

California Department of Transportation's

APPLICATION FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) FUNDS

- Cycle 4 -

Submitted By

Agency:

Application Ranked #: Out of :

Project Location

On International Boulevard between 77th and 81st Avenues, 87th and 93rd Avenues, and at 83rd, 84th, 95th, 96th, 98th, and Auseon Avenues.

Project Description

Install signal on International Bl at 78th and at 83rd Av. Traffic signal modification at International Bl/90th Av. Install ladder markings on crosswalks along most intersections on International Bl.

Project Countermeasures

Countermeasure Type	Countermeasure Name	CM #
INTERSECTION (Ped & Bike)	Install pedestrian crossing	1
Control	Install new traffic signal	2

Project's Total Benefit / Cost Ratio

Caltrans District

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Attachments

Vincinity Map

Project map showing existing and proposed conditions

Collision diagram

Collision summary report/list

Detailed Engineer's Estimate

Warrant studies

Additional Narration, Documentation, Letters of Support, etc.

APPLICATION FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) FUNDS

Basic Project Information

Date	12/10/2010	Caltrans District	04	MPO	MTC
Agency	OAKLAND			Locode	5012
Total number of applications being submitted by your agency					4
Rank of this project (each project application must have a different rank)					3

Contact Person Information

Position/Title of Contact Person	Transportation Engineer				
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County	ALAMEDA	City	OAKLAND	Zip	94612

Project Information

Project Location	On International Boulevard between 77th and 81st Avenues, 87th and 93rd Avenues, and at 83rd, 84th, 95th, 96th, 98th, and Auseon Avenues.
- Be Brief	
- See Instructions	

Project Description	Install signal on International Bl at 78th and at 83rd Av. Traffic signal modification at International Bl/90th Av. Install ladder markings on crosswalks along most intersections on International Bl.
- Be Brief	
- See Instructions	

Functional Classification	14-Urban Other Principal Arterial	Posted Speed	30
Current Average Daily Traffic	Major Street	26500	(Required)
	Minor Street		(For Intersection Projects)
	Year Collected	2002	

Is the project focused primarily on "Intersection" or "Roadway" Improvement	Intersection		
Number of Intersections	20	Number of Roadway miles	N/A

Work on the State Highway System

Does the project include improvements on the State Highway System?	No
If Yes, is this a joint-funded project with Caltrans?	N/A
If Yes, confirm a "letter of support" is attached to the application.	N/A
If No, confirm in writing that Caltrans-District Traffic Office is in support or neutral to the proposed improvements within the State Right of Way.	N/A

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Narrative Questions

These narrative questions are intended to provide additional project details for the reviewers and project files. These questions will be used in the scoring of projects that do not make the initial funding cut based fully on their Benefit/Cost Ratios.

1. Identification and Demonstration of Need

Describe how was the problem identified. Provide information showing the agency identified the project based on a data-driven, comprehensive safety evaluation of their roadway infrastructure and crash data. Given that other problems may exist within the applicant's jurisdiction, explain why this problem was chosen to compete for federal safety funds. Provide some background information about the problem: How long has the problem existed? Have other countermeasures been deployed? Describe the primary cause(s) of the collisions that have occurred at the location. Are there patterns in the crash types? Attach and reference any collision data, traffic data, community surveys, reports, plans, pictures, etc. to illustrate the problem.

International Boulevard a late Route (RT185). It is a major arterial running north and south with two vehicular lane in each direction. The wide median and high speed on International makes it hard for driver and pedestrian to observe the right-of-way assignment. There is no traffic control along International between 73rd Avenue and 82nd Avenue which amount to 2586 feet distance. The intersection with 78th Avenue is in the middle of this stretch of road. The intersection with 83 Avenue is on a curvature. The combination effect of high speed, lack of control and curvature makes it diifcult for pedestrians, bicycle and vehicles to cross international Boulevard within this corridor.

Statewide Integrated Traffic Record System (SWITRS) was used to identify high collision locations, and International Boulevard was found to be one of the corridors with high incidents. After further review of the collision data, it was found that it will benefit road users significantly to install traffic signal at the two intersections of International / 78th and International / 83rd Avenue. Enhanced pedestrian crosswalks are also proposed at many unsignalized intersections between 77rd Avenue and 82 Avenue. The State has supported this proposal as contained in the letter of support. has a significant number of collisions. There have been seventy-four recorded collisions at the intersection of International and 78th Avenue, and International and 83rd Avenue with 35 injuries and two fatalities within a ten-year period (July 1st, 1999 to June 30th, 2009) with thirty-five, with five pedestrian and four bicycle collisions. Due to the high number of injuries and fatality collision, this intersection were selected to compete for federal safety.

The collision problem has existed for a long time. Traffic calming has implemented attempting to reduce collisions. Majority of the collisions were related to Right-of-way assignment curvature and high speed.

2. Potential for Proposed Improvement to Correct or Improve the Problem

Describe how the proposed solution will improve the traffic safety at or near the project site. Clearly demonstrate the connection between the problem and the proposed solution. What other countermeasures were considered? Does the proposed solution provide safety benefits for all modes of travel? Does the countermeasure reduce speed? Increase visibility? Reduce collision severity? Reduce the occurrence of specific crash types? Enhance safety for persons with disabilities? Explain why the proposed solution is the preferred alternative.

Traffic signals and ADA-compliant curb ramps are proposed at the intersections of International and 78th Avenue, and International and 83rd Avenue. The traffic signal will assign right-of-way at the intersection and this should reduce right-of-way related collisions for pedestrians and cross-street traffic, and the ADA-compliant curb ramp will provide easier access to disable persons.

The proposed improvement will benefit all modes of travel. For motorist, the proposed traffic signals will provide clear right-of-way assignment to vehicles. Driver from the minor street would not need to worry about who has the right-of-way when they just pass the wide median. For bicycle, the proposed traffic signal will include bicycle detection where bicycles will be detected and be served with green time to cross the intersection. For pedestrian, the proposed improvements will definitely benefit from the project. In addition, to the installation of ADA-compliant curb ramp, the traffic signal will be installed with audible pedestrian push button which has a locator tune. Visually impaired person can easily locate where to cross and will receive direction as to when to cross the intersection. The traffic signal will also give right-of-way to pedestrian to cross the street.

The proposed improvements can also act as a speed calming measure. With no traffic control on International and 78th Avenue, and International and 83rd Avenue, the proposed traffic signal/control can act as a speed breaker. Traffic on International Boulevard will have to stop at the traffic signal when the traffic signal is red on International.

3. Potential for Timely Implementation of Project

Describe the time frame to implement the project (This timeframe and follow-up discussion must match the "Implementation Schedule" section of the application). Identify any potential barriers to a timely implementation. Are there likely environmental issues that could delay the project? Are there seasonal considerations for the construction period? Are all construction improvements within existing public rights of way? Have other local, regional or state funds been targeted for the project that have not yet been secured? Is there community support for, or opposition to the project?

There are no issues or concerns that may impact the delivery of the project. Once the City is awarded is with the project, the City will try to obtain the authorization to start the preliminary design within a six-month period. We will then expeditiously working with Caltrans to complete all required environmental studies and obtain the NEPA clearance. The City is foreseeing minimal environmental impact by this project since it is at an intersection, and the project is not proposing and major/lane changes to the intersection. All work will be within City's right-of-way, and no time is needed for right-of-way acquisition. The design will be done by City staff to reduce the time need to hire a consultant to do the design work.

If this project is selected to be funded by HSIP federal funds, local match is available to fund this project.

This project is supported by the community, and the City does not foresee any opposition to the project since it will improve the safety of the intersection.

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Project Cost Estimate

Project Costs

Preliminary Engineering Costs

(Preliminary Engineering costs should not exceed 25% of Construction Item costs)

Environmental	\$ 20,000
PS&E	\$ 136,375
PE Subtotal	\$ 156,375

Right of Way Costs

(Right of Way costs should not exceed 10% of Construction Item costs)

Engineering	\$ -
Appraisal and Acquisition	\$ -
Utilities	\$ -
ROW Subtotal	\$ -

Construction Costs

Construction Engineering	\$ 93,825
(Construction Engineering costs should not exceed 15% of Construction Item costs)	
Construction Items	\$ 625,500
(The cost for the "Construction Items" must match the Detail Engineer's Estimate)	
CON Subtotal	\$ 719,325

Project Cost Subtotal	\$ 875,700
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Contingencies

(Maximum of 10% of Project Costs Subtotal)

\$ 87,570

Total Project Cost

\$963,270

Federal Funds Requested

(Federal Funds must not exceed \$900,000 or 90% of Total Project Cost, whichever is less)

\$866,900

Local or other funds

\$96,370

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Implementation Schedule

*This schedule is based on the assumption that the
proposed project is amended into the FTIP on:*

6/1/2011

The Local Agency is expected to deliver the project per Caltrans Local Assistance HSIP Guidelines. Otherwise the project will be "flagged" in the program's delivery report.

Request Authorization to Proceed with Preliminary Engineering (PE)

If the PE phase for the project is already complete, check this box ☐

Time for agency to internally staff project and request PE authorization

4.0 Months

Time for Caltrans and FHWA to process and approve PE Auth

1.5 Months

Proposed PE Authorization Date:

11/16/2011

Estimated Durations for elements of the PE delivery phase

Will external consultants be required to complete the PE phase of this project? ☐

Additional time allocated to the Delivery Process for hiring PE consultant(s)

Months

Time to prepare environmental studies request

4.0 Months

Time to complete CEQA NEPA studies/approvals *

4.0 Months

Time to complete the Right of Way Acquisition (federal process)

Months

Time to complete final PS&E documentation

10.0 Months

Other :

Months

Expected Completion Date for the PE Phase:

5/16/2013

* See PES Form in the Local Assistance Procedures Manual for typical studies and permits

Request Authorization to Proceed with Construction (CON)

Time for agency to request CON authorization

4.5 Months

Time for Caltrans and FHWA to process and approve CON Auth

1.5 Months

Proposed CON Authorization Date:

11/16/2013

Estimated Durations for elements of the CON delivery phase

Time included for the Agency's workload-leveling or Construction-Window needs

3.0 Months

Time to award contract with CON contractor (using the federal process)

8.0 Months

Including: Board/Council approval, Advertise, Award, Execute, Mobilize

Time to complete Construction

6.0 Months

Time included for closing the CON contract

2.0 Months

Other :

Months

Expected Completion Date for the CON Phase:

6/16/2015

Complete the Project Close-out Process

Time to complete the Project Close-out Process

3.5 Months

Time for Caltrans and FHWA to process and approve Project Close-out

1.5 Months

Expected Completion Date for the Project Close Out:

11/16/2015

APPLICATION FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) FUNDS

Benefit / Cost Ratio Result

1. Summary of Project Countermeasures

Project Type	Countermeasure	Crash Type	CRF	Life
INTERSECTION (Ped & Bike)	Install pedestrian crossing	Ped & Bike	10	10
Control	Install new traffic signal	All	25	20

2. Crash Data Time Period

From	7/1/1999	To	6/30/2009	Years	10.00
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3. Details of Each Countermeasures

A. Countermeasure #1: Install pedestrian crossing

a) Crash Data Summary

Crash Type	Fatal	SI	Injury	MI	PDO	Total
All						
Night						
Ped & Bike	2		38		4	44
Animal						
Emerg Vehicle						

b) Result

Benefit (Annual)	\$102,232
Benefit (Life)	\$829,193

% of Total Cost	20
Cost	\$192,655

B/C Ratio	4.304
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B. Countermeasure #2: Install new traffic signal

a) Crash Data Summary

Crash Type	Fatal	SI	Injury	MI	PDO	Total
All	2		24		45	71
Night						
Ped & Bike						
Animal						
Emerg Vehicle						

b) Result

Benefit (Annual)	\$239,388
Benefit (Life)	\$3,253,354

% of Total Cost	80
Cost	\$770,621

B/C Ratio	4.222
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C. Countermeasure #3:

a) Crash Data Summary

Crash Type	Fatal	SI	Injury	MI	PDO	Total
All						
Night						
Ped & Bike						
Animal						
Emerg Vehicle						

b) Result

Benefit (Annual)	
Benefit (Life)	

% of Total Cost	
Cost	

B/C Ratio	
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4. Total Benefit : \$4,082,547

5. Total Project Cost : \$963,276

6. Project's Total B/C Ratio : 4.238

**APPLICATION FOR HIGHWAY SAFETY
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Applicant Data Verification and Signature

All HSIP applications (hard-copies only) must be signed by a registered engineer or the Agency's Transportation Manager in responsible charge of their Traffic Engineering section. By signing and submitting this application, the engineer/manager is attesting to :

1. All data in the application is accurate.
2. All likely project costs are included in the Total Project Cost.
3. Each countermeasure included represents a minimum of 20% of the Total Project Cost
4. All crash data is accurately shown in the application and applied to countermeasures using generally accepted traffic engineering principles.
5. The agency understands the Project Delivery Requirements for the HSIP Program and is prepared to deliver the Project with these requirements.

Agency Official Name Ade Oluwasogo

Engr. License # or Title C 55964

Signature A. Oluwasogo

Date December 9th, 2010

Application Attachments

Attachments to be included in Application

Included	Not Included	
<input checked="" type="checkbox"/>		Vicinity map
<input checked="" type="checkbox"/>		Project map showing existing and proposed conditions
<input checked="" type="checkbox"/>		Collision diagram
<input checked="" type="checkbox"/>		Collision summary report/list
<input checked="" type="checkbox"/>		Detailed Engineer's Estimate
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Warrant studies (required when applicable to proposed improvement)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Letter of Support from Caltrans
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Additional Narration, Documentation, Photographs, Letters of Support, etc.