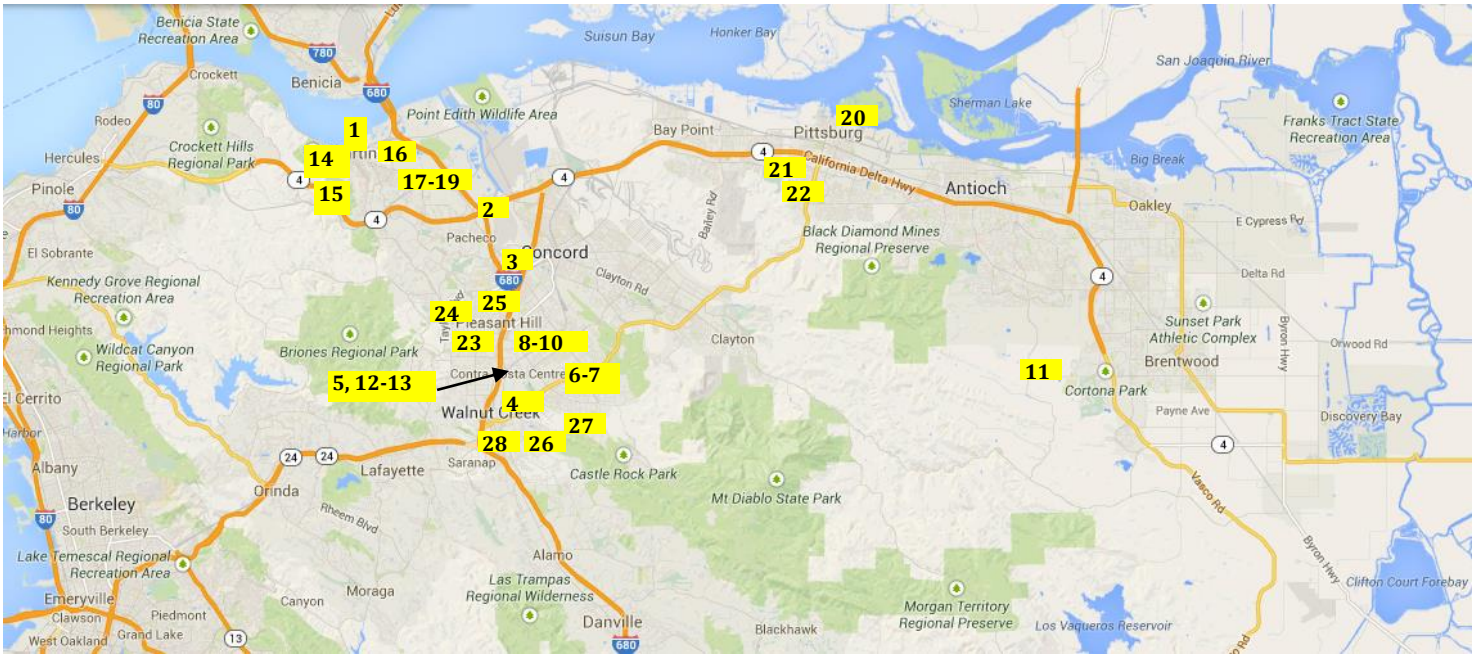
2. Program Highlights (June 2009-March 2014)
   a. Funded **28 electric vehicle charging stations** throughout Central and East County
   b. Funding provided by: Bay Area Air Quality Management District Transportation Fund for Clean Air, Measure J, and Measure C
   c. City/County sites include: **Brentwood, Concord, Martinez, Pittsburg, Pleasant Hill, Walnut Creek, and locations in unincorporated County**
   d. Total amount funded by 511 Contra Costa's *Electric Vehicle Charging Program*: **$165,043.00**
   e. All 28 electric vehicle charging stations are hosted on the ChargePoint network
   f. Funding agreements include sharing usage data for performance measures, identification of future installation sites, and justification of funding by calculated emissions reductions

3. Marketing and Outreach
   a. **June 2009** – City of Walnut Creek Unveiling Ceremony
   b. **December 2009**- Pleasant Hill Unveiling Ceremony
   c. **April 2010**- City of Martinez Unveiling Ceremony
   d. **April 2011**- City of Pittsburg Unveiling Ceremony
   e. **2012 December Countywide EV Charging Forum hosted by 511CC**
      i. Attended by 15 staff members from: local cities, BAAQMD and Caltrans staff
      ii. Discussed current consumption rates and federal and state incentive programs while identifying ways in which 511 Contra Costa could aid continued efforts and address any issues/questions
      iii. Brought in Bay Area Air Quality Management District Strategic Incentives staff to discuss the Air District's "Bay Area PEV Ready Program"
   f. Continued outreach on 511contracosta.org and City-specific newsletters

[See pages 2-4 for a map and complete inventory of 511CC sponsored electric vehicle charging stations]

Map of Electric Vehicle Charging Station Inventory (June 2009-March 2014)

ELECTRIC VEHICLE CHARGING PROGRAM



Sponsoring Agency:

1. Contra Costa County- 2467 Waterbird Way, Martinez*
2. Contra Costa County- 651 Pine St., Martinez*
3. Contra Costa County- 2366 Stanwell Cir., Concord*
4. Contra Costa Centre- 2805 Jones Rd., Walnut Creek
5. Contra Costa Centre- 1400 Treat Blvd., Walnut Creek
6. Contra Costa Centre- 1601 Ygnacio Valley Blvd., Walnut Creek
7. Contra Costa Centre- 1601 Ygnacio Valley Blvd., Walnut Creek
8. Contra Costa Centre- 3003 Oak Rd., Walnut Creek
9. Contra Costa Centre- 2999 Oak Rd., Walnut Creek
10. Contra Costa Centre- 2999 Oak Rd., Walnut Creek
11. Contra Costa Centre- 2400 Balfour Rd., Brentwood
12. Contra Costa Centre- 1450 Treat Blvd., Walnut Creek
13. Contra Costa Centre- 1450 Treat Blvd., Walnut Creek
14. City of Martinez- 680 Court St., Martinez
15. City of Martinez- 525 Henrietta St., Martinez
16. City of Martinez- 407 Estudillo St., Martinez
17. City of Martinez- Pacheco PNR Lot, Martinez
18. City of Martinez- Pacheco PNR Lot, Martinez
19. City of Martinez- Pacheco PNR Lot, Martinez
20. City of Pittsburg- 515 Railroad Ave., Pittsburg
21. City of Pittsburg- 65 Civic Dr., Pittsburg
22. City of Pittsburg- 65 Civic Dr., Pittsburg
23. City of Pleasant Hill- 100 Gregory Ln., Pleasant Hill
24. City of Pleasant Hill- 160 Crescent Dr., Pleasant Hill
25. City of Pleasant Hill- 310 Civic Dr., Pleasant Hill*
26. City of Walnut Creek- 1350 Locus St., Walnut Creek
27. City of Walnut Creek- 1390 N Broadway, Walnut Creek
28. City of Walnut Creek- 1625 Locust St., Walnut Creek

- Fleet vehicle electric charging stations

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Program Funded by: Contra Costa Transportation Authority and Bay Area Air Quality Management District

Electric Vehicle Charging Station Inventory (June 2009-March 2014)

ELECTRIC VEHICLE CHARGING PROGRAM

Station Manager	Location City	Station Location	Type	# of Connectors	Public Use/ Staff Only	Date Installed	511CC Costs
Contra Costa County	Martinez	2467 Waterbird Way- CCCounty Repair Facility	Pole Mount	1	Staff Only	February 2012	I*: $10,000.00
	Martinez	651 Pine Street- CCCounty Fleet Yard	Pole Mount	1	Staff Only		
	Concord	2366 Stanwell Circle- CCCounty Transit Yard	Pole Mount	1	Staff Only		
Contra Costa County- Contra Costa Centre	Walnut Creek	2805 Jones Road- CCC Parking Lot	Bollard	1	Public Use	December 2011	E: $20,000.00
	Walnut Creek	1400 Treat Boulevard- John Muir Parking Lot	Bollard	1	Public Use		
	Walnut Creek	1601 Ygnacio Valley Boulevard- John Muir Hospital Parking Garage	Pole Mount	1	Public Use		
	Walnut Creek	1601 Ygnacio Valley Boulevard- John Muir Hospital Parking Garage	Pole Mount	1	Public Use		
	Walnut Creek	3003 Oak Road- CCC Parking Lot (PMI Plaza)	Bollard	1	Public Use		
	Walnut Creek	2999 Oak Road- CCC Parking Lot	Bollard	1	Public Use		
	Walnut Creek	2999 Oak Road- CCC Parking Lot	Bollard	2	Public Use	October 2013	E: $38,756.00
	Brentwood	2400 Balfour Road- John Muir Hospital Parking Lot	Bollard	2	Public Use		
	Walnut Creek	1450 Treat Boulevard- John Muir Office Parking Lot	Bollard	2	Public Use		
	Walnut Creek	1450 Treat Boulevard- John Muir Office Parking Lot	Bollard	2	Public Use		
City of Martinez	Martinez	680 Court Street- Downtown Parking Area	Bollard	1	Public Use	March 2012	I*: $7,302.00 E: $13,567.00 **T*:$20,869.00**
	Martinez	525 Henrietta Street- City Hall Parking Lot	Bollard	1	Public Use		
	Martinez	407 Estudillo Street- Amtrak Parking Lot	Bollard	1	Public Use		
	Martinez	Pacheco Park and Ride Lot	Bollard	2	Public Use	January 2014	E: $20,600.00
	Martinez	Pacheco Park and Ride Lot	Bollard	2	Public Use		
	Martinez	Pacheco Park and Ride Lot	Bollard	2	Public Use		

***Key:** E = Equipment
I = Installation
T = Total

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Program Funded by: Contra Costa Transportation Authority and Bay Area Air Quality Management District

Electric Vehicle Charging Station Inventory- Continued (June 2009-March 2014)

ELECTRIC VEHICLE CHARGING PROGRAM

Station Manager	Location City	Station Location	Type	# of Connectors	Public Use/ Staff Only	Date Installed	511CC Costs
City of Pittsburg	Pittsburg	515 Railroad Avenue- Public Parking Lot	Bollard	1	Public Use	May 2010	E*: $14,220.00
	Pittsburg	65 Civic Drive- City Hall Parking Lot	Bollard	1	Public Use		
	Pittsburg	65 Civic Drive- City Hall Parking Lot	Bollard	1	Public Use		
City of Pleasant Hill	Pleasant Hill	100 Gregory Lane- City Hall Parking Lot	Bollard	1	Public Use	December 2009	I*: $12,831.00 E: $15,509.00 **T*: $29,340.00**
	Pleasant Hill	160 Crescent Drive- Public Parking Garage	Pole Mount	1	Public Use		
	Pleasant Hill	310 Civic Drive- City Corp Yard	Bollard	1	Staff Only		
City of Walnut Creek	Walnut Creek	1350 Locust Street- Public Parking Garage	Pole Mount	1	Public Use	June 2009	E: $11,258.00
	Walnut Creek	1390 North Broadway- Broadway Plaza Parking Garage	Pole Mount	1	Public Use		
	Walnut Creek	1625 Locust Street- Public Parking Garage	Bollard	1	Public Use		

***Key:** E = Equipment
I = Installation
T = Total

4. Pending Installations

Staff is currently assisting the City of Concord and the City of Antioch to identify ideal locations and other details for electric vehicle charging station installations in those cities. In addition, staff is working with cities that are not yet ready to invest in electric charging stations, but may be interested in future funding opportunities. Letters of support from these City Councils are being sought in order for city staff to be able to act swiftly as future grants become available.

5. Charging Station Fees

As the consumer demand for charging stations has increased, cities are now considering charging a fee per session to offset electricity charges that to-date have been subsidized by the local jurisdictions. Staff is currently assisting cities in determining appropriate revenue generation by identifying average annual usage and maintenance costs.

6. Future Funding

Future 511 Contra Costa mini grant allocations will be limited to $2,000 per charging unit, due to restrictions currently in effect by the Bay Area Air Quality Management District for electric vehicle charging station funding. As charging station usage increases and more data is available to support more emissions reductions by electric vehicles, this funding limit may change over time.