## APPLICATION FOR CYCLE 7 HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

#### APPLICATION SUMMARY

This summary page is filled out automatically once the application is completed.

After the application is finalized, please save this PDF form using the exact "Application ID" (shown below) as the file name.

**Important:** Review and follow <u>the Application Instructions</u> step-by-step as you complete the application. Completing an application without referencing to the instructions will likely in an incomplete application or an application with fatal flaws that will be disqualified from the ranking and selection process.

Application ID: 04-Oakland-3

Submitted By (Agency):
Oakland

Caltrans District
04

Application Number
04

4

## **Project Location**

Shattuck Avenue at 49 St, 51St, 59th St, Alactraz Ave; Claremont Avenue between Telegraph Avenue and Clifton Street

## **Project Description**

Sign and stripe road diet with bike lanes on Claremont; uncontrolled crosswalk enhancements with ladder crosswalk, RRFBs, bulb-out, and/or median refuges at multiple locations; protected left-turn at Shattuck/Alcatraz

NS18: Install pedestrian crossing at uncontrolled locations (with enhanced safety features / curb-extensions)

Countermeasure 2:

S17: Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)

R15: Road Diet (Reduce travel lanes from 4 to 3 and add a two way left-turn and bike lane)

Total Expected Benefit

B/C Ratio:

7.11

Form Date: April 26, 2015 HSIP Cycle 7 Application Form

	<u> </u>		I.	Basic Proje	ect Information	1			
Date	Jul 31, 2015			Caltrans District	04	MPO	MTC		
Agenc	y Oakland			County Alame	da County				
Total n	number of applicat	ions being su	ubmitted by yo	ur agency	4				
Applic	ation Number (eac	:h application	າ must have a ເ	ınique number)	3				
Cont	act Person Info	<u>rmation</u>							
Name	(Last, First):	W	lassowsky, Wla	dimir					
Positio	n/Title of Contact	Person Tr	ansportation S	ervices Manage	r				
Email:	wwlassowsky@	oaklandnet.c	com	Telephone: (	510) 238-6383		Extension:		
Addres	ss: 250 Frank	Ogawa Plaza	, Third Floor						
City:	Oakland			Zip Code:	CA 94602	(Ent	er only a 5-d	igit number.)	
<u>Proje</u>	ect Information	<u>l</u>							
Project Location -Be Brief (limited to 250 characters) -See Instructions  Project Description -Be Brief (limited to 250 characters) -See Instructions			Shattuck Avenue at 49 St, 51St, 59th St, Alactraz Ave; Claremont Avenue between Telegraph Avenue and Clifton Street  Sign and stripe road diet with bike lanes on Claremont; uncontrolled crosswalk enhancements with ladder crosswalk, RRFBs, bulb-out, and/or median refuges at multiple locations; protected left-turn at Shattuck/Alcatraz						
Fund	ctional Classificatio	n Minor Art	terial			ctional Classi		CRS Maps, sip/hseb/crs maps/)	
CRS	Map ID (e.g. 08E14	05L13			VISICIICL	<u> </u>	ca.gov/nq/ts	пр/пзер/стз_парз/)	
Urba	an/Rural Area	Urban		(Visit	t http://earth.dot.ca.g	ov/)			
High	n-Risk-Rural-Roads	(HR3) Eligibil	lity No						
If th	is project is not HR	3 eligible, wl	nat is the appro	oximate total co	st percentage that is I	HR3 eligible?	0 9	<b>%</b>	
Worl	k on the State H	Highway S	<u>ystem</u>						
	•	-	•		ighway System? No below question.	D			
			oject with Caltra		7				
		If yes, chec	k this box to co	nfirm a formal L	etter of Support from mates of cost sharing		strict Traffic	is attached to the	
		application	n. The correspo	ondence should	correspondence from indicate that Caltra iving an encroachme	ns does not s			

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Non-Infrastructure (NI) Elements
Does the project include NI Elements? No  If yes, NI Activity Worksheet and NI Cost Estimate are required attachments. For more information on the requirements and guidance for NI elements of HSIP applications, see the <a href="HSIP NI webpage">HSIP NI webpage</a> .
What are the primary type(s) of non-infrastructure included? (Check all that apply. Skip if project does not include NI Elements.)
☐ Bicycle and pedestrian safety education (K-12 students) ☐ Enforcement (school zones)
☐ Bicycle and pedestrian safety education (adults) ☐ Other Enforcement (please describe below)
Other safety education (please describe below)
☐ Emergency Medical System
Additional Information
1. Is the project focused primarily on "spot location(s)" or "systemic" improvements? Systemic
The primary type of the "systemic" improvements: Other
2. Which of the California's Strategic Highway Safety Plan (SHSP) Challenge Areas does the project address primarily? (For more information on the SHSP and its Challenge Areas, see: <a href="http://www.dot.ca.gov/SHSP/">http://www.dot.ca.gov/SHSP/</a> )
8: Make Walking and Street Crossing Safer
3. How were the safety needs and potential countermeasures for this project <b>first</b> identified?
Agency Management/Other Departments in Agency
4. What is the primarily mode of travel intended to be benefited by this project?
4. What is the primarily mode of traver interface to be benefited by this project:
Pedestrians
5. Approximate percentage of project cost going to improvements related to <b>motorized</b> travel 0 %
6. Approximate percentage of project cost going to improvements related to <b>non-motorized</b> travel \[ \begin{align*} 100 \] \%
7. Is the project focused primarily on "Intersection" or "Roadway" improvement?
Intersection
Number of Intersections 10
8. Posted Speed Limit (mph) 25

Year Collected

0

ADT (Minor Road)

ADT (Major Road)

7,518

9. Average Daily Traffic

(See Instructions)

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## **II. Narrative Questions** (See Instructions)

These narrative questions are intended to provide additional project details for the application reviewers and project files. Application reviewers will use the information in their "fatal flaw" assessment of the applications, including:

- 1) The project scope is eligible for HSIP funding;
- 2) The countermeasures used in the B/C ratio calculation are appropriately applied based on the scope of the project;
- 3) The crash data used in the B/C ratio calculation is appropriately applied based on the scope of the project and countermeasures used:
- 4) The costs included in the application represent the likely total project cost necessary to fully construct the proposed scope. If the proposed project is a piece of a larger construction project, the entire scope of the larger project must be identified and included in the B/C ratio calculation;
- 5) The application data and attachments are reasonable and meet generally accepted traffic engineering and transportation safety principles.

If significant inconsistencies or errors are found in the application information, the Caltrans reviewers may conclude that the application includes one or more "fatal flaws" and the application will be dropped from further funding considerations. The applicant will not be notified of Caltrans findings until after the selection process is complete.

#### 1. Overall Identification of Need

Describe how the agency identified the project as one of its top safety priorities. Was a data-driven, safety evaluation of their entire roadway network completed? Do the proposed project locations represent some of the agency's highest crash concentrations? (limited to 5,000 characters)

This project addresses the pedestrian and bicycle safety concerns on Shattuck Avenue and Claremont Avenue in the Bushrod, Temescal, and Rockridge neighborhoods of Oakland. This project treats two corridors, as the collision types, needs, and proposed countermeasures are similar, and these two corridors serve similar neighborhood and citywide functions. Taken together, they will improve safety for all roadway users in these North Oakland neighborhoods, with an emphasis on pedestrian and bicycle safety. Characteristics and background on the two corridors are provided below.

The pedestrian and bicycle improvement projects for the Shattuck Avenue and Claremont Avenue corridors originated from a Preliminary Safety Assessment Study that the City of Oakland commissioned in 2015. The City prepared a map of injury collisions that occurred citywide between 2009 and 2014. Two engineering consulting firms were hired to assess collision patterns citywide to identify countermeasures and safety projects that would best address the observed collision patterns in the last five years. As part of that citywide assessment, the pattern of pedestrian collisions occurring at legal intersection crossings (both marked and unmarked crosswalks) on both Shattuck Avenue and Claremont Avenue was identified. In addition, based on Average Daily Traffic and a Systemic approach to pedestrian crosswalk enhancements, a four- to three-lane road diet on Claremont Avenue was identified. Last, a pattern of left-turn conflicts was also identified at the Shattuck Avenue / Alcatraz Avenue intersection.

Shattuck Avenue, a two-lane minor arterial with bike lanes, provides an important north-south connection through the cities of Oakland and Berkeley for through traffic and also serves substantial residential, school, and parks functions above 51st Street and retail and commercial functions south of 51st Street. Turn pockets are not provided along the corridor. In 2012, the City resurfaced Shattuck Avenue and added Class II bike lanes, high-visibility crosswalks, and advanced yield markings. These changes addressed auto-bicycle collisions on the corridor, but did not provide substantial enhancements for pedestrian safety at crosswalks. With 14,200 (2012) vehicles traveling through the corridor on a typical weekday, and no traffic control between 55th Street and Alcatraz Avenue, there is a steady flow of motor vehicles and limited gaps in the traffic stream for pedestrians to cross the street. To address the multiple severe pedestrian-auto collisions and one fatal auto-pedestrian collision on this segment of Shattuck Avenue, this project uses a systemic approach to enhancing pedestrian safety through (1) further enhancing crosswalks with Rectangular Rapid Flash Beacons and curb extensions near high volume pedestrian areas and (2) protecting northbound/southbound left-turns and striping left-turn pockets at the Shattuck Avenue / Alcatraz Avenue intersection. This HSIP project would complete the City's 2012 resurfacing project which provided an important benefit to bicyclists but due to the limited traffic control, has had less safety benefit for pedestrians needing to cross Shattuck Avenue.

Claremont Avenue is a four-lane minor arterial with two mid-block crosswalks within the study corridor. Turn pockets are not provided, except at the Telegraph Avenue signal. Along this portion of Claremont, major pedestrian and bicycle destinations include the Claremont California State Department of Motor Vehicles (DMV), UCSF Benihoff Children's Hospital Medical offices, Sunday Farmer's market in the DMV parking lot, the Children's Hospital teen clinic, the Colombo Club, and locally serving retail. There is the risk of multiple-threat collisions on Claremont Avenue due to the four-lane cross-section. This portion of Claremont has low

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vehicular volumes at 7,500 ADT and has significant excess capacity which can be better allocated for safety improvements for bicyclists and pedestrians. This project would directly address auto-pedestrian collisions, including one severe collision that injured two seniors in a marked crosswalk, as well as respond systemically to enhancements at all crosswalks through this portion of Claremont. This project was identified by City of Oakland staff for three reasons: (1) the high profile severe injuries to two seniors, (2) the ability to directly address these systemic safety issues through a road diet given low ADT and excess capacity, and (3) the priority of Claremont Avenue within the City's Bicycle Master Plan and Bikeway 2.0 Network.

#### 2. Potential for Proposed Improvements to Address the Safety Issuse

Describe the primary causes of the collisions that have occurred within the project limits. Are there patterns in the crash types? Clearly demonstrate the connection between the problem and the proposed countermeasures utilized in the Benefit/Cost Ratio calculations. Depending on the nature of the project, explain why the agency choose to pursue "Spot location(s)" or Systemic" improvements. If the proposed project include Non-Infrastructure (NI) elements, also describe how the NI elements will complement in improving the safety within the project limits. (limited to 5,000 characters)

**Note:** Safety improvements that do not have countermeasures and crash reduction factors identified in the TIMS B/C Calculator can be included in the project scope and cost estimate as "Other Safety-Related" improvement; they just won't be added to the project's B/C ratio shown in the application.

This project takes a Systemic Approach addressing pedestrian safety at uncontrolled crosswalks on long stretches of both corridors (1.0 mile for Shattuck and 0.25 miles for Claremont) through aligning injury auto-pedestrian collisions with corridor improvements located near the highest activity land uses. For each existing uncontrolled crosswalk on Claremont Avenue, the systemic approach yields enhanced median refuges, advanced yield markings, and signs. For existing uncontrolled crosswalks on Shattuck in the Influence Area this approach yields curb extensions and RRFBs near the greatest pedestrian generators—Sankofka Academy, Bushrod Park, and the Temescal shopping district.

Nearly 50% of the pedestrian collisions occurred at an intersection with marked or unmarked legal pedestrian crossings or a marked mid-block crosswalk when pedestrians were struck by an auto proceeding straight on the major street. Additionally, crosswalks near major driveways had collisions between turning autos and pedestrians in crosswalks, such as the driveway near Shattuck/51st intersection and at the mid-block crosswalk at the Claremont Department of Motor Vehicles driveway.

In the Shattuck Influence Area, there is limited traffic control (only three traffic signals: 52nd, 55th, and Alcatraz) which allows autos to maintain higher corridor vehicle speeds, and this creates minimal gaps in the traffic stream for pedestrians to cross Shattuck. In Temescal, an inherent conflict immediately adjacent to this pedestrian-heavy environment is the proximity to the SR 24 Ramps one block north which contribute to a higher speed, auto-dominate, environment. Above 51st, the land uses along Shattuck transition to residential neighborhoods, including schools and parks. Shattuck also functions as a "last mile to transit" walking route for AC Transit's bus route 18.

The Claremont Influence Area has limited traffic control, with signals spaced approximately 1,000 feet apart. With long block sizes, there are two existing mid-block crosswalks: 150 feet north of Clarke, which serves local retail and UCSF Benihoff Children's Hospital offices, and 200 feet north of Cavour, which serves the DMV, Farmers Market, and a social club. The offset Claremont Avenue intersections at Vicente South and Cavour have an important function in Oakland's low-stress bicycle network.

Countermeasure 1 NS18: Install pedestrian crossing at uncontrolled locations (with enhanced safety features) which enhances crosswalk safety for pedestrians throughout both corridors through geometric (curb extensions, median refuges), striping (high-visibility ladder crosswalk and advanced yield markings where not already provided), signing (W11-2 and W7-9p high-visibility pedestrian crosswalk sign assembly, R1-5 Yield Here to Pedestrians), and RRFBs (Shattuck corridor only). The Shattuck crosswalk at 51st is straightened to reduce crossing distances and pedestrian exposure to vehicles. The existing overhead beacon north of Clarke/Claremont intersection remains. With the systemic approach, these measures respond to the 21 injury collisions occurred at intersections and intersection approaches on the corridor, including 1 fatal and 3 severe injuries, which are applied to high priority countermeasure locations near the park, school, and shopping area.

Countermeasure 2 S17: Install left-turn lane and add turn phase (signal has no left-turn lane or phase before) which enhances safety for all roadway users by installing left-turn pockets and a protected left-turn phase for northbound and southbound traffic. Of the 7 collisions applied at this intersection, 4 were rear-end collisions, likely a through vehicle striking a vehicle waiting to turn left, and one of these was a bicycle-auto collision where the bicycle rider was proceeding straight and the auto was turning left. Two collisions were broad-sides between turning autos and opposing through vehicles. One collision was an auto-pedestrian crash resulting in a severe pedestrian injury and it resulted from a left-turning vehicle striking a pedestrian in the crosswalk.

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Countermeasure 3 R15: Road Diet (Reduce travel lanes from 4 to 3 and add a two way left-turn and bike lanes) which enhances safety for all roadway users on Claremont between Telegraph and Clifton. Southbound, the road diet would extend with a buffered bike lane between Clifton and Hudson to not affect existing SR 24 Ramp geometries at Clifton. The existing slip lane at Telegraph/ Claremont would be removed to eliminate the need for a second receiving lane and bringing the east crosswalk fully under signal control. The use of CM3 builds on the uncontrolled crosswalk enhancements of CM1, as it removes the risk of multiple-threat collisions on this portion of Claremont. Bike lanes are consistent with the City's adopted Bicycle Master Plan. 9 collisions occurred in the segment between 2006 and 2014, including 1 severe injury, 1 other injury, and 7 complaint of pain injuries.

#### 3. Crash Data Evaluation

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Explain how the influence areas for each separate countermeasure were established. Describe how the limits of the crash data were established for each countermeasure to ensure only appropriate crashes were included in the Collision Summary Report(s), Collision Diagram(s) and B/C calculations. (limited to 5,000 characters)

The 2015 Preliminary Safety Analysis determined the project extents.

CM1 Uncontrolled Crosswalk Enhancements: As shown on Attachments 7a & 7b, all of the pedestrian-auto collisions attributed to this countermeasure and included in the B/C ratio occurred at existing uncontrolled marked crosswalks or within 50 feet of a crosswalk. Fifty feet was determined to be the maximum reasonable distance that pedestrian crossing collisions could be attributed to marked crosswalk enhancements. This rationale applied to both the intersections and the marked mid-block crosswalks. For Shattuck Avenue, the Influence Areas encompass Shattuck between 48th Street and Alcatraz Avenue, as pedestrian crossing conditions at unsignalized intersections are consistent along the corridor. Countermeasures with the systemic approach were prioritized near the major pedestrian attractors: Bushrod Park, Sankofka Academy, and the Temescal business district; as a result, the uncontrolled crosswalks near these locations were prioritized for countermeasures and proposed safety improvements.

CM2 Protected Left Turn Phasing and New Left-Turn Pockets: The Influence Area is restricted to collisions that occurred at the Shattuck Avenue / Alcatraz Avenue intersection, as this is the only location where protected left-turn phasing is proposed. As shown on Attachment 7b, collisions dealing with permissive left-turning vehicles striking a pedestrian or an opposing through auto AND rear-end vehicle collisions were attributed to this countermeasure and included in the B/C ratio. As collisions at the intersection and intersection approach are allowed under the Local Roadway Safety Manual, collisions at the intersection or within 60 feet of the intersection on Shattuck Avenue were included. Collisions coded to Alcatraz Avenue, the minor street, were not applied to this countermeasure.

CM3 Road Diet with Bike Lanes: As shown on Attachment 7a, the Influence Area is restricted to collisions that occurred on Claremont Avenue between Telegraph Avenue and Hudson Street. Per the Local Roadway Safety Manual, all crashes occurring within the limits of the new lane striping are allowable. Collisions that occurred northbound between Clifton Street and Hudson Street were not included, as the road diet in the northbound direction terminates at Hudson Street. Southbound Claremont Avenue collisions between Hudson Street and Clifton Street were considered, as the project terminates at Hudson Street in the southbound direction. Intersections that occurred at the Telegraph Avenue / Claremont Avenue intersection were not included, as these were considered to be unaffected by the Claremont road diet, as it is the minor street.

#### 4. Prior attempts to address the Safety Issue

If appropriate, list all other projects/countermeasures that have been (or are being) deployed at this location. Applicants must identify all prior federal HSIP, HR3 or Safe Routes To School (SRTS) funds approved within or directly adjacent to the propose projects limits within the last 10 years. (HSIP funding cannot be used to construct the same general type of countermeasures within the same limits within 10 years to ensure agencies do not apply the same Crash Reduction Factors to the same crashes.)

If the agency is proposing to construct follow-up improvements along a corridor or at a location that has already had a safety project funded, the applicant must ensure the combines CRF applied to the crashes by both projects is not greater than 80% (See the applications instructions relating to Crash Data for more detail).

For projects proposing high cost spot location projects/countermeasures, applicants must document that they have installed and monitored low-cost improvements which have not been adequately addressing the safety issue. (limited to 5,000 characters)

Oakland has employed various safety/project countermeasures to improve pedestrian and bicycle safety on Shattuck Avenue and Claremont Avenue. These include:

• Striping Class II Bicycle Lanes in the existing wide travel lanes on Shattuck Avenue, including high-visibility ladder crosswalk and

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advanced yield markings in 2012, a low cost improvement integrated through a pavement rehabilitation project

- High-visibility ladder crosswalks and pedestrian paddles on Claremont Avenue, a low cost improvement
- Overhead flashing beacon on mast arm at mid-block crosswalk on Claremont Avenue north of Clarke Street

#### 5. Total project costs

Describe the process used to establish the total cost for the project. Confirm contingencies for reasonably expected costs, including drainage, environmental, traffic, etc, are included. All PE, CE and other project delivery costs must be included, even if federal funding will not be utilized in the phase of the project. For a large project where the HSIP funding is only a small portion of the overall project scope and costs, the total project cost must still be included in the application and its B/C ratio calculation. (limited to 5,000 characters)

The City retained an engineering consultant in 2015 to prepare conceptual design drawings of the countermeasures and other safety improvements based on the results of the City's 2015 Preliminary Safety Assessment. As part of this, cost estimates were prepared corresponding to the preliminary layouts. Cost estimates reflect the latest information regarding construction bid documents in Oakland and Caltrans District 4. Contingencies for drainage, environmental, and traffic control are included in the cost estimates. Attachments 4a-4d presents preliminary layout showing existing and proposed conditions, and Attachment 10 presents the corresponding Detailed Engineers Estimate.

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## III. Project Cost Estimate (See Instructions)

All project costs must be accounted for on this form, even if substantial elements of the overall project are to be funded by other sources. (For federal funds to be 100% reimbursable, all countermeasures selected must be 100% eligible)

Do not enter in shaded fields (calculated - read only). Round all costs up to the nearest hundred dollars. Once all costs and the desired HSIP/ Total ratios are entered, click "Check Cost Estimate" to perform validation. If errors are detected, they will appear below the button. Click it to check again each time when the costs have been revised.

Phase		Total Cost	HS	SIP/Total (	%)	HSIP Funds	Local/Other Funds
Preliminary	Environmental	\$59,100		90	(%)	\$53,190	\$5,910
Engineering	PS&E	\$141,900		90	(%)	\$127,710	\$14,190
	PE Subtotal	\$201,000				\$180,900	\$20,100
	Agency does NOT reques	t <b>HSIP</b> funds for PE Phase (au	utom	atically chec	ked if	PE - HSIP funds is \$0).	
Right of Way	Right of Way Engineering	\$0		0 (		\$0	\$0
	Appraisals, Acquisitions & Utilities	\$0		0 (%)		\$0	\$0
	ROW Subtotal	\$0				\$0	\$0
Construction Engineering	Construction Engineering	\$177,200		90	(%)	\$159,480	\$17,720
& Construction	Construction	\$1,181,900		90	(%)	\$1,063,710	\$118,190
	CON Subtotal	\$1,359,100				\$1,223,190	\$135,910
Non - Infrastructure (NI)	NI Elements	\$0		0	(%)	\$0	\$0
	Total Cost	\$1,560,100		90	(%)	\$1,404,090	\$156,010

Click to Check Cost Estimate (See Notes in Instructions)

No errors have been found in the cost estimate.

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## IV. Implementation Schedule (See Instructions)

The local agency is expected to deliver the project per Caltrans Local Assistance <u>safety program delivery requirements</u>. In order for the milestones to be calculated correctly, all fields needs to be filled in. For steps that are not applicable, enter "0".

Target Date for the Project's Amendment into the FTIP:	01/01/2016	
Time for agency to internally staff project and request PE authorization	3 Month(s)	
Typical Time for Caltrans and FHWA to process and approve PE authorization	2 Month(s)	
Proposed PE Authorization Date:	06/01/2016	(PE Authorization Delivery Milestone)
Will outpun al consultants be required to complete the DE phase of this project?	Yes	,
Will external consultants be required to complete the PE phase of this project?		
Additional time needed to the Delivery Process for hiring PE consultant(s) 6	Month(s) (0 - 6)	
Time to prepare environmental studies request	3 Month(s)	
Time to complete CEQA/NEPA studies/approvals	3 Month(s)	
See PES Form in the LAPM for Typical studies and permits		
Time to complete the Right of Way Acquisition (federal process)	0 Month(s)	
Plan on 18 months minimum for federal process including a condemnation		
Time to complete final PS&E documentation	14 Month(s)	
Other	0 Manath (a)	
other	0 Month(s)	
Expected Completion Date for the PE Phase:	07/31/2018	
	07/31/2018	
Expected Completion Date for the PE Phase:	07/31/2018  3 Month(s)	
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization	07/31/2018	(CON Authorization
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization  Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:	07/31/2018  3	(CON Authorization Delivery Milestone)
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization  Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization  Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization  Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs  Time to award contract with CON contractor (following the federal process,	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization  Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs  Time to award contract with CON contractor (following the federal process, including Board/Council approval, advertise, award, execute and mobilize)	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization Typical Time for Caltrans and FHWA to process and approve CON Auth Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs Time to award contract with CON contractor (following the federal process, including Board/Council approval, advertise, award, execute and mobilize) Time to complete construction	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs Time to award contract with CON contractor (following the federal process, including Board/Council approval, advertise, award, execute and mobilize) Time to complete construction Time included for closing the CON contract	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization Typical Time for Caltrans and FHWA to process and approve CON Auth Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs Time to award contract with CON contractor (following the federal process, including Board/Council approval, advertise, award, execute and mobilize) Time to complete construction Time included for closing the CON contract Other	07/31/2018  3	•
Expected Completion Date for the PE Phase:  Time for agency to request CON authorization Typical Time for Caltrans and FHWA to process and approve CON Auth  Proposed CON Authorization Date:  Time included for the agency's workload-leveling or construction-window needs Time to award contract with CON contractor (following the federal process, including Board/Council approval, advertise, award, execute and mobilize) Time to complete construction Time included for closing the CON contract Other  Expected Completion Date for the CON Phase:	07/31/2018  3	•

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Countermeasure #1

## V. Countermeasures, Crash Data and Benefit/Cost Ratio (See Instructions)

In the process of completing this application, the Local Agency is required to utilize the Benefit/Cost Ratio Calculation Tool that is included in the Safe Transportation research and Education Center (SafeTREC) Transportation Injury Mapping System (TIMS) web site. This web site can be assessed at <a href="http://tims.berkeley.edu/">http://tims.berkeley.edu/</a>

The final output summary page from TIMS must be included as part of the official application (both electronically and hard copy). The hard copy page must be included in the application as one of the attachments.

In order to facilitate the electronic collection and tracking of this data, Caltrans is requiring agencies to manually enter some of the key "input data" and "output data" used in their final TIMS B/C Ratio. <u>NOTE: If any of the values inputted on this sheet do not match the values from the TIMS B/C Ratio Output Summary sheet, THE APPLICATION WILL BE REJECTED.</u> **Be careful and confirm the numbers!** 

TIMS Application	ID: 04-Oakl	and-3		This ID is generated by IMS Application ID mi				
Version (from TIM	S): 1	Crash Data Perio	d: from	03/27/2006	to	11/23/20	14	
Total Project Cost:	\$1,560,100	(This must match the total pro	ject cost in Sec	tion III.)				
		Countern	neasure li	nformation				
Number of counterr	neasures utili:	zed: 3						
		Countermeasu	ire					
#1: NS18: Install pe	destrian cross	ing at uncontrolled locat	ions (with e	nhanced safety fe	eatures /	curb-exten	CRF:	35
#2: S17: Install left-	turn lane and	add turn phase (signal h	as no left-tu	ırn lane or phase	before)		CRF:	50
#3: R15: Road Diet	(Reduce trave	l lanes from 4 to 3 and ad	ld a two way	y left-turn and bik	ke lane)		CRF:	30
						(	Combined CRF:	115
						Erro	r: Combined CRF Can	not Exceed 80
		B/C R	atio Calc	ulation				
	E	xpected Benefit (Life)	Expected	Cost	Resul	ting B/C		

# \$717,646

 Countermeasure #2
 \$2,066,928
 \$234,015

 Countermeasure #3
 \$1,570,611
 \$608,439

\$7,459,206

Project's Total (Overall) \$11,096,745 \$1,560,100 7.11

## VI. Application Attachments (See Instructions)

Check all attachments included in this application.

Engineer's Checklist (Required)
∇icinity map /Location map (Required)
Project maps/plans showing existing and proposed conditions (Required)
□ Pictures of Existing Condition (Required)
□ Detailed Engineer's Estimate (Required)
Warrant studies (Required when applicable)
Letter/email of Support from Caltrans (Required when applicable)
Non-Infrastructure (NI) Activity Worksheet and NI Cost Estimate (Required when applicable)
Additional narration, documentation, letters of support, etc. (optional)

### **Application Data Checklist and Engineer's Stamp**

This application checklist is to be used by the engineer in "responsible charge" of the preparation of this HSIP application to ensure all of the primary elements of the application are included and the application is free of errors in the calculation of the Benefit –to-Cost Ratio (B/C); allowing the application to be accurately ranked in the statewide selection process. Applications with errors in the supporting data for the B/C calculation will not be considered in the application process.

Special Considerations for Engineers before they Sign and Stamp this document attesting to the accuracy of the application:

Chapter 7; Article 3; Section 6735 of the Professional Engineer's Act of the State of California requires engineering calculation(s) or report(s) be either prepared by or under the responsible charge of a licensed civil engineer. Since the corresponding HSIP application defines the scope of work of a future civil construction project and requires complex engineering principles and calculations which are based on the best data available at the time of the application, the application must be signed and stamped by a licensed civil engineer. By signing and stamping this document, the engineer is attesting to this application's technical information and engineering data upon which local agency's recommendations, conclusions, and decisions are made. This action is governed by the Professional Engineer's Act and the corresponding Code of Professional Conduct, under Sections 6775 and 6735.

The following checklist is to be completed by the engineer in "responsible charge" based on the final application and application attachments – as submitted to Caltrans. The engineer's initials and stamp should not be placed until the application is complete and in final form.

1. Vicinity map /Location map

Engineer's Initials:

a. The project limits must be clearly depicted in relationship to the overall agency boundary

2. **Project layout-plan** showing existing and proposed conditions must:

Engineer's Initials:

- a. Be to a scale which allows the visual verification of the overall project limits and the "construction" limits of each safety countermeasure included in the application's B/C ratio
- b. Show the full scope of the proposed project, including any non-safety construction items
- c. Show the "Influence Area" for each safety countermeasure (CM) included in the application's B/C ratio
- d. Show all changes to existing lane and shoulder widths. Label the proposed widths
- e. Show limits of all roadway excavation/demolition
- f. Show agency's right of way (ROW) lines. (Also show Caltrans', Railroad, and all other government agencies)
- 3. **Project cross-section** showing existing and proposed conditions. **Engineer's Initials** (Only required for projects with roadway excavation, cut/fill slopes, and changes to lane widths)

a. Show and dimension: changes, ROW lines, safety countermeasures, etc.

4. Countermeasure Selection (used throughout the application):

Engineer's Initials:

a. The CMs used are appropriate and reasonable based specifically on the guidance in the HSIP call-for projects guidelines and application instructions, including Appendix B of the Local Roadway Safety Manyal.

5. Crash Data used in the B/C calculations must be:

Engineer's Initials:

- a. From a reliable and well documented source
- b. Within influence area of CM and applied to CMs using generally accepted traffic engineering principles (Example: If the CM only addresses the northbound lanes of a divided roadway, then southbound crashes should be excluded.)
- c. Accurately shown in collision diagram(s) and collision lists(s) attached to this application.
- d. Crashes are presented in terms of the number of crashes (**not** the number of injuries and fatalities)
- e. The most recent crash data available and a minimum 5 years and maximum 10 years of data
- 6. Collision Diagram(s) (Shown separately or combined)

Engineer's Initials

a. Should be to scale with crash locations accurately plotted

- b. Reveals collision pattern(s) necessary to justify CM(s)
- c. The influence area for each CM is shown separately on the diagrams (unless the areas are identical)
- d. All crashes, included in the B/C Calculation, must be clearly shown within the influence area of that CM
- e. Totals for each Location and/or CM are shown with crashes segregated based on Crash Severity
- f. The totals shown match the totals shown in the Collision List and Collision Summary

Form Date: 7/21/15 HSIP 7 Application Form

7. Collision List(s) (Shown separately or combined)

Engineer's Initials:

- a. Totals for each Location and/or CM are shown with crashes segregated based on Crash Severity
- b. If the List(s) includes crashes that were not appropriate to include in the project B/C calculations, these crashes must be crossed through or removed and not included in the totals
- c. The totals shown match the totals shown in the Collision Diagram and Collision Summary
- d. Each crash is only counted as one, even if there were multiple victims and/or vehicles involved

#### 8. Collision Summary (HSIP Form)

Engineer's Initials:

a. Totals for each Location/CM are shown with crashes segregated based on Crash Severity

- b. The totals for each Location/CM match the totals shown in the Collision Diagram and Collision List
- c. The totals for each CM at the bottom of the form match the totals in the TIMS B/C Output Summary

#### 9. Detailed Engineer's Estimate (HSIP Form)

Engineer's Initials:

a. All likely construction costs associated with the project are identified and included in the estimate

- b. Each of the main project elements are broken out into separate construction items. The costs for each item are based on calculated quantities and appropriate corresponding unit costs
- c. Costs for each item are distributed between CMs using a logical method to fairly calculate each CM's cost
- d. Each CM included in the B/C calculation must represent a minimum of 15% of the construction costs
- e. "Other Safety" and "Non-Safety" construction items/costs are identified and properly accounted for
- f. The total construction cost in the estimate must match the "Construction" cost in Section III of the application

#### 10. TIMS B/C output summary sheet

Engineer's Initials:

- a. CMs and crash data shown match the totals shown in the Collision Summary form
- b. The total project cost in the B/C calculation must match the total project cost in Section III of the application
- c. The combined CRF applied to any single set of crashes is less than or equal to 0.8
- d. The sheet attached to the application must be signed by the Engineer in Responsible Charge

#### 11. Warrant studies/guidance (Check if not applicable)

Engineer's Initials:

a. Traffic Signal Warrants – Warrant 4, 5 or 7 met (CA MUTCD): Signal warrants must be documented as having been met based on the CA MUTCD.

#### 12. Additional narration, documentation, letters of support:

Engineer's Initials:

- a. The text in the "Narrative Questions" in the application is consistent with and supports the engineering logic and calculations used in the development of the application's B/C ratio
- b. When needed to clarify non-standard application of countermeasures, crashes and/or costs; appropriate documentation is attached to the application to document the engineering decisions and calculations

#### Licensed Engineer:

Name: Ryan McClain, PE

Title: Senior Associate, Fehr & Peers

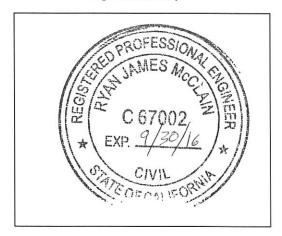
Engineer License Number 67002

Signature: Date: July 31, 2015

Email: r.mcclain@fehrandpeers.com

Phone: (925)930-7100

#### Engineer's Stamp:



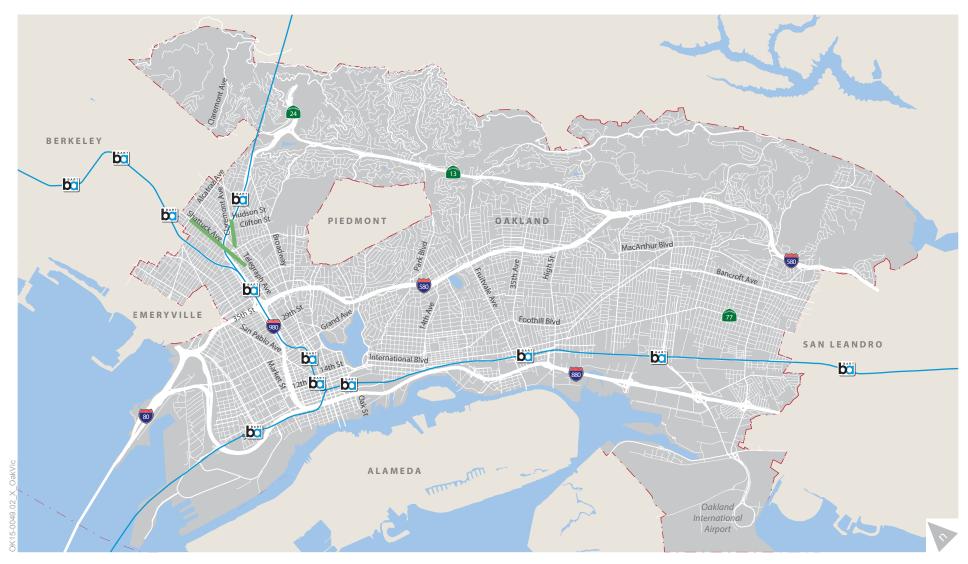
To ensure the application's quality and the agency's commitment to deliver the safety project in an expedited manner, the application must be signed by the Agency's Transportation/Traffic Engineering Manager.

By signing this application, the manager is attesting to:

- 1. All data in the application is accurate and represents the total scope of the planned project;
- 2. The agency understands the Project Delivery Requirements for the HSIP Program and is prepared to deliver the project with these requirements; and
- 3. The agency understands if Caltrans staff determine that any of the above requirements are not met, or data is inaccurate, or the application fails to meet the program guidelines and application instructions, the application will be rejected and will not be eligible to receive federal safety funding. Due to time constraints in the evaluation process, applicants will not be notified until after the selection process is complete. Refer to Application Form Instructions for more information.

#### **Transportation Manager:**

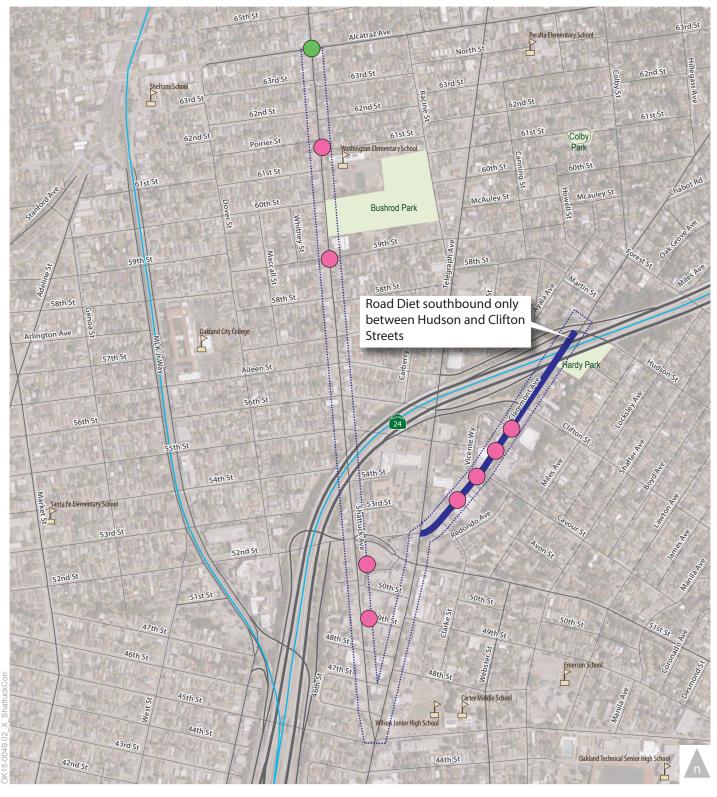
Name:	Wladimir Wlassowsky
Title:	Transportation Services Manager
Signature:	Mell.
Date:	July 21 2015



#### **LEGEND**

Shattuck Avenue between Telegraph Avenue and Alcatraz Avenue; Claremont Avenue between Telegraph Avenue and Hudson Street









Proposed CM1 Uncontrolled Pedestrian Crossing Improvements



Proposed CM2 Protected Left-Turn Phasing with Existing Pocket



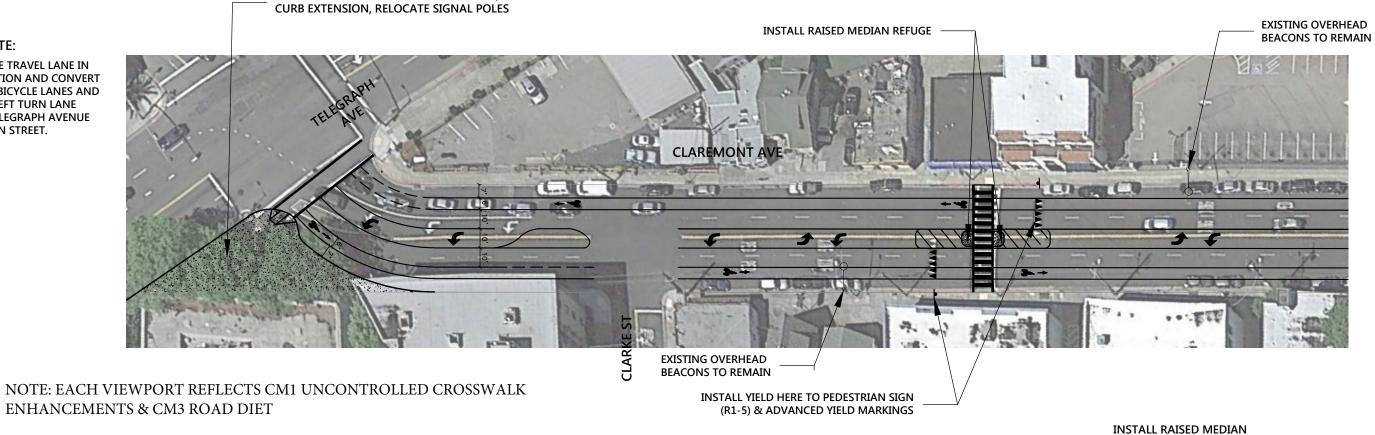
Proposed CM3 Road Diet with Bike Lanes and Two-Way Left Turn Lane

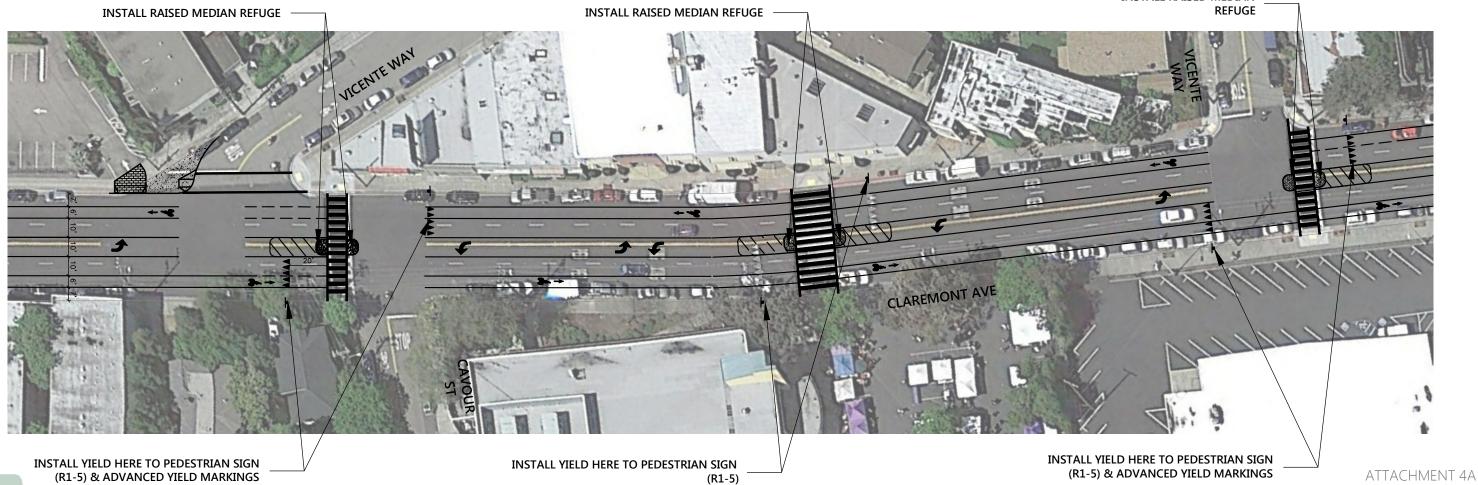


Attachment 3

#### **GENERAL NOTE:**

 REMOVE ONE TRAVEL LANE IN EACH DIRECTION AND CONVERT TO CLASS II BICYCLE LANES AND TWO-WAY LEFT TURN LANE BETWEEN TELEGRAPH AVENUE AND CLIFTON STREET.







Claremont Ave between Telegraph Ave and Clifton Street

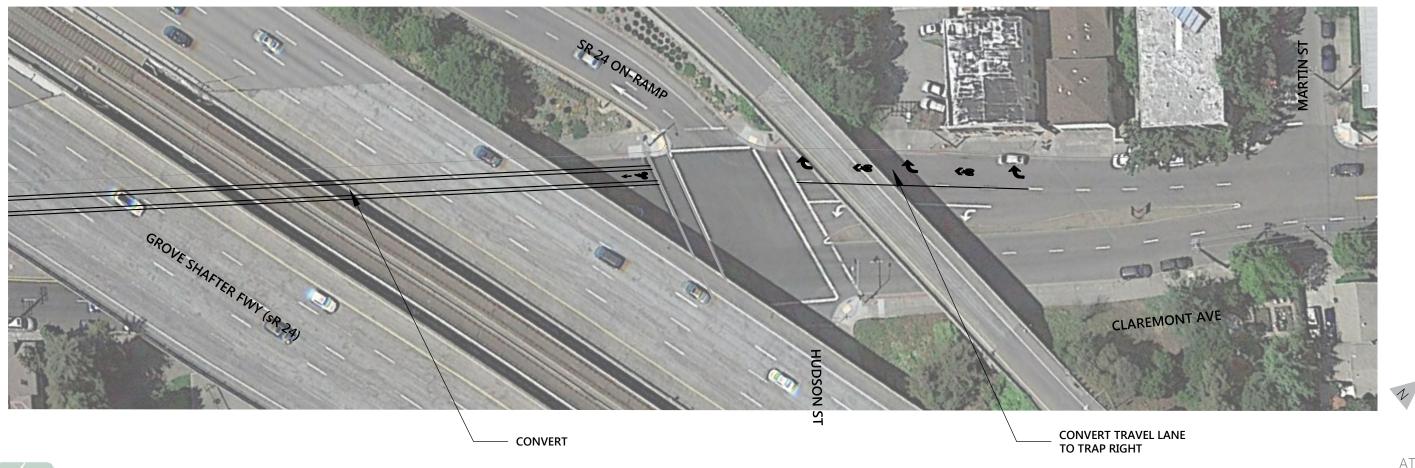
REMOVE SLIP LANE AND MEDIAN ISLAND, INSTALL

#### **GENERAL NOTES:**

- 1. REMOVE ONE TRAVEL LANE IN EACH DIRECTION AND CONVERT TO CLASS II BICYCLE LANES AND TWO-WAY LEFT TURN LANE BETWEEN TELEGRAPH AVENUE AND CLIFTON STREET
- 2. REMOVE SOUTHBOUND TRAVEL LANE AND CONVERT TO CLASS II BICYCLE LANE WITH TRAVEL LANE AND PARKING SIDE BUFFER BETWEEN CLIFTON STREET AND HUDSON STREET.

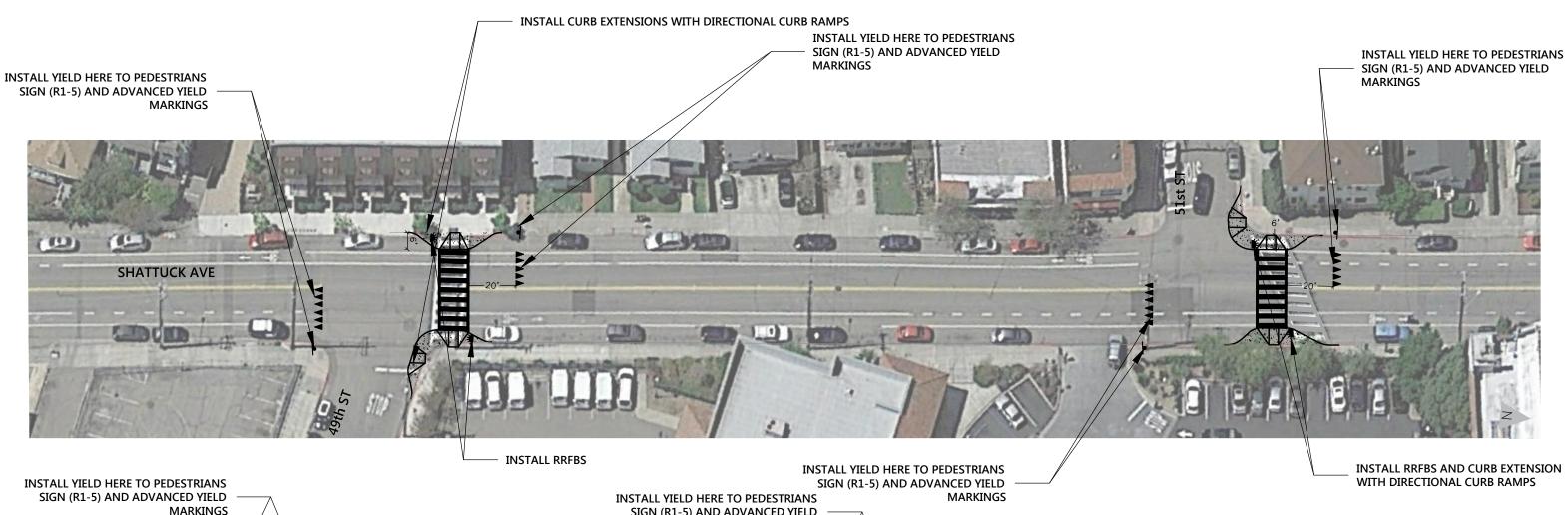
NOTE: EACH VIEWPORT REFLECTS CM3 ROAD DIET





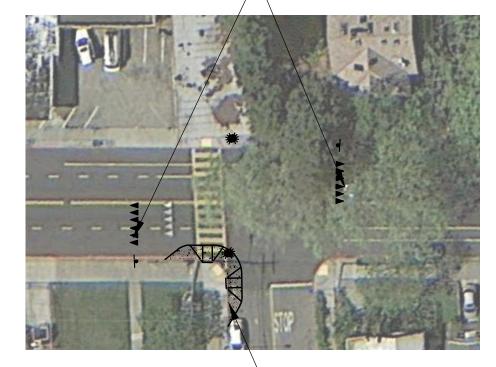


ATTACHMENT 4B
Claremont Ave
between Clifton St and Martin St



SHATTUCK AVE

SIGN (R1-5) AND ADVANCED YIELD **MARKINGS** 



NOTE: EACH VIEWPORT REFLECTS CM1 UNCONTROLLED CROSSWALK **ENHANCEMENTS** 

INSTALL RRFBS AND CURB EXTENSION

ATTACHMENT 4C **Shattuck Ave Crossing Improvements** at 49th, 51st, and 59th Streets

INSTALL RRFBS AND CURB EXTENSION WITH DIRECTIONAL CURB RAMPS

STRIPE LEFT TURN POCKET AT ALCATRAZ AND MODIFY SIGNAL TO ADD PROTECTED NORTHBOUND/SOUTHBOUND LEFT-TURN PHASE ADD COUNTDOWN HEADS AND APS PUSH BUTTONS



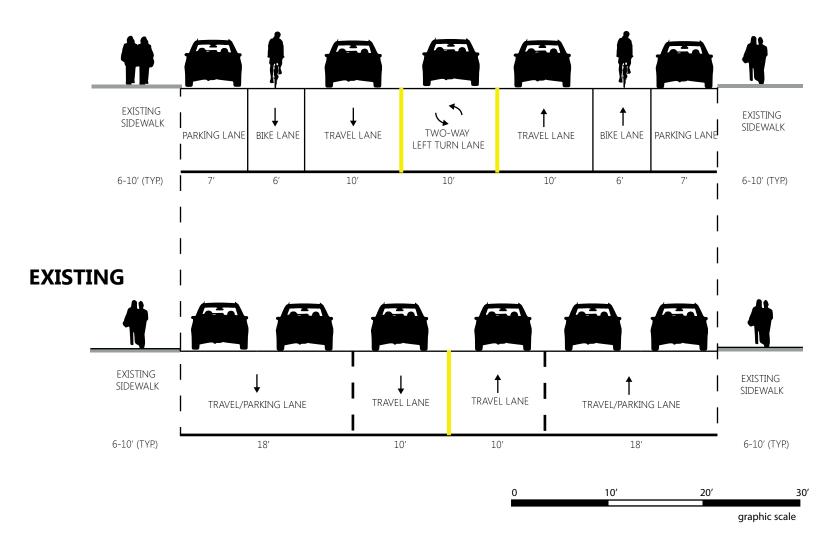
NOTE: VIEWPORT REFLECTS CM2 LEFT-TURN PHASE WITH NO TURN POCKETS

ATTACHMENT 4D

## PROPOSED ROAD DIET IMPROVEMENTS

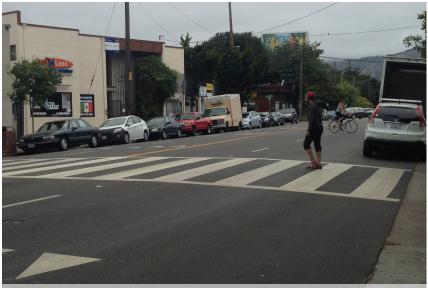
Telegraph Avenue to Clifton Street

NOTE: REFLECTS CM3 ROAD DIET



## **CLAREMONT AVENUE ROAD DIET PROPOSED CROSS-SECTION**

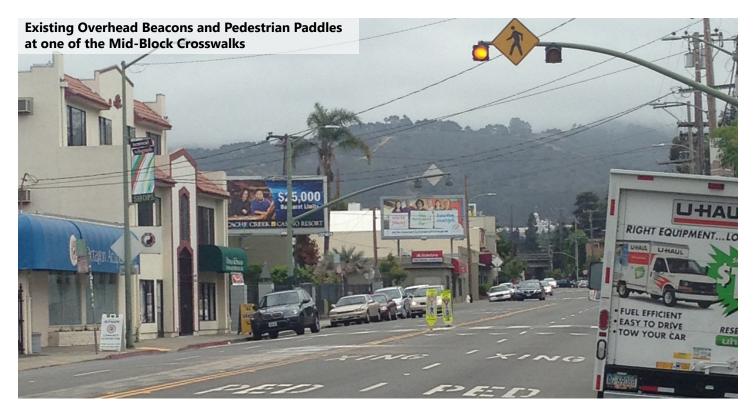
ATTACHMENT 5



Existing Mid-Block Crosswalk Across Four-Lane Claremont Cross-Section, Existing Advanced Yield Markings



Long Crossing Distances and Wide/Acute Side-Street Intersection at Vicente (south)

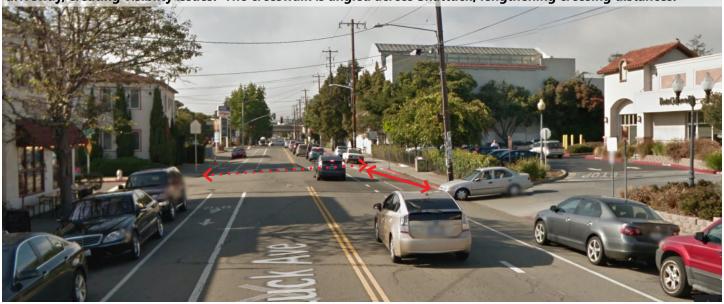






Attachment 6a

Offset Shopping Center Driveway at 51st Street in Temescal. The crosswalk is set approximately 60' back from the driveway, creating visibility issues. The crosswalk is angled across Shattuck, lengthening crossing distances.



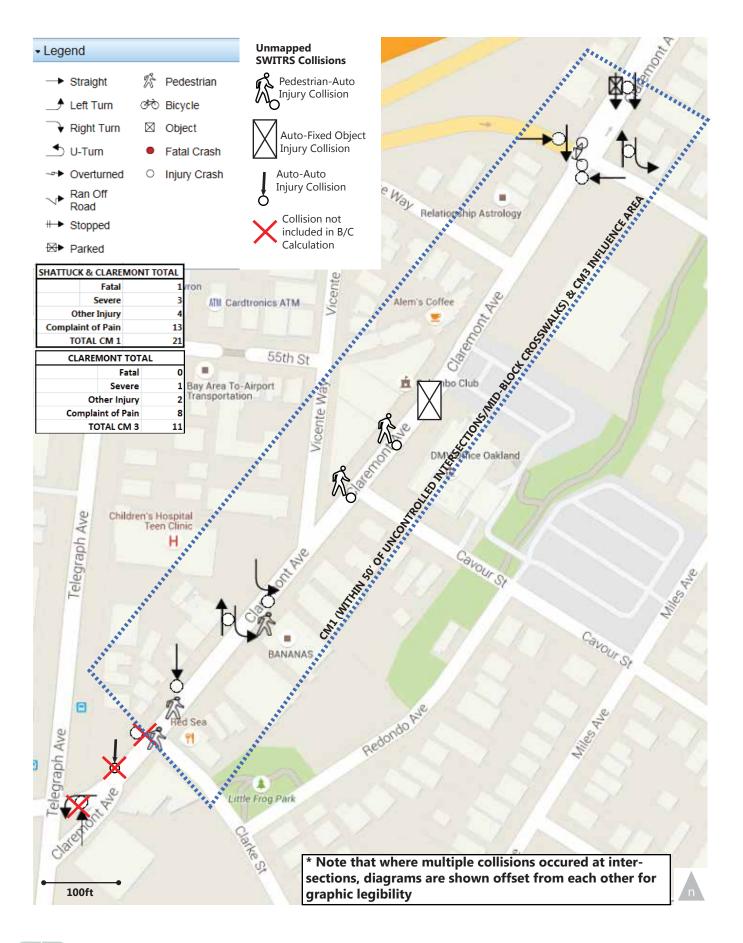
In the residential portions of Shattuck, there is limited traffic control and limited gaps in traffic for pedestrians to cross. Schools and Parks, including Bushrod Park and Sankofka Academy generate foot traffic.



Existing in-pavement flashers with high-visibility crosswalk and advanced yield markings support the crosswalk at 61st Street (south) near the school and park.











## Legend

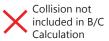
- → Straight 🕺 Pedestrian
- ∱ Left Turn া ঞ Bicycle
- → Right Turn 🛛 Object
- 👲 U-Turn 👤 🕒 Fatal Crash
  - → Overturned Injury Crash
- Ran Off Road
- Parked

\* Note that where multiple collisions occured at intersections, diagrams are shown offset from each other for graphic legibility

## Unmapped SWITRS Collisions



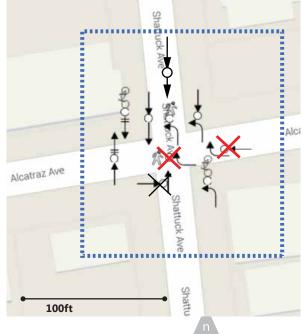
Pedestrian-Auto Injury Collision





SHATTUCK & CLAREMONT TOTAL					
	Fatal	1			
	Severe	3			
Of	4				
Complai	13				
TO	21				

SHATTUCK/ALCATRAZ TOTAL  Fatal (  Severe			
	Fatal		0
	Severe		1
Ot	ther Injury		0
Compla	int of Pain		6
TC	OTAL CM 2		7





CASEID	POINT_X	POINT_Y Y	YEAR_	LOCATION	СНРТҮРЕ	DAYWEEK	CRASHSEV	VIOLCAT	KILLED	SEVINJ (	OTHERINJ	СОР	INJURED
5082299	-122.264	37.83508	2011	. 109	0	4	2	11	0	1	0	0	1
4031864	-122.264	37.83683	2008	109	0	4	4	10	0	0	0	1	1
4736683	-122.264	37.83683	2010	109	0	6	3	0	0	0	1	0	1
6284765	-122.264	37.8369	2013	109	0	4	4	10	0	0	0	1	1
6062077	-122.264	37.8367	2013	109	0	1	3	10	0	0	1	0	1
6415092	-122.265	37.8412	2013	109	0	3	4	10	0	0	0	1	1
6835742	-122.265	37.8412	2014	109	0	7	4	9	0	0	0	1	1
4527551	-122.265	37.84357	2009	109	0	1	4	10	0	0	0	1	1
2615480	-122.265	37.84452	2006	109	0	6	2	11	0	1	1	0	2
4014010	-122.265	37.84452	2008	109	0	3	4	11	0	0	0	1	1
3382763	-122.265	37.84432	2007	109	0	5	3	3	0	0	2	0	2
4685888	-122.265	37.84453	2010	109	0	4	4	8	0	0	0	2	2
2584183	-122.265	37.84201	2006	109	0	1	4	0	0	0	0	1	1
3145349	-122.265	37.842	2007	109	0	4	4	10	0	0	0	1	1
2548578	-122.265	37.842	2006	109	0	1	4	0	0	0	0	1	1
5006510	-122.26	37.83949	2010	109	0	3	3	10	0	0	2	1	3
5030868	-122.26	37.83992	2010	109	0	5	2	10	0	1	1	0	2
6377787	-122.261	37.8385	2014	109	0	1	4	10	0	0	0	1	1
2694826	-122.266	37.84731	2006	109	0	7	1	1	1	0	0	0	0
6559627	-122.266	37.8473	2014	109	0	1	4	9	0	0	0	1	1

SHATTUCK & CLAREMONT TO	OTAL
Fatal	1
Severe	3
Other Injury	4
Complaint of Pain	13
TOTAL CM 1	21

WEA	THER1 PEDCOL	CRASI	HTYP INVOLVE	PED	PRIMARYRD	SECONDRD	DISTANCE DIRECT	INTER	SECT PROCDATE JUR	IS
С	Υ	G	В	D	SHATTUCK AV	49TH ST	39 S	N	#######	109
Α	Υ	G	В	В	SHATTUCK AV	51ST ST	0	Υ	#######	109
Α	Υ	Н	В	E	SHATTUCK AV	51ST ST	0	Υ	#######	109
Α	Υ	G	В	В	SHATTUCK AV	51ST ST	25 N	N	#######	109
Α	Υ	G	В	F	SHATTUCK AV	51ST ST	30 S	N	#######	109
Α	Υ	G	В	D	SHATTUCK AV	56TH ST	0	Υ	#######	109
Α	Υ	G	В	С	SHATTUCK AV	56TH ST	1 N	N	#######	109
Α	Υ	G	В	В	SHATTUCK AV	58TH ST	0	Υ	#######	109
Α	Υ	G	В	D	SHATTUCK AV	59TH ST	0	Υ	#######	109
Α	Υ	G	В	В	SHATTUCK AV	59TH ST	0	Υ	#######	109
Α	Υ	G	В	D	SHATTUCK AV	59TH ST	75 S	N	#######	109
Α	Υ	G	В	E	SHATTUCK AV	59TH ST	0	Υ	#######	109
С	Υ	G	В	В	SHATTUCK AV	AILEEN ST	0	Υ	#######	109
Α	Υ	G	В	В	SHATTUCK AV	AILEEN ST	3 S	N	#######	109
С	Υ	G	В	В	SHATTUCK AV	AILEEN ST	4 S	N	#######	109
Α	Υ	G	В	В	<b>CLAREMONT AV</b>	CAVOUR ST	0	Υ	#######	109
Α	Υ	G	В	С	<b>CLAREMONT AV</b>	CAVOUR ST	200 N	N	#######	109
В	Υ	G	В	С	<b>CLAREMONT AV</b>	CLARKE ST	100 N	N	6/9/2014	109
Α	Υ	G	В	D	SHATTUCK AV	POIRIER ST	0	Υ	#######	109
Α	Υ	G	В	F	SHATTUCK AV	POIRIER ST	4 E	N	8/4/2014	109

DATE_	TIME_	BADGE	JURIDIST	SHIFT	POP	SPECIAL	BEATTY	PE LAPDDIV	BEATCLAS	BEATNUM	I WEATHER:	STATEHW	CALTRANC
2/24/2011	1801	8374	2		5	7	0	0	0	12X	-	N	
11/20/2008	1830	8683	1	•	5	7	0	0	0	11X	-	N	
6/19/2010	434	9000	2		5	7	0	0	0	11X	-	N	
10/17/2013	1000	8961	1	•	5	7	0	0	0	11X	-	N	
4/8/2013	1410	9054	1		5	7	0	0	0	12X	-	N	
12/18/2013	1810	8397	1		5	7	0	0	0	11X	-	N	
11/23/2014	1716	9120	1	•	5	7	0	0	0	11X	-	N	
12/28/2009	2309	9025	1	•	5	7	0	0	0	11X	-	N	
4/29/2006	1645	7896P	2		5	7	0	0	0	11X	-	N	
12/17/2008	951	8843	1		5	7	0	0	0	11X	-	N	
8/24/2007	2203	8589	2		5	7	0	0	0	11X	-	N	
4/15/2010	1517	8732	1	•	5	7	0	0	0	11X	-	N	
1/30/2006	1145	7944			5	7	0	0	0	11X	-	N	
4/12/2007	2013	8756			5	7	0	0	0	11X	-	N	
3/27/2006	1844	8119			5	7	0	0	0		-	N	
12/15/2010	1306	8073	2		5	7	0	0	0	12Y	-	N	
12/31/2010	1700	8682	2		5	7	0	0	0	12X	-	N	
1/6/2014	1637	8660	1		5	7	0	0	0	12Y	-	N	
1/1/2006	334	8255			5	7	0	0	0	11X	-	N	
4/28/2014	840	9120	1		5	7	0	0	0	11X	-	N	

CALTRAND STROUTE	ROUTESUF POSTPRE	POSTMILE LOCATYPE RAMP	SIDEHW	TOWAWAY PARTIES	PCF	VIOLCODE VIO	L VIOLSUB
	0	0		N	2 A	-	21954 A
0	0	0		N	2 A	-	21950 A
(	0	0		N	2 D	-	0
0	0	0		N	2 A	-	21950 A
0	0	0		Υ	5 A	-	21952
0	0	0		N	2 A	-	21950 A
0	0	0		N	3 A	-	21801 A
	0	0		N	2 A	-	21950 A
0	0	0		N	2 A	-	21954 A
0	0	0		N	2 A	-	21950 B
0	0	0		N	2 A	-	22350
	0	0		Υ	2 A	-	22107
0	0	0		N	2 D	-	0
0	0	0		N	2 A	-	21950 A
0	0	0		N	2 D	-	0
(	0	0		N	4 A	-	21950 A
(	0	0		N	3 A	-	21950 A
0	0	0		N	2 A	-	21950 A
0	0	0		Υ	2 A	-	23152 A
0	0	0		N	2 A	-	21804 A

HITRUN	ROADSU	RF RDCOND1	RDCOND2	LIGHTING	RIGHTWAY CHPRDT	YP NOTPRIV	STFAULT	CHPFAULT PEDKILL	PEDINJ	BICKILL	BICINJ	
N	В	Н	-	В	D	0 Y	N	60	0	1	0	0
N	Α	Н	-	С	Α	0 Y	D	23	0	1	0	0
F	Α	Н	-	С	Α	0 Y	-	-	0	1	0	0
N	Α	Н	-	Α	Α	0 Y	Α	1	0	1	0	0
N	Α	Н	-	Α	D	0 Y	Α	7	0	1	0	0
N	Α	Н	-	С	Α	0 Y	Α	7	0	1	0	0
N	Α	Н	-	С	D	0 Y	Α	1	0	1	0	0
N	Α	Н	-	С	Α	0 Y	Α	1	0	1	0	0
N	Α	Н	-	Α	Α	0 Y	N	60	0	1	0	0
N	Α	Н	-	С	D	0 Y	N	60	0	1	0	0
N	Α	Н	-	С	D	0 Y	С	2	0	1	0	0
N	Α	Н	-	Α	Α	0 Y	Α	1	0	1	0	0
N	В	Н	-	Α	D	0 Y	-	-	0	1	0	0
F	Α	Н	-	С	D	0 Y	-	-	0	1	0	0
N	В	Н	-	С	Α	0 Y	-	-	0	1	0	0
N	Α	Н	-	Α	D	0 Y	Α	7	0	3	0	0
N	Α	Н	-	С	D	0 Y	Α	1	0	2	0	0
N	Α	Н	-	Α	Α	0 Y	Α	1	0	1	0	0
N	Α	Н	-	С	-	0 Y	-	-	1	0	0	0
F	Α	Н	-	Α	D	0 Y	Α	1	0	1	0	0

MCKILL	MCINJURE RAMP1	RAMP2	CITY	COUNTY	STATE	X_CHP	Y_CHP	
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	1 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0
C	0 -	-	OAKLAND	ALAMEDA	CA		0	0

CASEID	POINT_X	POINT_Y	YEAR_	LOCATION	CHPTYPE	DAYWEEK	${\sf CRASHSEV}$	VIOLCAT	KILLED	SEVINJ	OTHERINJ	COP	INJURED
3202012	-122.266	37.84958	20	07 109	0	3	4	5	0	0	0	1	1
6277096	-122.266	37.8495	20	13 109	0	4	4	3	0	0	0	2	2
6827474	-122.266	37.8495	20	14 109	0	6	4	3	0	0	0	1	1
3957020	-122.266	37.84948	20	08 109	0	4	4	3	0	0	0	1	1
6699514	-122.266	37.8493	20	14 109	0	2	4	17	0	0	0	1	1
5307407	-122.266	37.84947	20	11 109	0	4	4	9	0	0	0	1	1
5006694	-122.266	37.84948	20	10 109	0	3	2	10	0	1	0	0	1

SHATTUCK/ALCATRAZ TOTAL	
Fatal	0
Severe	1
Other Injury	0
Complaint of Pain	6
TOTAL CM 2	7

PEDCOL	BICCOL	CRASHTYF	INVOLVE	PED	PRIMARYRD	SECONDRD	DISTANCE DIRECT	INTERSECT	r PROCDATE JURIS	;
	Υ	С	G	Α	SHATTUCK AV	ALCATRAZ AV	36 N	N	#######	109
		С	С	Α	SHATTUCK AV	ALCATRAZ AV	10 N	N	#######	109
		С	С	Α	SHATTUCK AV	ALCATRAZ AV	10 N	N	#######	109
		С	С	Α	SHATTUCK AV	ALCATRAZ AV	0	Υ	#######	109
	Υ	D	G	Α	SHATTUCK AV	ALCATRAZ AV	55 S	N	#######	109
		D	С	Α	SHATTUCK AV	ALCATRAZ AV	0	Υ	#######	109
Υ		G	В	В	SHATTUCK AV	ALCATRAZ AV	0	Υ	#######	109

DATE_	TIME_	BADGE	JURIDIST	SHIFT	POP	SPECIAL	BEATTY	PE LAPDDIV	BEATCLAS	BEATNUM	WEATHER	STATEHW	CALTRANC
5/30/2007	1140	8214	2		5	7	0	0	0	11X	-	N	
9/12/2013	1059	8900	2		5	7	0	0	0	11X	-	N	
11/15/2014	1533	9238	1		5	7	0	0	0	11X	-	N	
10/9/2008	1252	8214	2		5	7	0	0	0	11X	-	N	
9/2/2014	1730	8347	1		5	7	0	0	0	11X	-	N	
8/18/2011	1608	8444	1		5	7	0	0	0	11X	-	N	
12/1/2010	1555	8100	1	•	5	7	0	0	0 :	11X	-	N	

CALTRAND STROUTE	ROUTESUF POSTPRE	POSTMILE LOCATYPE RAMP	SIDEHW	TOWAWAY PARTIES	PCF	VIOLCODE VIO	L VIOLSUB
0	0	0		N	2 A	-	21202 A
0	0	0		N	3 A	-	22350
0	0	0		N	2 A	-	22350
0	0	0		N	2 A	-	22350
0	0	0		N	2 A	-	22517
	0	0		Υ	2 A	-	21801 A
	0	0		N	2 A	-	21950 A

HITRUN	ROADSUR	F RDCOND1	RDCOND2	LIGHTING	RIGHTWAY CHPRDT	YP NOTPRIV	STFAULT	CHPFAULT SEVINJ	OTHER	INJ COP	PEDKILI	-
N	Α	Н	-	Α	Α	0 Y	L	4	0	0	1	0
N	Α	D	-	Α	Α	0 Y	D	22	0	0	2	0
N	Α	Н	-	Α	Α	0 Y	Α	1	0	0	1	0
N	Α	Н	-	Α	Α	0 Y	Α	7	0	0	1	0
M	Α	Н	-	Α	Α	0 Y	-	99	0	0	1	0
N	Α	Н	-	Α	Α	0 Y	Α	1	0	0	1	0
N	Α	Н	-	Α	Α	0 Y	Α	1	1	0	0	0

# ATTACHMENT 8B - LIST OF COLLISION FOR CM2 LEFT-TURN PHASE WITH NEW TURN POCKET AT ALCATRAZ AVENUE/SHATTUCK AVENUE

PEDINJ	BICKILL	BICINJ	MCKILL	MCINJU	RE RAMP1	RAMP2	CITY	COUNTY	STATE	X_CHP	Y_CHP	
	0	0	1	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	0	0	1	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
	1	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0

CASEID	POINT_X	POINT_Y	YEAR_	LOCATION	CHPTYPE	DAYWEEK	CRASHSEV	VIOLCAT	KILLED	SEVINJ	OTHERIN	NJ COP	INJURED	)
5006510	-122.2604031	37.83949	2010	109	0	3	3	10		0	0	2	1	3
5030868	-122.2599727	37.83992	2010	109	0	5	2	10		0	1	1	0	2
6377787	-122.2614227	37.8385	2014	109	0	1	4	10		0	0	0	1	1
3670264	-122.2590631	37.84101	2008	109	0	3	4	9		0	0	0	1	1
4474736	-122.25905	37.84101	2009	109	0	6	4	12		0	0	0	1	1
4715173	-122.2587882	37.84136	2010	109	0	3	4	-		0	0	0	1	1
4759963	-122.2590631	37.84102	2010	109	0	1	4	5		0	0	0	1	1
2985919	-122.2610541	37.83886	2007	109	0	1	4	9		0	0	0	1	1
4141997	-122.2609989	37.83891	2009	109	0	4	4	11		0	0	0	1	1

CLAREMONT TOTAL	
Fatal	0
Severe	1
Other Injury	1
Complaint of Pain	7
TOTAL CM 3	9

WEA	THER1 PEDCOL	BICCOL	MCCOL TRUCKCOL ETOH	TIMECAT	MONTH_	CRASHTYP	INVOLVE	PED	PRIMARYRD	SECONDRD	DISTANCE
Α	Υ			1500	12	G	В	В	<b>CLAREMONT AV</b>	<b>CAVOUR ST</b>	0
Α	Υ			1800	12	G	В	С	<b>CLAREMONT AV</b>	<b>CAVOUR ST</b>	200
В	Υ			1800	1	G	В	С	<b>CLAREMONT AV</b>	CLARKE ST	100
Α				1800	3	В	С	Α	<b>CLAREMONT AV</b>	CLIFTON ST	0
Α				1800	10	D	С	Α	<b>CLAREMONT AV</b>	CLIFTON ST	0
Α				1500	5	В	E	Α		<b>CLIFTON ST</b>	150
Α		Υ		1800	5	Н	G	Α	<b>CLAREMONT AV</b>	<b>CLIFTON ST</b>	0
Α				1200	1	В	С	Α	<b>CLAREMONT AV</b>	<b>VICENTE WY</b>	200
Α	Υ			2100	2	D	В	D	<b>CLAREMONT AV</b>	<b>VICENTE WY</b>	175

DIRECT	INTERSECT	PROCDATE	JURIS	I	DATE_	TIME_	BADGE	JURIDIST	SHIFT	POP	SPECIAL	. 6	BEATTYPE LAPDDIV	BEATCLAS
	Υ	12/12/2011	:	109	12/15/2010	1306	8073	:	2	5	7	0	0	0
N	N	12/5/2011	:	109	12/31/2010	1700	8682	:	2	5	7	0	0	0
N	N	6/9/2014		109	1/6/2014	1637	8660	:	1	5	7	0	0	0
	Υ	10/6/2008		109	3/19/2008	1752	8830	:	1	5	7	0	0	0
	Υ	7/16/2010		109	10/10/2009	1724	8932	:	1	5	7	0	0	0
N	N	5/20/2011	:	109	5/5/2010	1406	7940	:	1	5	7	0	0	0
	Υ	5/9/2011	:	109	5/24/2010	1755	8896			5	7	0	0	0
S	N	4/28/2007		109	1/15/2007	1103	8278			5	7	0	0	0
S	N	10/19/2009		109	2/26/2009	1932	9006		1	5	7	0	0	0

BEATNUM	II WEATHI	ER2 STATEHW	CALTRANC CALTRAND STR	OUTE	ROUTESUF POSTPRE	POSTMILE LOCATYPE RAM	P SIDEHW	TOWAWAY PARTIE	.S
12Y	-	N		0		0		N	4
12X	-	N		0		0		N	3
12Y	-	N	0	0		0		N	2
12X	-	N	0	0		0		N	2
12Y	-	N		0		0		Υ	2
12X	-	N		0		0		N	2
12X	-	N		0		0		N	2
12X	-	N	0	0		0		N	2
12Y	-	N		0		0		N	2

PCF	VIOLCODE VIC	)L	VIOLSUB	HITRUN	ROADSUR	FRDCOND1	RDCOND2	LIGHTING	RIGHTWAY CHPRDT	YP NOTPRIV	STFAULT	CHPFAULT
Α	-	21950	Α	N	Α	Н	-	Α	D	0 Y	Α	7
Α	-	21950	Α	N	Α	Н	-	С	D	0 Y	Α	1
Α	-	21950	Α	N	Α	Н	-	Α	Α	0 Y	Α	1
Α	-	21801	Α	N	Α	Н	-	Α	Α	0 Y	Α	7
Α	-	21453	Α	N	Α	Н	-	Α	Α	0 Y	Α	1
Α	-	0		N	Α	Н	-	Α	D	0 Y	Α	1
Α	-	21202	Α	N	Α	Н	-	Α	D	0 Y	L	4
Α	-	21801	Α	N	Α	Н	-	Α	D	0 Y	-	-
Α	-	21954	Α	N	Α	Н	-	Α	D	0 Y	N	60

PEDKILL	PEDINJ	BICKILL	BICINJ	MCKILL	MCINJUF	RE RAMP1	RAMP2	CITY	COUNTY	STATE	X_CHP	Y_CHP	
0		3	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0		2	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0		1	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0		0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0	(	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0	(	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0		0	0	1	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0	(	0	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0
0		1	0	0	0	0 -	-	OAKLAND	ALAMEDA	CA		0	0

## HSIP CYCLE 7 - ATTACHMENT 9

## CRASH DATA SUMMARY SHEET

Important: Read the Instructions in the other sheet (tab) before entering data. Do not enter data in shaded fields (with formulas).

Agency:	City of Oakland, Shattuck-Claremont, 2006-2014	Applic	ation I	D:	04-Oa	kland-3		Prepare	ed by:		CN					7/30.1 5			
						CM Nu	mber					CM Nu	mber			J		CM Nu	mber
						1						2						3	
	LOCATION * (Intersection Name or Corridor Limit)	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	PDO	Total	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	PDO	Total	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	PDO	Total
1	Shattuck Avenue/49th Street		1				1						0						0
	Shattuck Avenue/51st Street			2	2		4						0						0
3	Shattuck Avenue/53rd Street						0						0						0
4	Shattuck Avenue/Aileen Street				3		3						0						0
5	Shattuck Avenue/56th Street				2		2						0						0
6	Shattuck Avenue/58th Street				1		1						0						0
6	Shattuck Avenue/59th Street		1	1	2		4						0						0
7	Shattuck Avenue/61st Street						0						0						0
8	Shattuck Avenue/Poirer Street	1			1		2						0						0
9	Shattuck Avenue/Alcatraz Avenue						0		1		6		7						0
10	Claremont Avenue/Telegraph Avenue						0						0						0
11	Claremont Avenue/Clarke Street				1		1						0				1		1
12	Claremont Avenue/Cavour Street		1	1	1		3						0		1	1			2
13	Claremont Avenue/Vicente Way						0						0				2		2
14	Claremont Avenue/Clifton Street						0						0				4		4
Count	termeasure Total**	1	3	4	13	0	21	0	1	0	6	0	7	0	1	1	7	0	9

<sup>\*</sup> Crash Total for each Location must match the total shown on the Crash Diagrams and Crash Tables

Countermeasur(Install ped crossing
Countermeasur(Install left-turn lane and phase
Countermeasur(Road diet

1/30/2015 1 of 1

<sup>\*\*</sup> Crash Totals for each Countermeasure must match the Total Inputted shown into the TIMS B/C Calculator and B/C Summary Sheet

# Detailed Engineer's Estimate and Cost Breakdown by Countermeasure ATTACHMENT 10

**For Construction Items Only** 

Important: Read the Instructions in the other sheet before entering data.

Do not enter in shaded fields (with formulas)

Agency:	City of Oakland	Application ID:	04-Oakland-3	Prepared by:	RM	Date:	7/31/2015
	•	•	•	•	· •	-	

**Project Description: Shattuck Avenue - Claremont Avenue Improvements** 

Project Location: Shattuck Avenue between 49th Street and Alcatraz Avenue; Claremont Avenue between Telegraph Avenue and Hudson Street

										Cost I	Breakdown				
	Engineer's Estimate (f	or Construction	(tems Only)						Safety-Rel	lated Cost	s			Non Saf	ety-Related
						Counter	measure #1	Counte	rmeasure #2	Counte	rmeasure #3	Other S	Safety-Related	(	Costs
Item No.	Item Description	Quantity	Units	Unit Cost	Total	%	\$	\$	%	\$					
1	Rectangular Rapid Flashing Beacons	4	Crosswalk	\$30,000.00	\$120,000	100	\$120,000								
2	Curb	294	LF	\$25.00	\$7,350	100	\$7,350								
3	Curb and Gutter	886	LF	\$50.00	\$44,300	75	\$33,225			25	\$11,075				
4	Curb Ramp	14	EA	\$5,000.00	\$70,000	100	\$70,000								
5	Concrete Sidewalk	6090	SF	\$15.00	\$91,350	43	\$39,281			57	\$52,070				
6	Asphalt Patch	1772	SF	\$8.00	\$14,176	75	\$10,632			25	\$3,544				
7	Thermoplastic Traffic Striping	11083	LF	\$1.75	\$19,395					100	\$19,395				
8	Thermoplastic Pavement Markings	650	SF	\$3.40	\$2,210					100	\$2,210				
9	Slurry Seal	78400	SF	\$2.00	\$156,800					100	\$156,800				
10	Install New Signage	20	EA	\$750.00	\$15,000					100	\$15,000				
11	Curb Removal	125	LF	\$5.00	\$625					100	\$625				
12	Sidewalk Removal	330	SF	\$2.00	\$660					100	\$660				
13	Signal Removal	1	EA	\$1,000.00	\$1,000					100	\$1,000				
14	Install Countdown Heads	1	Intersection	\$7,000.00	\$7,000			100	\$7,000						
15	Install Accessible Push Buttons	1	Intersection	\$10,000.00	\$10,000			100	\$10,000						
16	Replace Signal Controller and Cabinet	1	EA	\$15,000.00	\$15,000			100	\$15,000						
17	Install Service Pedestal	1	EA	\$5,000.00	\$5,000			100	\$5,000						
18	Install Signal Mast Arm	3	Approach	\$20,000.00	\$60,000			100	\$60,000						
19	Install Video Detection	1	Intersection	\$30,000.00	\$30,000			100	\$30,000						
20	Install Signal Pole with Signal Heads	1	Approach	\$6,000.00	\$6,000					100	\$6,000				
21	Drainage Modifications (to accommodate curb extensions)	6	Intersection	\$30,000.00	\$180,000	65	\$117,000			35	\$63,000				
22	Traffic Control	1	LS	43,000	\$43,000	46	\$19,780	15	\$6,450	39	\$16,770				
23	Mobilization	1	LS	86,000	\$86,000	46	\$39,560	15	\$12,900	39	\$33,540				

7/31/2015 1 of 2

							Cost I	reakdown				
Engineer's Estimate (for Construction Items Only)						Safety-Rel	ated Cost	s			Non Sai	fety-Related
									Other S	afety-Related		Costs
Sub Total of Construction Items:	\$984,866		\$456,828		\$146,350		\$381,689					
% of ''Construction Items onl (Yellow fields - To be enter			CM #1	15%	CM #2	39%	CM #3		Other Safety		Non Safety	
Construction Item Contingencies (% of Con Items):						-		•				
Enter in the cell to the right	20.00%	196,973										
Total (Construction Items & Contingencies):	1,181,900	(Rounde	l up to the neare	st hundred	ls)							
Maximum "HSIP/Total" percentage allowed for Construction												

7/31/2015 2 of 2

### Benefit / Cost Calculation Result

1. Project Information

Application ID 04-Oakland-3 Agency Oakland Versi
MPO/RTPA Metropolitan Transportation Commission (MTC)

Version 1

2. Countermeasures and Crash Data

Crash Data Time Period 03/27/2006 to 11/23/2014 Years 8.663

· Install pedestrian crossing at uncontrolled location (with enhanced safety features)

<b>CM Number</b>	Project Typ	oe .	Crash Type	CRF	Life		
NS18	Ped and Bil	ке	Ped & Bike	35	20		
Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain		Property Damage Only	Total
Ped & Bike	1 3		4	4 13		0	21
			Annual Benefit	\$ 372	2,960	Cost	\$ 717,646
			Life Benefit	\$ 7,459	9,206	B/C Ratio	10.39

· Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)

CM Number	Project Type Geometric Mod.		Crash Type	CRF	Life		
S17			All	55 20			
Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain		Property Damage Only	Total
All	0	1	0	6		0	7
			Annual Benefit	\$ 103	,346	Cost	\$ 234,01
			Life Benefit	\$ 2,066	.928	B/C Ratio	8.83

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

CM Number	Project Type Geometric Mod.		Crash Type	CRF	Life		
R15			All	30	20	int Property Damage Only	
Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain			Total
All	0 1 1		1	7		0	9
			Annual Benefit	\$ 78	,531	Cost	\$ 608,43
			Life Benefit	\$ 1,570	,611	B/C Ratio	2.58

3. Benefit Cost Result

 Total Benefit
 \$ 11,096,745

 Total Cost
 \$ 1,560,100

 B/C Ratio
 7.11

HSIP applications are only allowed to apply a combined CRF of not more than 0.8 to a set of crashes. Please ensure one or more of the CRFs apply to different crashes/locations.

NOTE: CRFs do not total more than 0.8, as the collisions for CM2 are not applied to CM1 or CM3.

Safety Practitioner / Engineer: Rob Rees, PE

Signature:

By signing this B/C Calculation Result, you are attesting to your authority / responsibility as the Engineer in Responsible Charge of the preparation of the HSIP application 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.



#### SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

300 Lakeside Drive, P.O. Box 12688 Oakland, CA 94604-2688 (510) 464-6000

#### 2015

Thomas M. Blalock, P.E. PRESIDENT

Tom Radulovich VICE PRESIDENT

Grace Crunican GENERAL MANAGER

July 30, 2015 nas M. Blalock, P.E.

Wlad Wlassowsky

City of Oakland Public Works Agency Transportation Services Division

250 Frank H. Ogawa Plaza, Ste 4344

Oakland, CA 94612

**DIRECTORS** 

Gail Murray

Joel Keller 2ND DISTRICT

Rebecca Saltzman 3RD DISTRICT

Robert Raburn, Ph.D. 4TH DISTRICT

John McPartland

Thomas M. Blalock, P.E. 6TH DISTRICT

Zakhary Mallett, MCP

Nicholas Josefowitz

Tom Radulovich

SUBJECT:

City of Oakland Highway Safety Improvement Program Grant Applications

Mr. Wlassowsky:

On behalf of the San Francisco Bay Area Rapid Transit District (BART), I am writing to express support for the City of Oakland's Highway Safety Improvement Program (HSIP) grant applications. These projects address, bicycle, and vehicular collisions by proposing various safety improvements. All four priority areas include improvements nearby or on access routes to BART stations:

- Telegraph Avenue Corridor MacArthur and 19<sup>th</sup> St/Oakland BART Stations
- Market Street and San Pablo Avenue Corridor West Oakland BART Station (connecting to 7<sup>th</sup> St)
- The Claremont Avenue & Shattuck Avenue Corridors access routes to Rockridge and MacArthur stations.
- The Central Business District 12<sup>th</sup> St/Oakland City Center, 19<sup>th</sup> St/Oakland, and Lake Merritt Stations

The BART Board of Directors adopted a Transit-Oriented Development Policy which includes a goal to reduce the access mode share of the automobile by enhancing multi-modal access to and from BART stations in partnership with communities and access providers. Improving bicycle, pedestrian and transit access to the station is critical to improving regional, and neighborhood, sustainability. Corroborating data of past pedestrian and bicyclist fatalities as well as right angle vehicular collisions support these roadways as the best candidates of HSIP grant funds. Improved pedestrian and bicycle safety near BART stations and along key access routes is essential to the support BART's continued efforts to encourage non-automobile access to BART stations.

BART supports the proposed projects and looks forward to seeing design details should they be funded. Please do not hesitate to contact me or Hannah Lindelof (HLindel@bart.gov), BART Senior Planner, at (510) 464-6426 if you have any questions or comments about this letter.

Sincerely,

**Bob Franklin** 

Bob Franks

San Francisco Bay Area Rapid Transit District (BART)

Department Manager, Customer Access and Accessibility



May 5, 2015

Wlad Wlassowsky City of Oakland Public Works Agency, Transportation Services Division 250 Frank H. Ogawa Plaza, Ste 4344 Oakland, CA 94612

Re: Letter of Support of Oakland's HSIP Grant Applications

Mr. Wlassowsky:

Bike East Bay is happy to support your grant applications to the HSIP program and are delighted to know the City of Oakland is moving forward on four important projects where collisions are high and safety improvements are much needed. We look forward to working with the City of Oakland on these four projects, when funding is secured:

- 1. Telegraph Avenue Corridor
- 2. Market Street and San Pablo Avenue Corridor
- 3. The Claremont Avenue & Shattuck Avenue Corridors
- 4. The Central Business District

All represent four of the highest priority areas of the City's roadways. Corroborating data of past bicyclist fatalities as well as right angle vehicular collisions support these roadways as the best candidates of HSIP grant funds. And such improvements have broader safety implications for all users of the roadway, including pedestrians.

## **Telegraph Avenue:**

Bike East Bay fully supports Oakland's application to fund the Telegraph Avenue Complete Street Project and we hope you can secure this most-worthy project. This multimodal project improves safety and comfort for all users of Telegraph Avenue, including thousands of people who bicycle Telegraph Avenue every day, as well as many pedestrians and transit users. Telegraph Avenue is a



critical multimodal corridor linking Downtown Oakland with UC Berkeley, one of the most bike popular destinations in the State of California. Unfortunately, the current configuration of Telegraph Avenue disproportionately serves automobile traffic at the expense of other roadway users. We have a great opportunity to change that and the community is ready to do it.

In fact, no complete street or active transportation project in the East Bay better addresses the goal of Caltrans in its recently proposed California 2040 plan to triple bicycling in the state by 2020 and the Governor's new target for greenhouse gas reductions of 40% by 2030. Yes, both the Governor and Caltrans have set a 'high bar' for California, matching the European Union's similar high bars. Oakland is doing its part to help the Governor and Caltrans meet these goals by designing and preparing to build a popular bikeway that bike-friendly European cities would be proud of. We need funding.

What makes Telegraph Avenue so special? First, Telegraph Ave is the most heavily used bikeway in the East Bay that does not have a bike lane. Counts at various intersections along the road exceed 1,000 people on bikes, and on Bike to Work Day, energizer stations along Telegraph Avenue see over 500 bike commuters during the morning commute alone. This is not surprising, as the Oakland metro area (Oakland, Berkeley, Alameda, Albany, Emeryville, Piedmont) is a top five metro area nationally for bicycling, and in fact may be number 2 nationally behind Portland (<a href="https://bikeeastbay.org/news/oakland-metro-area-pushing-dc-2nd-nation-bike-commuting">https://bikeeastbay.org/news/oakland-metro-area-pushing-dc-2nd-nation-bike-commuting</a>). And we know from the American Communities Survey that Berkeley is ranked 4th nationally in bicycling, with UC Berkeley located right at the end of Telegraph Avenue. Telegraph is served by three BART stations and an AC Transit Rapid Bus line, which encourages many Oakland residents to bike to transit. In our opinion, the East Bay is the most bike-popular bike-to-transit metro area in the nation, and if the commute data captured it, we could be the nation's 2nd most bike popular metro area.

In 1999, Oakland was ready to stripe a bike lane on Telegraph Avenue by doing a 5-4 road diet. Unfortunately, a couple of wealthy local business owners banded together and filed a CEQA lawsuit, challenging the removal of a travel lane. Doubly unfortunately, a judge ruled against safe bike access on Telegraph Avenue, and required Oakland to do a full EIR in order to paint a white line on the street.

Then, AC Transit began work on a potential bus rapid transit project for Telegraph Ave, which further delayed progress on a new bikeway. Thoughtfully, AC Transit designed bike lanes into the BRT project but unfortunately the process for designing and approving the BRT project took ten years and in the end the Temescal neighborhood of Oakland vetoed the project. Now this neighborhood, and the KONO neighborhood are ready to fix Telegraph, thanks to a tremendous amount of



outreach by us and the City of Oakland. It was an exemplary, and exhausting, outreach effort, but well worth the effort to build support, which led to a unanimous City Council vote in December last year to approve bike lanes and complete streets improvements on Telegraph Avenue.

The grant will make significant improvements to Telegraph Avenue from approximately 17th Street to 40th Street, including continuous bicycle facilities, pedestrian crossing improvements, and transit boarding islands with bike lanes behind the bus islands. Work performed under this grant will dramatically improve safety for pedestrians and cyclists, and is consistent with Oakland's adopted Complete Streets policy.

Bike East Bay and our partner organization Walk Oakland Bike Oakland and the City of Oakland have worked together on numerous transportation projects. Through these experiences, we recognize the clear benefits to a safer and more multimodal Oakland. The work products of this important project will allow Oakland to realize these goals on Telegraph Avenue.

Bike East Bay looks forward to working closely with the City of Oakland on this important project. Once again, we urge Caltrans to fully fund Oakland's application for Telegraph Avenue HSIP funding.

## **Claremont Avenue:**

Claremont Avenue is a busy thoroughfare in need of pedestrian and bicycling safety improvements. At many times of the day, this street functions as a freeway offramp, and in one of the most heavily used bike corridors in the East Bay. We have fought for bike lanes on Claremont Avenue in Oakland and Berkeley for many years, and done much public outreach to support a road diet with bike lanes and safer pedestrian crossings. The Oakland Bicycle Master Plan includes bike lanes on Claremont as does the City of Berkeley, yet today we have not been successful in getting the necessary funding to complete this project. I hope you can fund it in this cycle of the HSIP program

#### **Market Street:**

Market Street and San Pablo Avenue need many safety improvements, especially for safer walking. We support the City's proposed reduction of travel lanes along Market Street from 5<sup>th</sup> Street to San Pablo Avenue in order to make these improvements. Pedestrian crossing improvements along Market Street at six locations are sorely needed, as are similar safety improvements along San Pablo from 32nd Street to 34<sup>th</sup> Street at 3 locations. We hope you can also fund improvements to Market St and San Pablo Avenue.



## **Central Business District:**

We support proposed countdown signals and audible signals Throughout the downtown grid at seven locations. Curb extensions for pedestrian visibility are important, as is a protected left turn phase. Four locations will have countdown signals and mast arms installed.

Thank you for your support of complete streets projects in Oakland.

Cordially yours,

Advocacy Director

Dod Control



# Service Development and Marketing 1600 Franklin Street, Oakland CA 94612

7/30/15

Wlad Wlassowsky City of Oakland Public Works Agency, Transportation Services Division 250 Frank H. Ogawa Plaza, Ste 4344 Oakland, CA 94612

**Re: Highway Safety Improvement Program** 

Mr. Wlassowsky:

The Alameda Contra Costa Transit District lends its support to your Highway Safety Improvement Program grant applications provided the proposals do not impede on our bus operations via lane reductions or conflicts with our path of travel and bus stops.

The below selected roadways represent four of the highest priority areas of the City's roadways.

- 1. Telegraph Avenue Corridor
- 2. Market Street and San Pablo Avenue Corridor
- 3. The Claremont Avenue & Shattuck Avenue Corridors
- 4. The Central Business District

Corroborating data of past pedestrian and bicyclist fatalities as well as right angle vehicular collisions support these roadways as the best candidates of HSIP grant funds. These improvements have broader safety implications for all users of the roadway.

AC Transit supports the proposed projects and look forward to seeing design details should they be funded.

Sincerely,

**Robert Del Rosario** 

**Director of Service Development** 

Alameda Contra Costa Transit District

