APPLICATION FORM FOR 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.

Application ID 04-East Palo Alto-1

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

Submitted By (Agency)
East Palo Alto

Application Category
Benefit Cost Ratio (BCR)

Caltrans District	Application Number	Out of
04	1	1

Project Location

The Project is located along University Avenue in the City of East Palo Alto. The five signalized intersection with proposed enhancements within the project bounds are Bay Rd, Runnymede St, Woodland Ave, Donohoe St, and Kavanaugh Rd.

Project Description

The Project include improving pedestrian crossings throughout the corridor, installing upgraded signal equipment to increase visibility, and installing protected left phases to separate conflicting vehicle movements.

Total Project Cost
$1,235,700

HSIP Funds Requested
$1,235,700

Benefit Cost Ratio (BCR)
12.32

APPLICATION FORM FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

Basic Information

Date: Sep 14, 2020 | Caltrans District: 04 | MPO: MTC

Agency: East Palo Alto | County: San Mateo County

Total number of applications being submitted by your agency: 1

Application Number (each application must have a unique number): 1

☐ Check if this application is one of the multiple ones for the same project (please review the form instructions for explanation).

Contact Person Information

Name (Last, First): Javed, Humza

Position/Title of Contact Person: City Engineer

Email: hjaved@cityofepa.org | Telephone: (650) 853-3130 | Extension:

Address: 2415 University Avenue

City: East Palo Alto | Zip Code: CA 94303 (Enter only a 5-digit number)

Application Category: Benefit Cost Ratio (BCR)

Project Information

Project Title:
-Be Brief (Limited to 100 Characters)

University Avenue Intersection Safety Enhancements

Project Location:
-Be Brief (Limited to 250 Characters)
-See Application Form Instructions

The Project is located along University Avenue in the City of East Palo Alto. The five signalized intersection with proposed enhancements within the project bounds are Bay Rd, Runnymede St, Woodland Ave, Donohoe St, and Kavanaugh Rd.

Project Description:
-Be Brief (Limited to 250 Characters)
-See Application Form Instructions

The Project include improving pedestrian crossings throughout the corridor, installing upgraded signal equipment to increase visibility, and installing protected left phases to separate conflicting vehicle movements.

Total Project Cost

$1,235,700

HSIP Funds Requested

$1,235,700

Benefit Cost Ratio (BCR)
(Required for a BCR application. Enter 0 for Funding Set-Aside application)

12.32

APPLICATION FORM FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

1. Project Identification

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 and highest collision types?
(Limited to 5,000 characters)

The University Avenue Safety Enhancements Project addresses years of community concerns along University Avenue. As part of the preparation for this grant application, a jurisdiction wide safety analysis was completed. The analysis identified four intersections along University as having the top five greatest number of collisions by intersection in East Palo Alto. Woodland Avenue was the only intersection in the project extents not in the top five intersections. University Avenue also has the highest occurrence of collisions per intersection than any other roadway in East Palo Alto. Comprehensively addressing these safety deficiencies is the City of East Palo Alto's top safety concern.

The Project would install the proposed improvements at the intersections with the highest instances of collisions in East Palo Alto as well as one intersection that has similar features as high collision locations. In total, at the five locations identified, there have been 61 reported collisions, one of which was fatal and four were severe injury collisions. The most common traffic violation was unsafe speed, accounting for 32% of all reported collisions in the Project area.

The project area had 19 collisions involving a bicycle or pedestrian. Bulb outs, reduced corner curb radius and high visibility crosswalks will help minimize pedestrian exposure to motor vehicles by shortening the pedestrian crossing distance and making pedestrians more visible to motorists. Reduced corner curb radius may also reduce the speed of turning vehicles.

The fatal collision, at Kavanaugh Dr and University Ave, involved a motor vehicle disregarding a traffic signal. The countermeasure chosen for that location will directly address that safety deficiency by installing 12" LED signal heads. Disregarding traffic signals and signs is common along the corridor, accounting for almost 20% of all reported collisions along the corridor.

In addition to the reported collisions, numerous residents have raised concerns about the corridor's traffic speeds, as the corridor is a direct route, connecting the Dumbarton Bridge with the 101 Freeway.

2. Prior Attempts to Address the Safety Issues

List all other projects/countermeasures that have been (or are being) deployed at the location(s) within the last 5 years. Applicants must identify all federal and/or state funds that have been used or approved within the proposed project limits within the last 5 years. Normally HSIP funding cannot be used to construct safety countermeasures at the same locations within 5 years.
(Limited to 5,000 characters)

In response to community concerns that have arisen in the last 10 years, the City has worked with the police department to provide enforcement along the corridor. In addition to increased enforcement between 2008 and 2013 the City installed bulb outs, high visibility crosswalk, left turn phase and larger signal heads at Bell St and University Ave.

While these spot improvements have improved conditions a more comprehensive corridor-wide approach can reduce overall fatal and severe crashes of certain types within the corridor more effectively than applying safety improvements at a small number of spot locations and allow a more proactive approach.

3. Other Comments

Explain here if this project has any special circumstances or if you have other comments. Enter "NA" if none.
(Limited to 5,000 characters)

N/A

APPLICATION FORM FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

Application Attachments (See Application Form Instructions)

Please attach all files as needed. Note: files may not be attachable if file is open. Close before attach.

1. Engineer's Checklist (Required for all projects)
   Engineers Checklist-signedstamped.pdf
2. Vicinity map/Location map (Required for all projects)
   Attachment 2 - Location Map.pdf
3. Project maps/plans showing existing and proposed conditions (Required for all projects)
   Attachment 3 - University Ave Concepts.pdf
4. Pictures of Existing Condition (Required for all projects)
   Attachment 4 - Pictures of existing conditions East Palo Alto.pdf
5. HSIP Analyzer (Required for all projects)
   HSIPAnalyzer202009SR.pdf
6. Collision diagram(s) (Required for a BCR application)
   Attachment 6 - East Palo Alto Collision Diagram.pdf
7. Collision List(s) (Required for a BCR application)
   Attachment 7 - Collision List.pdf

Warrant Studies

☐ Check if the project includes new installation of certain traffic control devices (e.g., traffic signals, pedestrian signals, etc.). If yes, Traffic Signal Warrant 4, 5 and/or 7 must be met (CA MUTCD Chapter 4C).

8. Warrant Studies (Not required for this project)

Work on the State Highway System

Does the project include improvements on the State Highway System?

☐ Yes, and the project will be jointly-funded with Caltrans
(Must be jointly-funded if the project is for intersection safety improvement involving SHS).
A formal Letter of Support from Caltrans District Traffic is required. The letter should include estimates of cost sharing.

☐ Yes, but the project will not be jointly-funded with Caltrans.
A written correspondence from Caltrans District Traffic is required. The correspondence should indicate that Caltrans does not see issues that would prevent the proposed project from receiving an encroachment permit.

☒ No.

9. Letter/email of Support from Caltrans (No SHS involved - not required for this project)

10. Additional narration, documentation, letters of support, etc. (Optional)
    Letters of Support East Palo Alto.pdf

HSIP Cycle 10 Application – Engineer's Checklist
(For BCR applications)

This application checklist is to be used by the engineer in "responsible charge" of the preparation of this HSIP application, 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 has been finalized.

The purpose of this checklist is to ensure all of the primary elements of the application are included and the application is free of errors, allowing the application to be accurately ranked in the statewide selection process. Applications with errors in the supporting data will not be considered in the project selection process.

Special Considerations for Engineers before signing and stamping 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 calculations or reports 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.

1. **Vicinity map /Location map**

Engineer's Initials: RJ

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

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

Engineer's Initials: RJ

   a. Be to a scale which allows the visual verification of the overall project limits and the construction limits of each safety countermeasure (CM) included in the application's BCR
   b. Show the <u>full</u> scope of the proposed project, including any non-safety construction items
   c. Show the "Influence Area" for each safety CM included in the application's BCR
   d. Show all changes to existing lanes 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 ROW of the State, Railroad, and all other government agencies)

3. **Project cross-section** showing existing and proposed conditions.

(Only required for projects with roadway excavation, cut/fill slopes, and changes to lane widths)

☑ **Check if not applicable (no initials required when not applicable)**

Engineer's Initials: _____

   a. Show dimension, changes, ROW lines, safety CMs, etc.

4. **Countermeasure Selection**:

Engineer's Initials: RJ

a. The CMs used are appropriate and reasonable based on the application instructions and the Local Roadway Safety Manual.

5. **Crash Data** used in the Benefit Cost Ratio (BCR) calculations:

Engineer's Initials: RJ

a. Must be from a reliable and well documented source
b. Must be within influence area of CMs and must be 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. Must be accurately shown in collision diagrams and collision lists attached to this application
d. Must be presented in terms of the number of crashes (**not** the number of injuries and fatalities)
e. Must be based on the most recent data available and must have a minimum 3 years and maximum 5 years of data

6. **Collision Diagrams** (Shown separately by CM or combined)

Engineer's Initials: RJ

a. Should be to scale with crash locations accurately plotted
b. Reveal collision patterns necessary to justify CMs
c. The influence area for each CM is shown separately on the diagrams (unless the areas are identical)
d. All crashes included in the BCR 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 data in the Collision Lists and the crash data tables in the HSIP Analyzer

7. **Collision Lists** (Shown separately by CM or combined)

Engineer's Initials: RJ

a. Totals for each Location and/or CM are shown with crashes segregated based on Crash Severity
b. If the Lists includes crashes that were not appropriate to include in the BCR calculations, these crashes must be crossed through or removed and not included in the totals
c. The totals shown match the data in the Collision Diagrams and the crash data tables in the HSIP Analyzer
d. Each crash is only counted as one, even if there were multiple victims and/or vehicles involved

8. **Detailed Engineer's Estimate and Project Cost Estimate (HSIP Analyzer – Sections I & II)**

Engineer's Initials: RJ

a. All likely construction costs associated with the project are identified and included in Section I (Construction Cost Estimate and Cost Breakdown)
b. Each of the main project elements are broken out into separate construction items. The costs for the construction items are based on calculated quantities and appropriate corresponding unit costs
c. Costs for the construction items are distributed among the CMs using a logical method to fairly calculate each CM's cost
d. "Other Safety-Related" and "Non-Safety-Related" components are properly identified and accounted for
e. The Total Construction Cost in Section I must match the "Construction Items – Total Cost" in Section II (Project Cost Estimate) (automatic in the HSIP Analyzer)
f. The project costs of all phases must be properly accounted for in Section II

9. **Benefit and BCR Calculation (HSIP Analyzer – Sections III & IV)**

Engineer's Initials: RJ

a. The CMs applied are selected properly based on the proposed work for safety improvements;
b. The crash data time period must be a minimum of 3 years and a maximum of 5 years and the most recent available crash data must be used.
c. The data in the crash data tables for each location must include only the crashes for the specified crash types and must match those in the Collision Diagrams and the Collison Lists.
d. The totals for each Location match the totals shown in the Collision Diagrams and Collision Lists
e. The total project cost in the BCR calculation must match the total project cost in Section II (automatic in the HSIP Analyzer)
f. The data transferred to the application form must match the data in the HSIP Analyzer

10. **Warrant studies/guidance (Check if not applicable)**

☑ **Check if not applicable (no initials required when not applicable)**

Engineer's Initials: _____

a. For new signals, Warrant 4, 5 or 7 must be documented as having been met based on the CA MUTCD. For pedestrian signals (including Pedestrian Hybrid Beacon (HAWK)), the justification may be Warrant 4, 5 and/or 7, or passing the test in Figure 4F-1/4F-2 in Chapter 4F of CA MUTCD.

11. **Additional narration, documentation, letters of support:**

Engineer's Initials: RJ

a. The answers to the "Narrative Questions" in the application form and the HSIP Analyzer are consistent with and support the engineering logic and the calculations in the development of the application's BCR
b. When needed, clarify non-standard application of countermeasures, crashes and/or costs; appropriate documentation is attached to the application to document the engineering decisions and calculations.

Signature and Stamp Page

Licensed Engineer:

Name:	Ruta Jariwala
Title:	Principal
Engineer License Number:	73840
Signature:	
Date:	10/19/2020
Email:	rjariwala@tjkm.com
Phone:	925.463.0611

Engineer's Stamp:

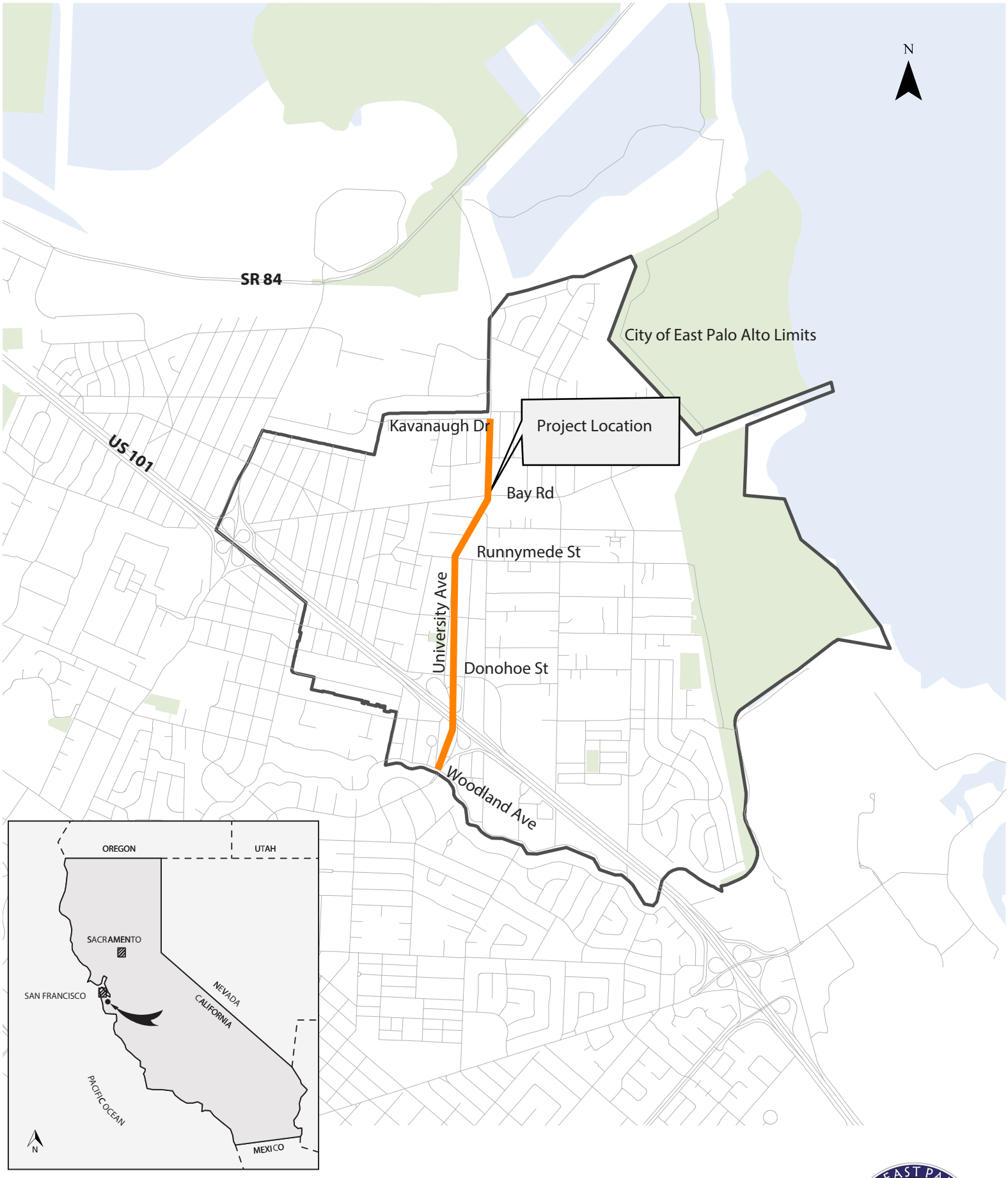
To ensure the application's quality and the agency's commitment to deliver the safety project in an expedited manner, the application must be signed by the Agency's Transportation/Traffic Engineering Manager.

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 per 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 HSIP 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:

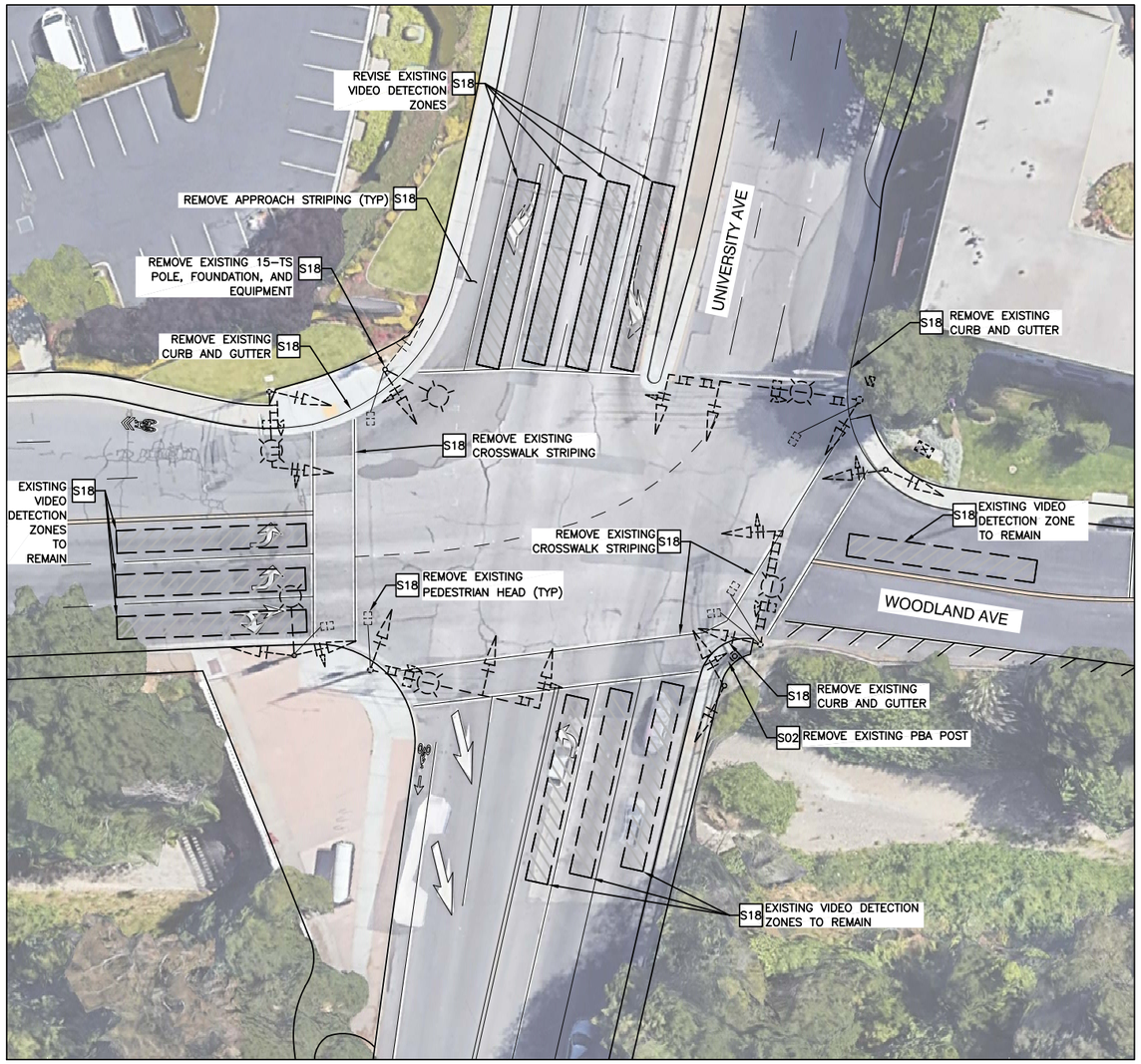
Name:	Humza Javed, P.E.
Title:	City Engineer
Signature:	
Date:	10/20/2020



Project Location Map
University Ave HSIP Improvements

UNIVERSITY AVENUE AND WOODLAND AVENUE

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com



EXISTING CONDITIONS

LEGEND:

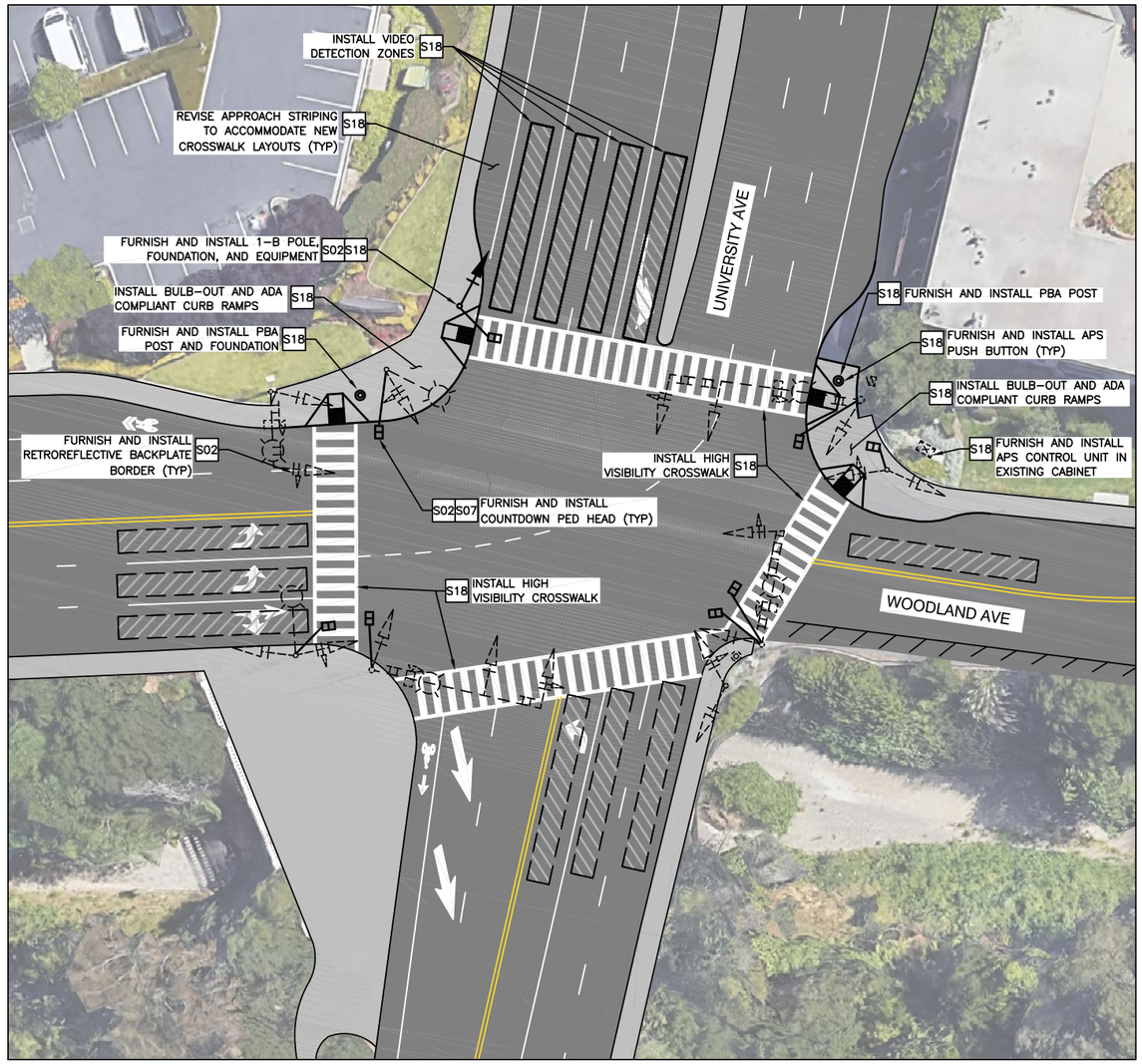
S02 COUNTERMEASURE S02 IMPROVEMENTS

S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'



PROPOSED CONDITIONS

LEGEND:

S02 COUNTERMEASURE S02 IMPROVEMENTS

S18 COUNTERMEASURE S18PB IMPROVEMENTS

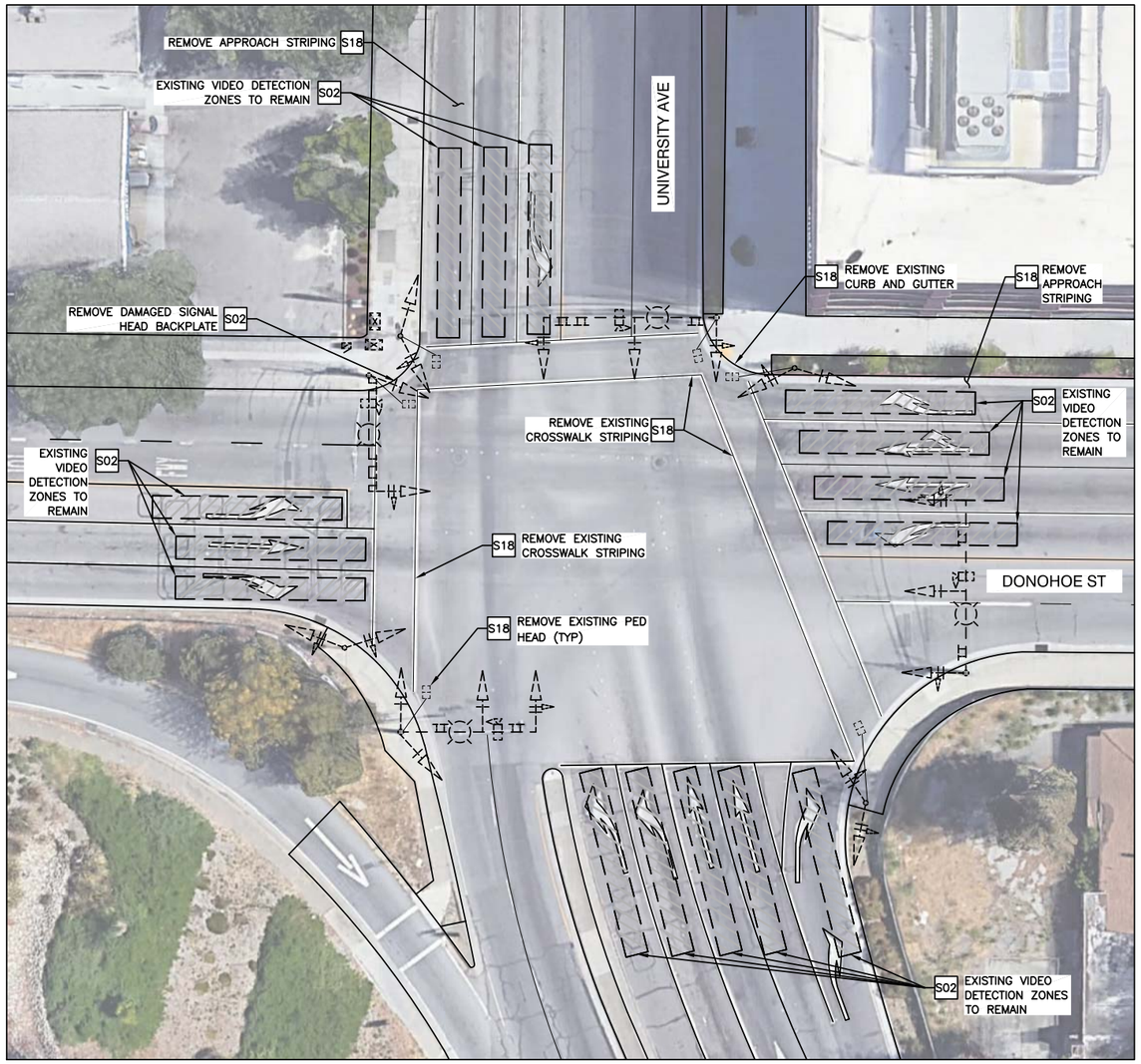
N

0 40' 80'

SCALE: 1"=40'

UNIVERSITY AVENUE AND DONOHOE STREET

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com



EXISTING CONDITIONS

LEGEND:

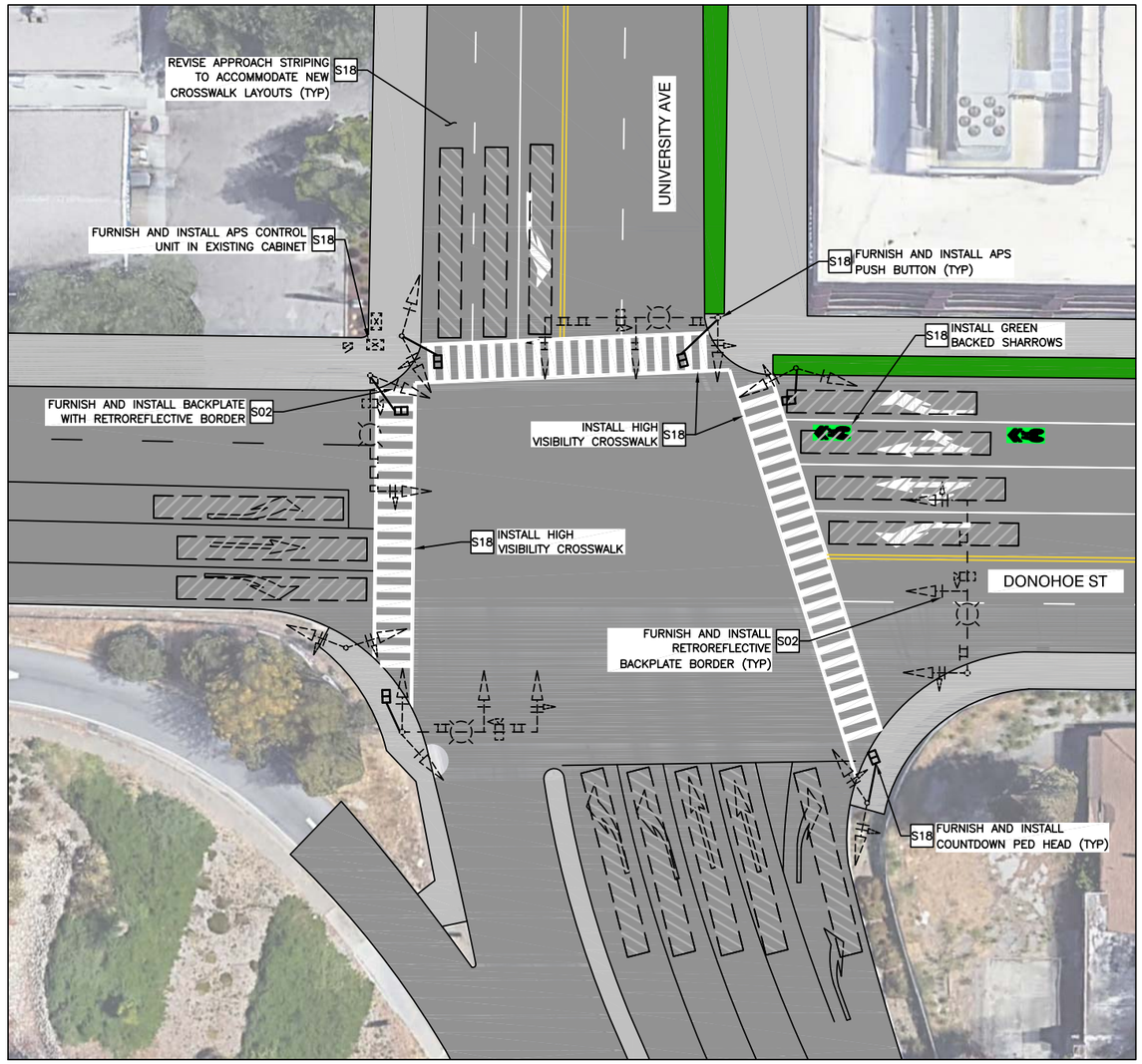
S02 COUNTERMEASURE S02 IMPROVEMENTS

S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'



PROPOSED CONDITIONS

LEGEND:

S02 COUNTERMEASURE S02 IMPROVEMENTS

S18 COUNTERMEASURE S18PB IMPROVEMENTS

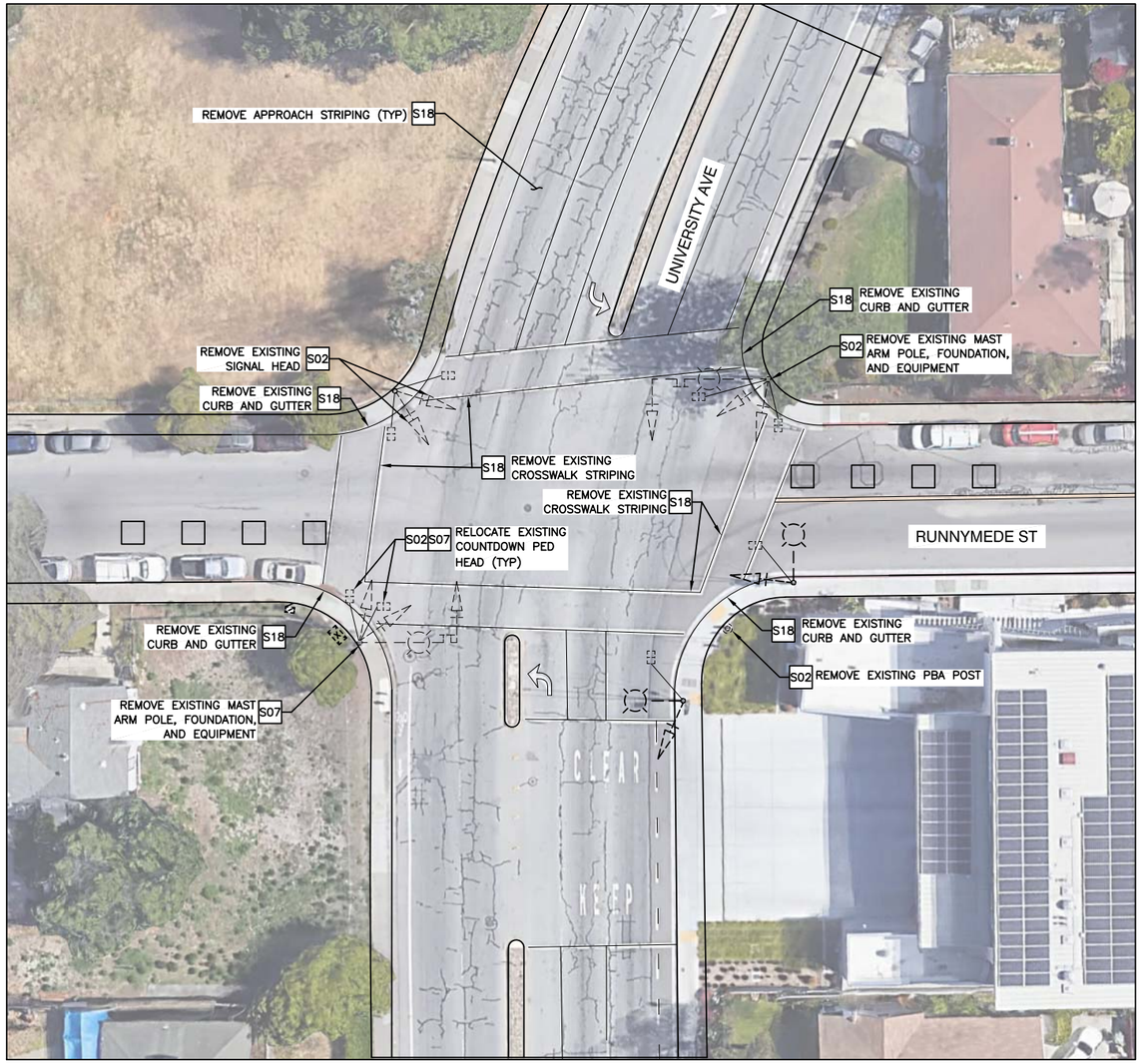
N

0 40' 80'

SCALE: 1"=40'

UNIVERSITY AVENUE AND RUNNYMEDE STREET

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com



EXISTING CONDITIONS

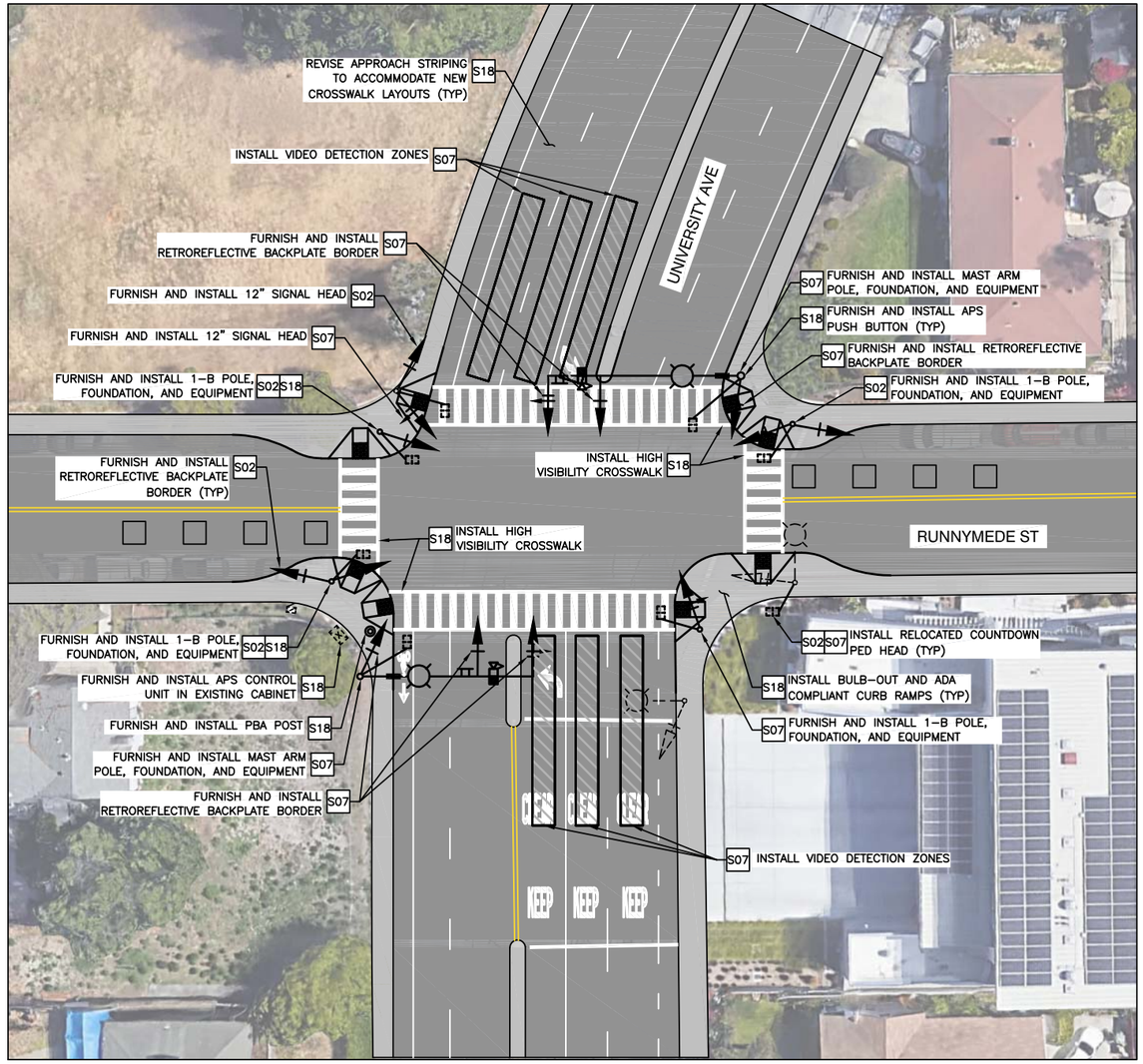
LEGEND:

- S02 COUNTERMEASURE S02 IMPROVEMENTS
- S07 COUNTERMEASURE S07 IMPROVEMENTS
- S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'



PROPOSED CONDITIONS

LEGEND:

- S02 COUNTERMEASURE S02 IMPROVEMENTS
- S07 COUNTERMEASURE S07 IMPROVEMENTS
- S18 COUNTERMEASURE S18PB IMPROVEMENTS

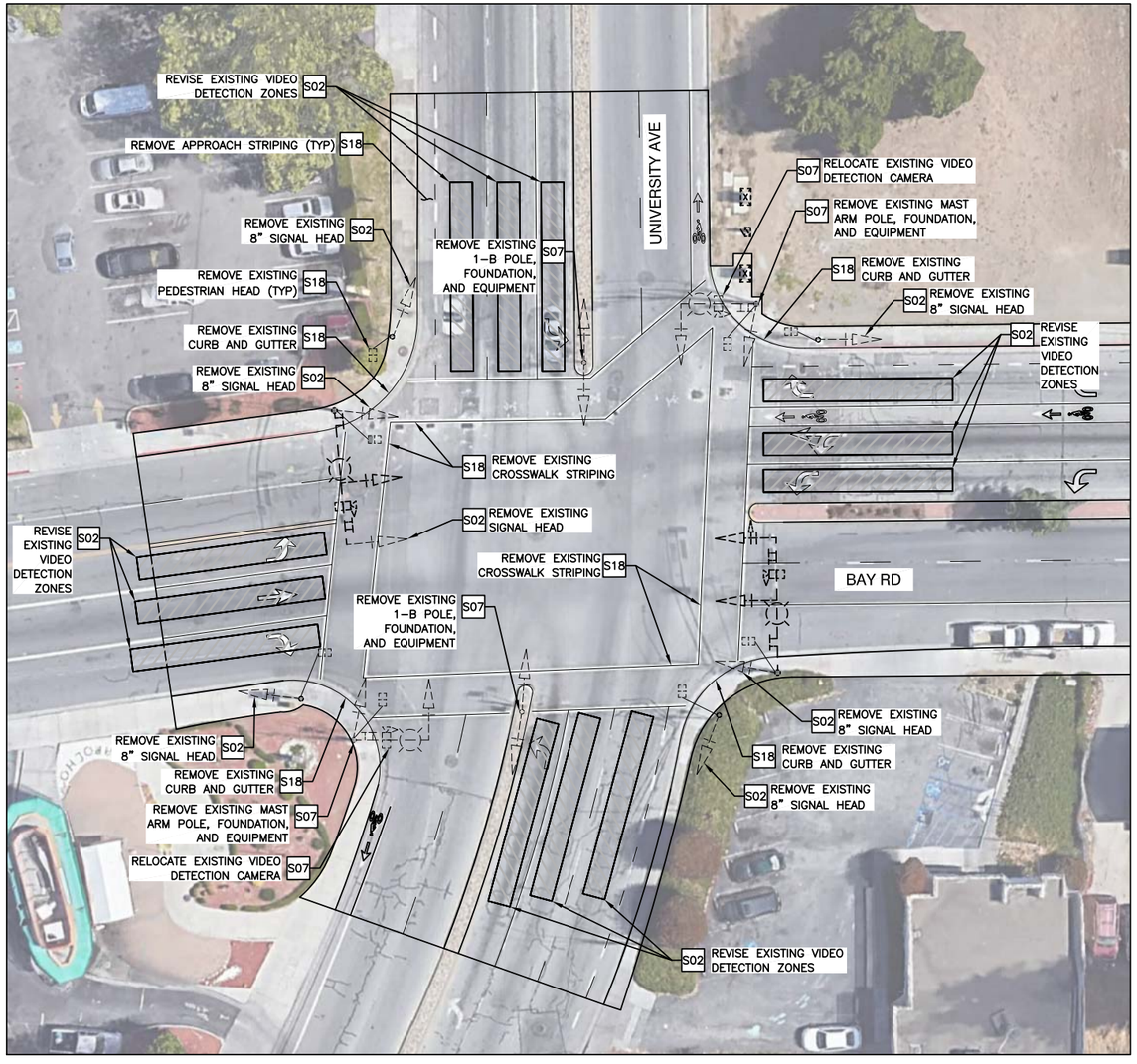
N

0 40' 80'

SCALE: 1"=40'

UNIVERSITY AVENUE AND BAY ROAD

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com



EXISTING CONDITIONS

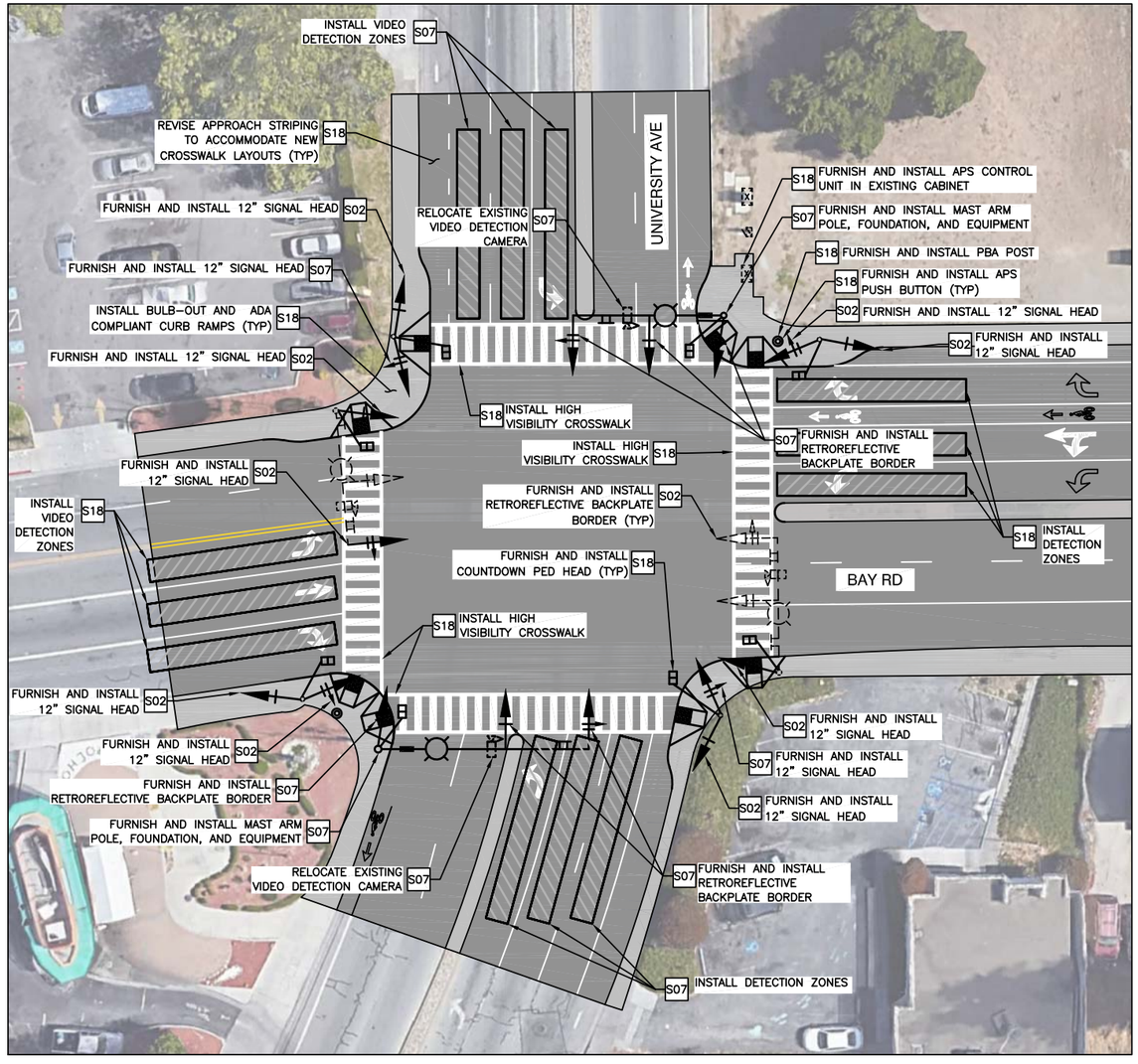
LEGEND:

- S02 COUNTERMEASURE S02 IMPROVEMENTS
- S07 COUNTERMEASURE S07 IMPROVEMENTS
- S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'



PROPOSED CONDITIONS

LEGEND:

- S02 COUNTERMEASURE S02 IMPROVEMENTS
- S07 COUNTERMEASURE S07 IMPROVEMENTS
- S18 COUNTERMEASURE S18PB IMPROVEMENTS

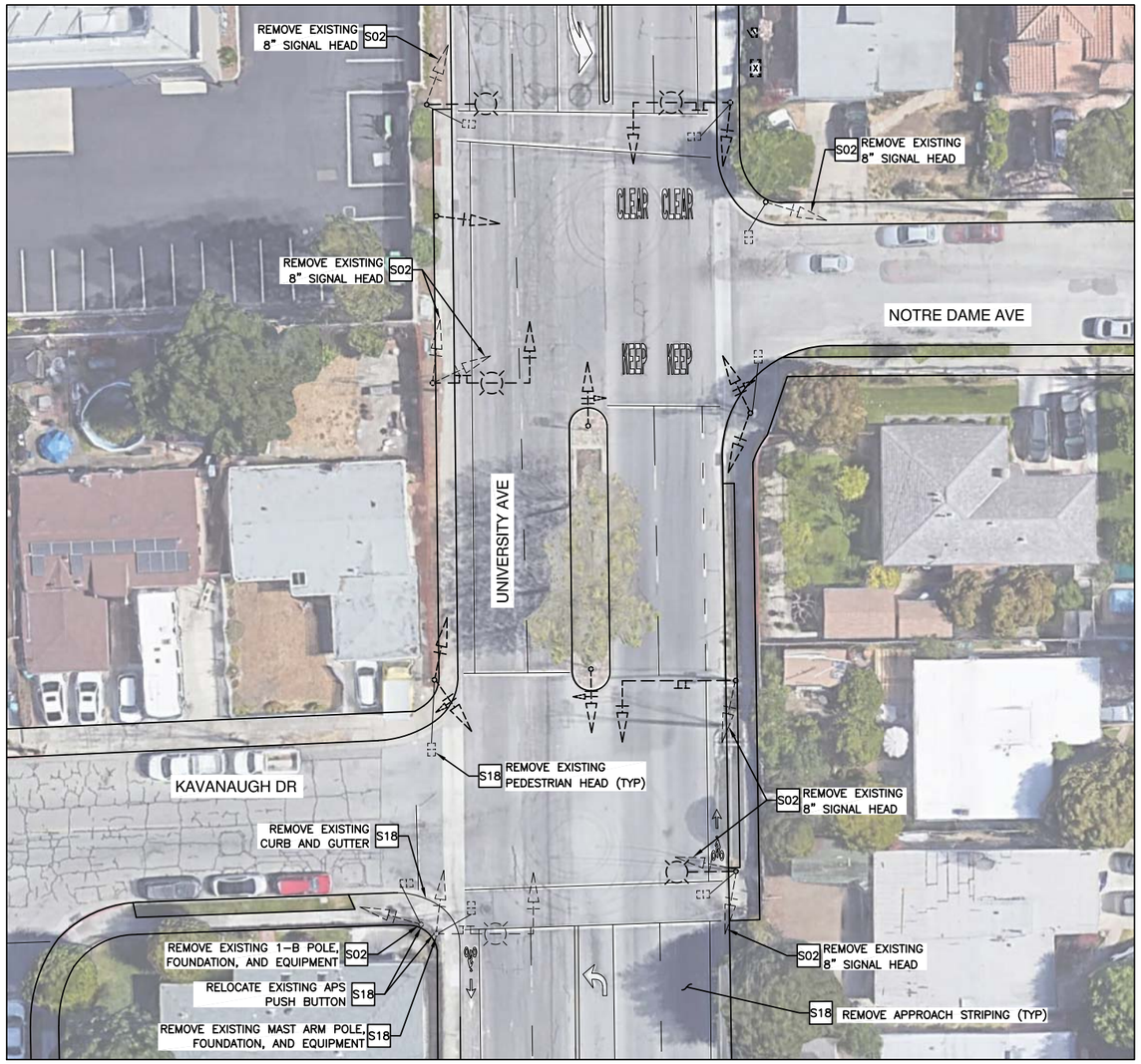
N

0 40' 80'

SCALE: 1"=40'

UNIVERSITY AVENUE AND KAVANAUGH DR

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com



EXISTING CONDITIONS

LEGEND:

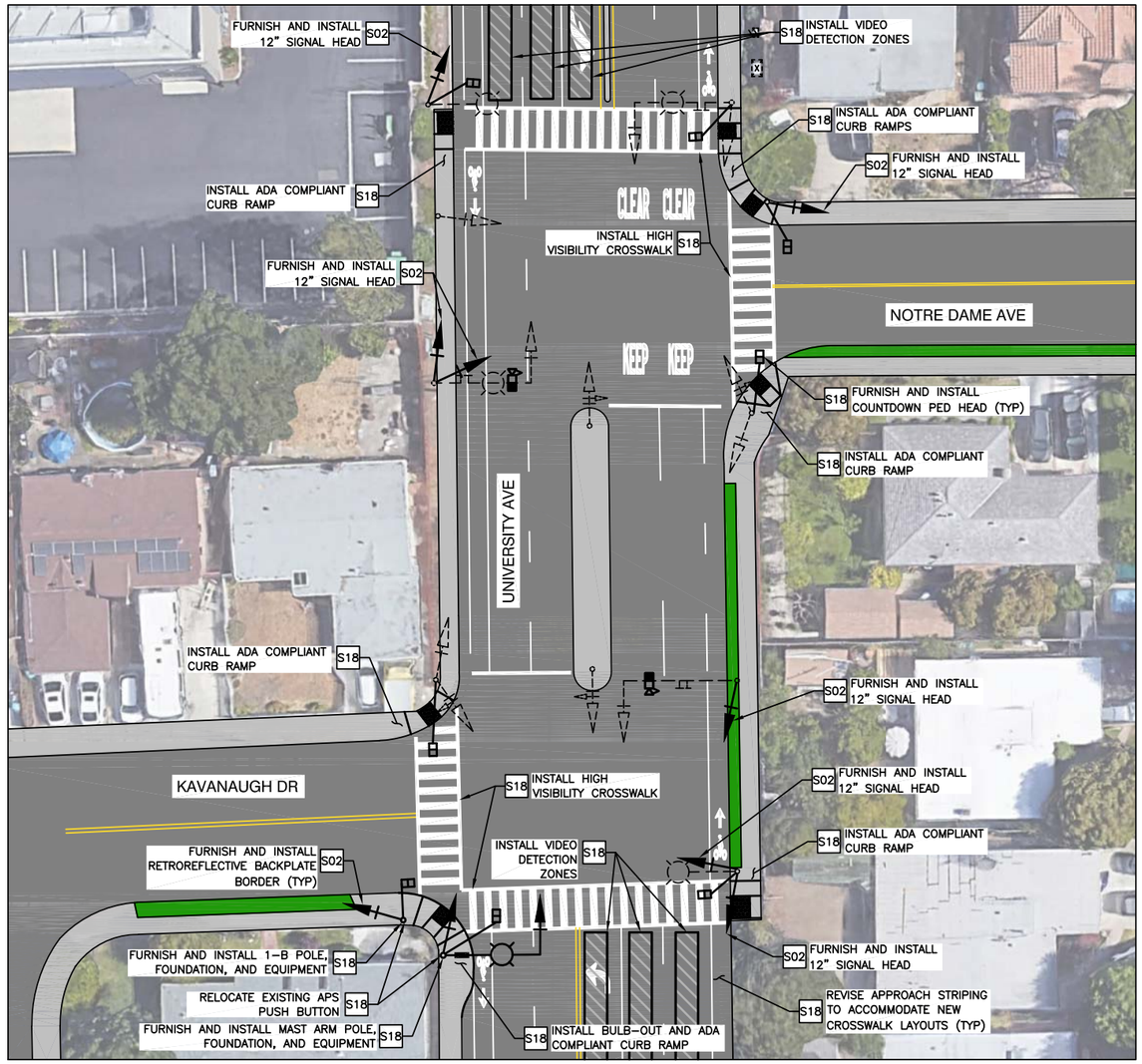
S02 COUNTERMEASURE S02 IMPROVEMENTS

S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'



PROPOSED CONDITIONS

LEGEND:

S02 COUNTERMEASURE S02 IMPROVEMENTS

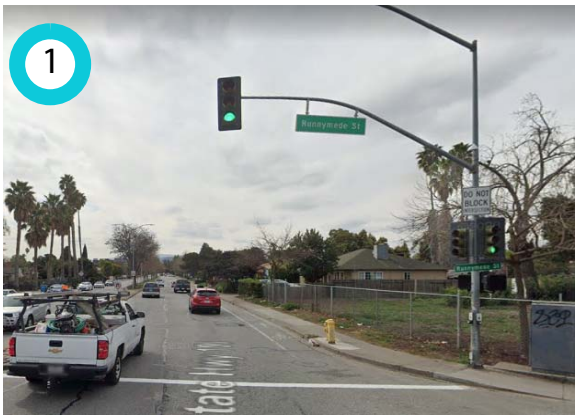
S18 COUNTERMEASURE S18PB IMPROVEMENTS

N

0 40' 80'

SCALE: 1"=40'

Countermeasure #1: S7 Provide Protected Left Turn Phase



Runnymede St and University Ave: Intersections with no left protection and a history of angled crashes involving left turning, opposing vehicles cabbe reduce with a protected left turn phase

Runnymede St and University Ave: Protected left turn phases can reduce rear end and sideswipe crashes between left turning vehicles.

Countermeasure #2: S02 Improve Signal Hardware

Bay St and University St: 9" signals reduce visibility of signal heads compared to 12" LED signals

Kavanaugh Dr and University St: intersections with a history of disregarding signal violations can be reduced by upgrading signal equipment to larger signal heads reduce the frequency of collisions

Countermeasure #3: S20 Install Pedestrian Crossing Improvements

Woodland Ave and University Ave: Crosswalks in the Project area lack high visiblity crosswalk and advanced stop bars that increase pedestrian visibility

Donohoe St and University Ave: Decreasing corner radius can result in decreased vehicle speeds

Pictures of Existing Conditions

University Ave HSIP Improvements

HSIP ANALYZER

Cost Estimate, Crash Data and Benefit Cost Ratio (BCR) Calculation for Highway Safety Improvement Program (HSIP) Application

Important: Review and follow the step-by-step instructions in "Manual for HSIP Analyzer". Completing the HSIP Analyzer without referencing to the manual may result in an application with fatal flaws that will be disqualified from the ranking and selection process.

All yellow highlighted fields must be filled in. The gray fields are calculated and read-only. This is a dynamic form (i.e. later steps vary depending on the data entered in earlier steps). If any error messages in red appear, fix the errors prior to proceeding to the next steps.

Save this file using "HA" +Application ID as the file name (e.g. "HA03-Sacramento-01.pdf"). Attach the completed HSIP Analyzer to the last page of the HSIP Application Form.

1. Application ID, Project Location and Project Description (copy from the HSIP Application Form):

Application ID: **04-East Palo Alto - 1**

Project Location: (limited to 250 characters): The Project is located along University Avenue in the City of East Palo Alto. The five signalized intersection with proposed enhancements within the project bounds are Bay Rd, Runnymede St, Woodland Ave, Donohoe St, and Kavanaugh Rd

Project Description: (limited to 250 characters): The Project include improving pedestrian crossings throughout the corridor, installing upgraded signal equipment to increase visibility, and installing protected left phases.

2. Application Category (BCR or Set-asides): Benefit Cost Ratio (BCR)

A safety benefit cost analysis is required for this application. This tool will guide through cost estimate, safety benefit evaluation and Benefit Cost Ratio (BCR) calculation.

Type of project locations: S (Signalized Intersections)

Number of Intersections/Miles: 1

Number of countermeasures for the project: 3

CM No. 1:	S07: Provide protected left turn phase (left turn lane already exists)
CM No. 2:	S18PB: Install pedestrian crossing (S.I.)
CM No. 3:	S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number

3. Project information

Functional Classification (FC): Other Principal Arterial

For California Road System (CRS) maps to check the FC, click here.

Urban / Rural Area: Urban

What is the approximate total cost percentage that is HR3 eligible? 90%

Annual Average Daily Traffic (see instructions):

AADT (Major Road) 25,000 AADT (Minor Road) 3,000 Year of AADT 2015

Posted Speed Limit (mph): 25

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, click here.)

Intersections

How were the safety needs and potential countermeasures for this project first identified?

Jurisdiction-wide safety analysis

California established Systemic Safety Analysis Report Program (SSARP) in 2016 and Local Roadway Safety Plan (LRSP) Program in 2019. Was this project identified through the SSARP or LRSP? No

Is the project focused primarily on "spot location(s)" or "systemic" improvements? Systemic

If it is systemic, the primary type of the "systemic" improvements is:

Upgrade/Modify/Remove Traffic Signal

What is the primary mode of travel intended to be benefited by this project (enter if not in the list)?

Motorized users

Approximate percentage of project cost going to improvements related to **motorized** travel 50%

4. Project schedule

The local agency is expected to deliver the project per the HSIP Program Delivery requirements. Assuming the HSIP Cycle 10 projects selected for funding will be programmed by January 1, 2021, please enter your best estimated dates for the following implementation milestones. Leave blank if not applicable.

Will this project use HSIP funds for Preliminary Engineering (PE) Phase?	Yes
Will an external consultant be hired to do the PE work?	Yes

Delivery Milestones to be met: PE Authorization by 9/30/2021; CON Authorization by 6/30/2024.

PE Authorization Date:	6/1/2021
Environmental Clearance Date:	9/1/2021
Right of Way Clearance Date:	9/1/2021
Final PS&E Date:	12/1/2022
CON Authorization Date:	6/1/2023
Construction Contract Award Date:	3/1/2023
Construction Completion Date:	5/1/2024
Project Close-Out Date:	10/1/2024

Section I. Construction Cost Estimate and Cost Breakdown

The purpose of this section is to:

- Provide detailed engineer's estimate (for construction items only). The costs for other phases (PE, ROW, and CE) will be included in Section II.
- Determine the project's maximum Funding Reimbursement Ratio (FRR).

I.1 Countermeasures (CMs) applied to all location(s) (from Page No. 1)

Number of countermeasures: 3
1. S07: Provide protected left turn phase (left turn lane already exists); HSIP Funding Eligibility: 100%
2. S18PB: Install pedestrian crossing (S.I.); HSIP Funding Eligibility: 100%
3. S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number; HSIP Funding Eligibility: 100%

I.2 Detailed Engineer's Estimate for Construction Items:

Cost breakdown by CMs. For each item, enter a cost percentage for each of the CMs and "Other Safety-Related" (OS) components. (e.g. enter 10 for 10%). The cost % for "Non-Safety-Related" (NS) components is calculated. Do not enter data for gray fields (calculated or not used).

	No.	Item Description	Unit	Quantity	Unit Cost	Total	% for CM#1 (S07)	% for CM#1 (S18PB)	% for CM#1 (S02)	% for OS*	% for NS**
+ -	1	Mobilization	LS	1	$19200.00	19,200	33 %	33 %	34 %	%	0 %
+ -	2	Traffic Control	LS	1	$38400.00	38,400	33 %	33 %	34 %	%	0 %
+ -	3	Remove Existing Striping	LF	6,000	$3.00	18,000	33 %	33 %	34 %	%	0 %
+ -	4	Remove Existning Pavement markings	SF	3,379	$4.00	13,516	%	100 %	%	%	0 %
+ -	5	Remove Curb and Gutter	LF	700	$10.00	7,000	%	100 %	%	%	0 %
+ -	6	Remove Asphalt Pavement	SY	420	$11.00	4,620	%	100 %	%	%	0 %
+ -	7	Remove Existing Mase Arm Pole, Equipment and Foundation	EA	5	$6500.00	32,500	20 %	%	80 %	%	0 %
+ -	8	Remove Existing 1-A Pole, Equipment, & Foundation	EA	3	$3000.00	9,000	20 %	%	80 %	%	0 %
+ -	9	Remove Existing Back Plate	EA	4	$100.00	400	20 %	%	80 %	%	0 %
+ -	10	Remove Existing Signal Head	EA	23	$100.00	2,300	20 %	%	80 %	%	0 %
+ -	11	Remove Existing Signal Head Mount	EA	11	$100.00	1,100	20 %	%	80 %	%	0 %
+ -	12	Remove Existing Pedestrian Head and Mount	EA	28	$100.00	2,800	%	100 %	%	%	0 %
+ -	13	Remove Existing Luminaire Fixture	EA	5	$195.00	975	20 %	%	80 %	%	0 %
+ -	14	Relocate Existing Video Detection Camera	EA	2	$5000.00	10,000	20 %	%	80 %	%	0 %
+ -	15	Relocate Existing Pedestrian Signal Head(s) & Pedestrian Signal Head Mount	EA	8	$650.00	5,200	%	100 %	%	0 %	0 %
+ -	16	Relocate Existing APS Push button	EA	2	$300.00	600	%	100 %	%	%	0 %
+ -	17	Install Striping	LF	6,755	$4.00	27,020	0 %	100 %	%	%	0 %
+ -	18	Install Pavement Marking	SF	9,500	$8.00	76,000	%	100 %	%	%	0 %
+ -	19	Install Sidewalk	SF	3,725	$20.00	74,500	%	100 %	%	%	0 %
+ -	20	Install ADA curb ramp	EA	27	$4500.00	121,500	%	100 %	%	%	0 %

	No.	Item Description	Unit	Quantity	Unit Cost	Total	% for CM#1 (S07)	% for CM#1 (S18PB)	% for CM#1 (S02)	% for OS*	% for NS**
+ -	21	Install Curb and Gutter	LF	770	$30.00	23,100	0 %	100 %	0 %	0 %	0 %
+ -	22	Furnish and Install PBA Post & Foundation	EA	5	$500.00	2,500	100 %	%	%	%	0 %
+ -	23	Furnish and Install 1-B Pole & Foundation	EA	6	$5000.00	30,000	%	%	100 %	%	0 %
+ -	24	Furnish and Install Mast Arm Pole & Foundation (24-4-100, 35' mast arm)	EA	1	$14000.00	14,000	20 %	%	80 %	%	0 %
+ -	25	Furnish and Install Mast Arm Pole & Foundation (26-4-100, 40' mast arm)	EA	1	$16250.00	16,250	20 %	%	80 %	%	0 %
+ -	26	Furnish and Install Mast Arm Pole & Foundation (26-4-100, 45' mast arm)	EA	1	$16900.00	16,900	20 %	%	80 %	%	0 %
+ -	27	Furnish and Install Mast Arm Pole & Foundation (29-5-100, 50' mast arm)	EA	1	$18850.00	18,850	20 %	%	80 %	%	0 %
+ -	28	Furnish and Install Mast Arm Pole & Foundation (29-5-100, 55' mast arm)	EA	1	$19500.00	19,500	20 %	%	80 %	%	0 %
+ -	29	Furnish and Install LED 12" x 3 Signal Head	EA	43	$500.00	21,500	20 %	%	80 %	%	0 %
+ -	30	Furnish and Install Signal Head Mount	EA	24	$200.00	4,800	20 %	%	80 %	%	0 %
+ -	31	Furnish and Install Retroreflective Back Plate	EA	94	$500.00	47,000	20 %	%	80 %	%	0 %
+ -	32	Furnish and Install Countdown Pedestrian Head	EA	30	$350.00	10,500	%	100 %	%	%	0 %
+ -	33	Furnish and Install APS Push Button	EA	30	$600.00	18,000	%	100 %	%	%	0 %
+ -	34	Furnish and Install APS Cables	LF	1,485	$4.00	5,940	20 %	%	80 %	%	0 %
+ -	35	Furnish and Install APS Controller	EA	4	$2500.00	10,000	20 %	%	80 %	%	0 %
+ -	36	Furnish and Install Sign on Mast Arm	EA	4	$1000.00	4,000	20 %	%	80 %	%	0 %
+ -	37	Furnish and Install Video Detection System (Per Camera)	EA	4	$10000.00	40,000	20 %	%	80 %	%	0 %
+ -	38	Furnish and Install LED Luminaire Fixture	EA	5	$1000.00	5,000	20 %	%	80 %	%	0 %
+ -	39	Furnish and Install LED IISNS	EA	5	$2000.00	10,000	20 %	%	80 %	%	0 %
+ -	40	Furnish and Install Conduit/ Cabling	LS	5	$8000.00	40,000	20 %	%	80 %	%	0 %
					Weighted Average (%)		11%	50%	39%		
					Total ($)	$822,471					

* % for OS: Cost % for Other Safety-Related components;
** % for NS: Cost % for Non Safety-Related components.

Contingencies, as % of the above "Total" of the construction items: 10 % $82,247
(e.g. enter 10 for 10%)

Total Construction Cost (Con Items & Contingencies): $904,800
(Rounded up to the nearest hundreds)

I.3 Funding Reimbursement Ratio

Project's Maximum Funding Reimbursement Ratio = 100.0%

The project's Maximum Funding Reimbursement Ratio is calculated as the least of the FEs of the above countermeasures, minus the percentage of the non-safety related costs in excess of 10%. This is the maximum value allowed to be entered in "HSIP/Total(%)" column in Section II (Project Cost Estimate).

Section II. Project Cost Estimate

All project costs, **for all phases and by all funding sources**, must be accounted for on this form.

i. "**Total Cost**": Round all costs up to the nearest hundred dollars.

ii. "**HSIP/Total (%)**": The maximum allowed is the project's Funding Reimbursement Ratio (FRR) as determined in Section I. Click the button to assign the maximum to all, OR enter if not the maximum.

iii. "**HSIP Funds**" and "**Local/Other Funds**" are calculated.

Pay attention to the interactive warning/error messages below the table. The messages, if any, must be fixed, or exceptions should be justified in narrative question No. 3 in the HSIP Application Form.

Project's maximum Funding Reimbursement Ratio (FRR) (from Section I, rounded up to integer): 100 %

To set all "HSIP/Total (%)" in the below table to the above maximum FRR, click "Set": Set

Description	Total Cost	HISP/Total (%)	HSIP Funds	Local/Other Funds
Preliminary Engineering (PE) Phase				
Environmental	$41,200	74 %	$30,488	$10,712
PS&E	$164,800	74 %	$121,952	$42,848
Subtotal - PE	**$206,000**	**74 %**	**$152,440**	**$53,560**
Right of Way (ROW) Phase				
Right of Way Engineering	$0	74 %	$0	$0
Appraisals, Acquisitions & Utilities	$0	74 %	$0	$0
Subtotal - Right of Way (ROW)	**$0**	**%**	**$0**	**$0**
Construction (CON) Phase				
Construction Engineering (CE)	$123,600	74 %	$91,464	$32,136
Construction Items	$904,800 (Read only - from Section I)	74 %	$669,552	$235,248
Subtotal - Construction	**$1,028,400**	**74 %**	**$761,016**	**$267,384**
PROJECT TOTAL	$1,234,400	74 %	$913,456	$320,944

☐ Agency does NOT request **HSIP** funds for PE Phase (automatically checked if PE - HSIP funds is $0).

Interactive Warning/Error Messages:
If there are any messages in the below box, please fix OR explain justification for exceptions in narrative question No 3 in the HSIP application form.

Section III. Crash Data

The benefit of an HSIP safety project is achieved by reducing potential future crashes due to the application of the safety countermeasures (CMs). In this section, you will need to provide information regarding the historical crash data at the project sites.

Different CMs will reduce crashes of different types during the life of the safety improvements. Depending on the selected CMs for the application, you will be required to fill in one or more crash data tables, for any combination of the five crash types (datasets): "All" , "Night" , Ped & Bike", "Emergency Vehicle", and "Animal" (Each of the later four datasets is a sub-dataset of the "All" dataset.)

Note: If a Roundabout CM (S16 or NS04 or NS05) is selected, additional information (such as roundabout configuration and ADT) is required.

For more information regarding crash data, please refer to the Manual for HSIP Analyzer and the Local Roadway Safety Manual.

1. Please indicate the sources of the crash data. Typical sources include Statewide Integrated Traffic Records System (SWITRS), UC Berkeley SafeTREC TIMS, your locally preferred mapping software (such as Crossroads) or any other data sources.

Berkeley Safe TREC TIMS and Statewide Integrated Traffic Records System

2. Please explain how "incremental approach" has been pursued if CM R15, R16, R17 or R18 is proposed. Please skip this question if none of these CMs are being proposed.

Countermeasure R15 (Widen shoulder), R16 (Curve shoulder widening (outside only)), R17 (Improve horizontal alignment (flatten curves)) and R18 (Flatten crest vertical curve) are not eligible unless they are done as the last step of an "incremental approach". Applicants need to document they have already installed lower cost and lower impact CMs but the crash rate is unacceptably high. What safety improvements have been pursued and installed at the project sites within the last ten years?

N/A

III.1 List of Project Locations

List all locations/sites included in this project. Highlighted fields must be filled in.

1) Initially there is only one location line in each group. Click "+"/"-" to add a new line/delete an existing line;
2) Enter location description for each line. The same descriptions will be auto-populated in III.2.

If your project has a large number of locations, please aggregate some locations into one description, e.g. 10 stop controlled intersections, 5 horizontal curves, etc. Please limit the number of rows to no more than 25.

Based on the criteria described on the last page, the locations/sites need to be divided into 3 groups.

	Location No.	Location Description (Intersection Name or Road Limit or General Description)
	Location type for this project:	S (Signalized Intersections)
		GROUP No. 1
+ -	1	All
		GROUP No. 2
+ -	2	Ped and Bike
		GROUP No. 3
+ -	3	Protected Left

III.2: Countermeasures and Crash Data

Countermeasures and Crash Data -Location Group No. 1 of 3

Hide Group Details

Step 1: Check countermeasure(s) to be applied for the locations in this group (countermeasures available are from Page 1).

	No.	Countermeasure (CM) Name	CM Type*	Crash Reduction Factor (CRF)	Expected Life (Years)	Crash Type	Federal Funding Eligibility
☐	1	S07: Provide protected left turn phase (left turn lane already exists)	S	0.3	20	All	100%
☐	2	S18PB: Install pedestrian crossing (S.I.)	S	0.25	20	Ped & Bike	100%
☒	3	S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S	0.15	10	All	100%
	*CM Type: S-Signalized Intersection; NS-Non-Signalized Intersection; R-Roadway.						

Step 2: Provide crash data.

2.1 Crash Data Period: must be between 3 and 5 years.

from (MM/DD/YYYY): 01/01/2015 To (MM/DD/YYYY): 12/30/2019 Crash Data Period (years) = 5

2.2 Fill out the crash data table(s) for the crash type(s) as required by the selected countermeasure(s) in Step 1.

Based on the countermeasures selected in Step 1 , the crash data types to be provided are:

(1) All

Crash Data Table for Crash Type: ALL

No.	Location (from Table III.1)	Fatal (ALL)	Severe Injury (ALL)	Other Visible Injury (ALL)	Complaint of Pain (ALL)	PDO (ALL)	Total
1	All	1	3	41	26	132	203
	Total	1	3	41	26	132	203

III.2: Countermeasures and Crash Data

Countermeasures and Crash Data -Location Group No. 2 of 3

Hide Group Details

Step 1: Check countermeasure(s) to be applied for the locations in this group (countermeasures available are from Page 1).

	No.	Countermeasure (CM) Name	CM Type*	Crash Reduction Factor (CRF)	Expected Life (Years)	Crash Type	Federal Funding Eligibility
☐	1	S07: Provide protected left turn phase (left turn lane already exists)	S	0.3	20	All	100%
☒	2	S18PB: Install pedestrian crossing (S.I.)	S	0.25	20	Ped & Bike	100%
☐	3	S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S	0.15	10	All	100%
	*CM Type: S-Signalized Intersection; NS-Non-Signalized Intersection; R-Roadway.						

Step 2: Provide crash data.

2.1 Crash Data Period: must be between 3 and 5 years.

from (MM/DD/YYYY): 01/01/2015 To (MM/DD/YYYY): 12/31/2019 Crash Data Period (years) = 5

2.2 Fill out the crash data table(s) for the crash type(s) as required by the selected countermeasure(s) in Step 1.

Based on the countermeasures selected in Step 1 , the crash data types to be provided are:

(1) Ped & Bike

Crash Data Table for Crash Type: Pedestrians and Bicyclists Involved (P&B)

No.	Location (from Table III.1)	Fatal (P&B)	Severe Injury (P&B)	Other Visible Injury (P&B)	Complaint of Pain (P&B)	PDO (P&B)	Total
1	Ped and Bike	0	2	17	7	2	28
	Total	0	2	17	7	2	28

III.2: Countermeasures and Crash Data

Countermeasures and Crash Data -Location Group No. 3 of 3

Hide Group Details

Step 1: Check countermeasure(s) to be applied for the locations in this group (countermeasures available are from Page 1).

	No.	Countermeasure (CM) Name	CM Type*	Crash Reduction Factor (CRF)	Expected Life (Years)	Crash Type	Federal Funding Eligibility
☒	1	S07: Provide protected left turn phase (left turn lane already exists)	S	0.3	20	All	100%
☐	2	S18PB: Install pedestrian crossing (S.I.)	S	0.25	20	Ped & Bike	100%
☐	3	S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	S	0.15	10	All	100%
	*CM Type: S-Signalized Intersection; NS-Non-Signalized Intersection; R-Roadway.						

Step 2: Provide crash data.

2.1 Crash Data Period: must be between 3 and 5 years.

from (MM/DD/YYYY): 01/01/2015 To (MM/DD/YYYY): 12/31/2019 Crash Data Period (years) = 5

2.2 Fill out the crash data table(s) for the crash type(s) as required by the selected countermeasure(s) in Step 1.

Based on the countermeasures selected in Step 1 , the crash data types to be provided are:

(1) All

Crash Data Table for Crash Type: ALL

No.	Location (from Table III.1)	Fatal (ALL)	Severe Injury (ALL)	Other Visible Injury (ALL)	Complaint of Pain (ALL)	PDO (ALL)	Total
1	Protected Left	0	1	9	5	18	33
	Total	0	1	9	5	18	33

Section IV. Calculation and Results

Click the "Calculate" button to calculate. The script will first check if there are any errors or inconsistencies in the countermeasure selections and crash data. If errors are detected and displayed below, the errors must be fixed first before you click the "Calculate" button again. If no errors are displayed, the calculation results are provided in this section. Please refer to the Manual for HSIP Analyzer for details regarding possible errors.

Calculate

Benefit Summary:

Information/Data*	Benefit from CM #1	Benefit from CM #2	Benefit from CM #3	Total Benefit
Location type: S (Signalized Intersections) Number of location(s): 1 Number of selected countermeasure(s): 1 (S02) Crash Data Information: Crash data period (years): 5 Number of crashes(F/SI/OVI/I-CP/PDO)*: All: 1,3,41,26,132	$0	$0	$4,818,631	$4,818,631
Location type: S (Signalized Intersections) Number of location(s): 1 Number of selected countermeasure(s): 1 (S18PB) Crash Data Information: Crash data period (years): 5 Number of crashes(F/SI/OVI/I-CP/PDO)*: Ped & Bike: 0,2,17,7,2	$0	$6,192,000	$0	$6,192,000
Location type: S (Signalized Intersections) Number of location(s): 1 Number of selected countermeasure(s): 1 (S07) Crash Data Information: Crash data period (years): 5 Number of crashes(F/SI/OVI/I-CP/PDO)*: All: 0,1,9,5,18	$4,217,521	$0	$0	$4,217,521
Sum	**$4,217,521**	**$6,192,000**	**$4,818,631**	**$15,228,152**

*Number of crashes: five crash numbers are for Fatal (F), Severe Injury (SI), Other Visible Injury (OVI), Injury - Complaint of Pain (I-CP), and Property Damage Only (PDO), respectively.

BCR and other key information:

Transfer the "Total Project Cost" , "HSIP Funds Requested" and the BCR to Page 2 of the HSIP Application Form.

Safety Countermeasure Information

Number of countermeasures: 3

S07: Provide protected left turn phase (left turn lane already exists)

S18PB: Install pedestrian crossing (S.I.)

S02: Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number

Cost, FRR, Benefit and BCR:

Total Project Cost	HSIP Funds Requested	Max. FRR
$1,234,400	$913,456	100%

Total Expected Benefit	Benefit Cost Ratio (BCR)
15,228,152	12.32

Collision Diagram

Primary Street:
University Ave

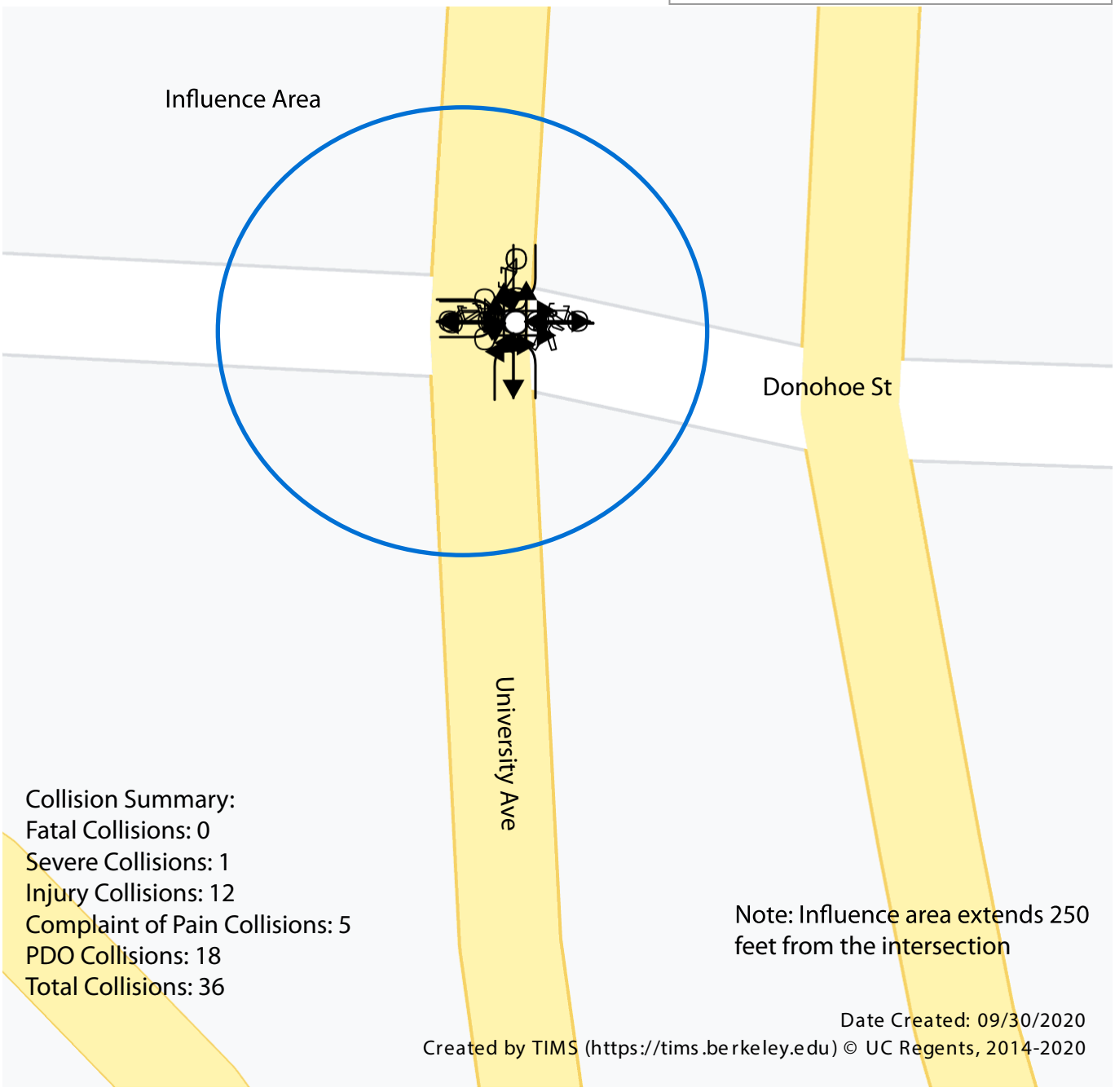
Secondary Street:
Donohoe St

Time Period:
2015 - 2019

Agency Name:
City of East Palo Alto

Mapping Summary:	
Fatal Collision	0
Injury Collision	18
Mapped	18
Not Drawn	18
Total	36

Straight
Left Turn
Right Turn
U-Turn
Overturned
Ran Off Road
Stopped
Parked
Pedestrian
Bicycle
Object
Fatal Crash
Injury Crash



Collision Summary:
Fatal Collisions: 0
Severe Collisions: 1
Injury Collisions: 12
Complaint of Pain Collisions: 5
PDO Collisions: 18
Total Collisions: 36

Note: Influence area extends 250 feet from the intersection

Date Created: 09/30/2020

Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2014-2020

Collision Diagram - Donohoe St
University Ave HSIP Improvements

COLLISION DIAGRAM

Primary Street:
University Ave

Secondary Street:
Bay St

Time Period:
2015 - 2019

Agency Name:
City of East Palo Alto

Mapping Summary:	
Fatal Collision	0
Injury Collision	12
Mapped	10
Not Drawn	24
Total	34

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash

Collision Summary:
Fatal Collisions: 0
Severe Collisions: 1
Injury Collisions: 7
Complaint of Pain Collisions: 4
PDO Collisions: 22
Total Collisions: 34

Note: Influence area extends 250 feet from the intersection

Date Created: 09/30/2020

Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2014-2020

Collision Diagram - Bay St

University Ave HSIP Improvements

Collision Diagram

Primary Street:
University Ave

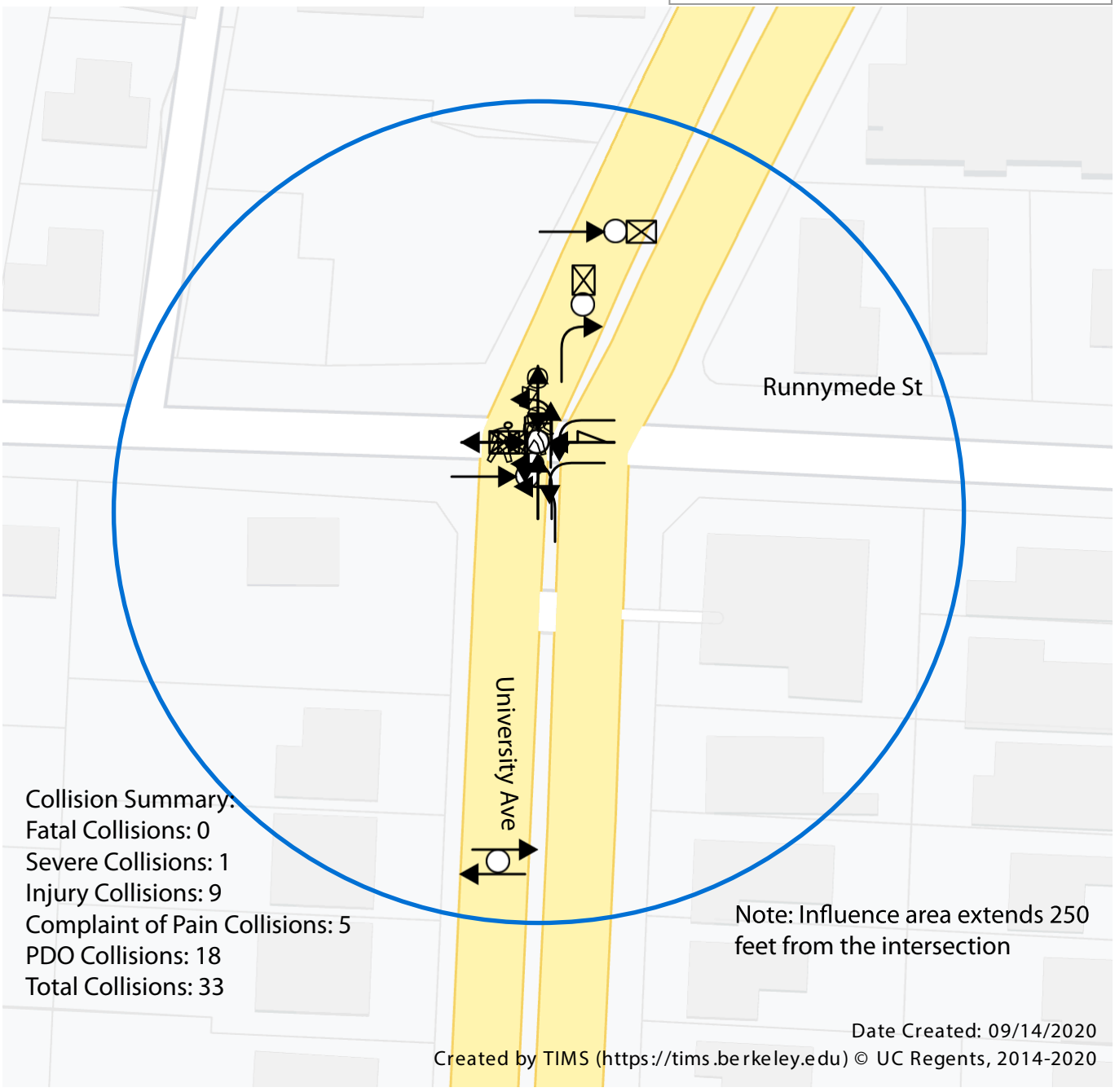
Secondary Street:
Runnymede St

Time Period:
2015- 2019

Agency Name:
East Palo Alto

Mapping Summary:	
Fatal Collision	0
Injury Collision	15
Mapped	14
Not Drawn	19
Total	33

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash



Collision Summary:
Fatal Collisions: 0
Severe Collisions: 1
Injury Collisions: 9
Complaint of Pain Collisions: 5
PDO Collisions: 18
Total Collisions: 33

Note: Influence area extends 250 feet from the intersection

Date Created: 09/14/2020

Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2014-2020

Collision Diagram - Runnymede St
University Ave HSIP Improvements

Collision Diagram

Primary Street:
University Ave

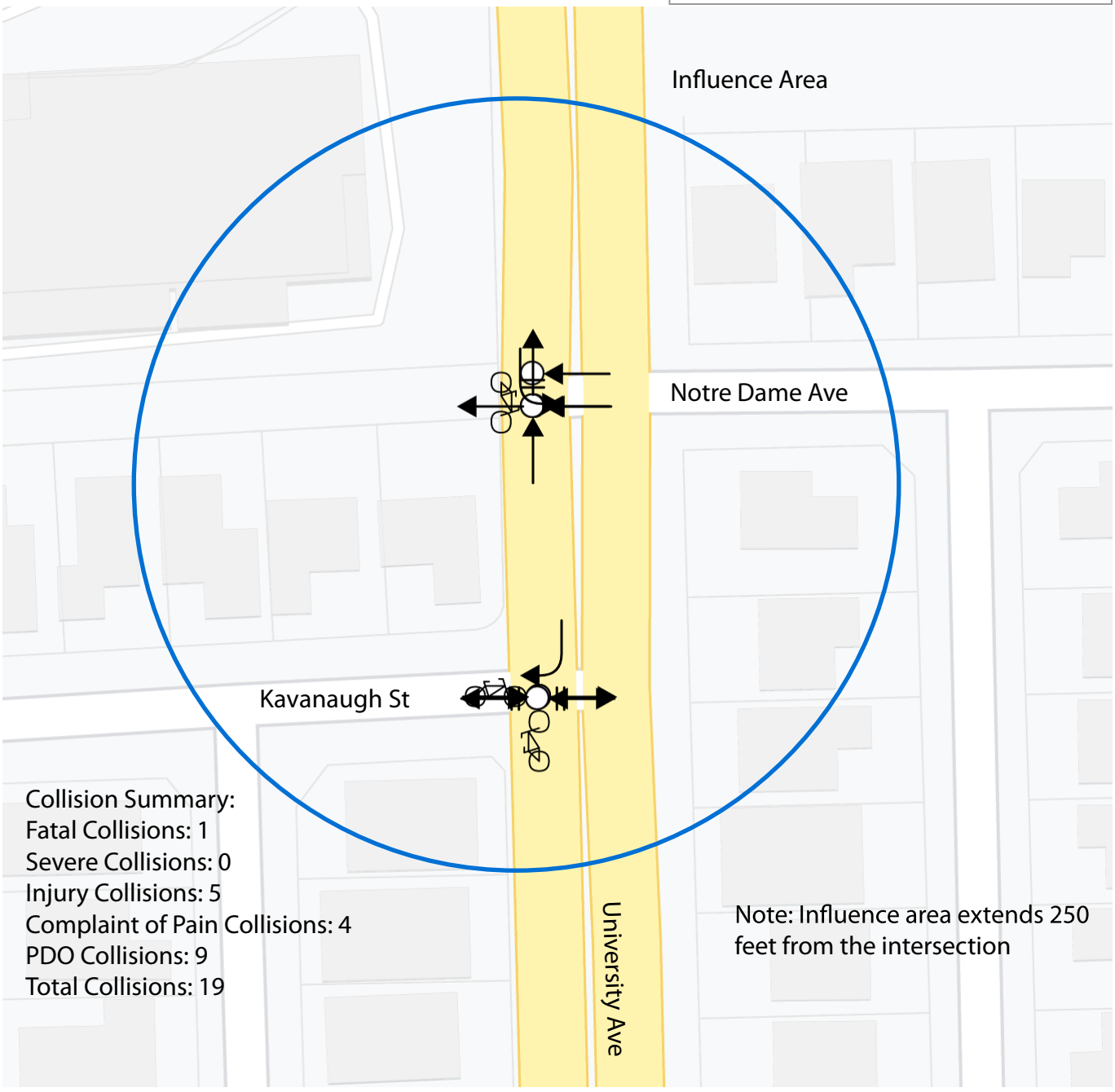
Secondary Street:
Kavanaugh St

Time Period:
2015- 2019

Agency Name:
City of East Palo Alto

Mapping Summary:	
Fatal Collision	1
Injury Collision	9
Mapped	9
Not Drawn	10
Total	19

Straight	Pedestrian
Left Turn	Bicycle
Right Turn	Object
U-Turn	Fatal Crash
Overturned	Injury Crash
Ran Off Road	
Stopped	
Parked	



Collision Summary:
Fatal Collisions: 1
Severe Collisions: 0
Injury Collisions: 5
Complaint of Pain Collisions: 4
PDO Collisions: 9
Total Collisions: 19

Note: Influence area extends 250 feet from the intersection

Date Created: 10/09/2020

Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2

Collision Diagram - Kavanaught St

University Ave HSIP Improvements

Collision Diagram

Primary Street:
University Ave

Secondary Street:
Woodland Ave

Time Period:
2015 - 2019

Agency Name:
City of East Palo Alto

Mapping Summary:	
Fatal Collision	0
Injury Collision	8
Mapped	6
Not Drawn	17
Total	23

Straight	Pedestrian
Left Turn	Bicycle
Right Turn	Object
U-Turn	Fatal Crash
Overturned	Injury Crash
Ran Off Road	
Stopped	
Parked	

Collision Summary:
Fatal Collisions: 0
Severe Collisions: 0
Injury Collisions: 6
Complaint of Pain Collisions: 2
PDO Collisions: 15
Total Collisions: 23

Note: Influence area extends 250 feet from the intersection

Date Created: 10/09/2020

Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2

Collision Diagram - Woodland Ave

University Ave HSIP Improvements

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
6678374	20170616	UNIVERSITY AV	KAVANAUGH DR	0		1	0
6865834	20150309	BAY RD	UNIVERSITY AV	0		2	Yes
8597644	20180306	UNIVERSITY AV	DONOHOE ST	3	E	2	Yes
9063824	20191118	RUNNYMEDE ST	UNIVERSITY AV	0		2	0
6804893	20150113	BAY RD	UNIVERSITY AV	199	N	3	Yes
6849789	20150227	DONOHOE ST	UNIVERSITY AV	0		3	0
6856083	20150304	DONOHOE ST	UNIVERSITY AV	48	N	3	Yes
7150635	20151221	UNIVERSITY AV	RUNNYMEDE ST	200	W	3	0
7194258	20160209	UNIVERSITY AV	NOTRE DAME AV	0		3	0
8046387	20160327	UNIVERSITY AV	DONOHOE ST	20	W	3	0
8434103	20181105	UNIVERSITY AV	DONOHOE ST	0		3	Yes
8447202	20170729	UNIVERSITY AV	BAY RD	0		3	Yes
8447225	20170726	RUNNYMEDE ST	UNIVERSITY AV	0		3	Yes
8469624	20180122	UNIVERSITY AV	BAY RD	115	E	3	0
8471309	20170905	UNIVERSITY AV	WOODLAND AV	0		3	Yes
8475946	20170928	DONOHOE ST	UNIVERSITY AV	0		3	Yes
8490393	20171004	UNIVERSITY AV	KAVANAUGH DR	0		3	Yes
8533425	20171220	UNIVERSITY AV	BAY RD	145	W	3	0
8543640	20180114	UNIVERSITY AV	RUNNYMEDE ST	0		3	0
8563844	20180201	UNIVERSITY AV	DONOHOE	48	E	3	0
8589453	20180309	UNIVERSITY AV	RUNNYMEDE ST	16	W	3	0
8648792	20180521	WOODLAND AV	UNIVERSITY AV	0		3	Yes
8668893	20180611	UNIVERSITY AV	DONOHOE ST	0		3	Yes
8676034	20180712	UNIVERSITY AV	NOTRE DAME ST	0		3	0
8677038	20180725	UNIVERSITY AV	DONOHOE ST	0		3	0
8678207	20180720	UNIVERSITY AV	DONOHOE ST	50	W	3	0
8735826	20180903	UNIVERSITY AV	WOODLAND AV	25	S	3	0
8741683	20181011	UNIVERSITY AV	BAY RD	21	W	3	0
8752736	20181118	RUNNYMEDE ST	UNIVERSITY AV	41	S	3	0
8788671	20181108	UNIVERSITY AV	WOODLAND AV	10	S	3	Yes
8790556	20181002	UNIVERSITY AV	RUNNYMEDE ST	0		3	Yes
8813479	20190207	DONOHOE ST	UNIVERSITY AV	103	S	3	0
8815477	20190130	RUNNYMEDE ST	UNIVERSITY AV	0		3	Yes
8819348	20190225	UNIVERSITY AV	DONOHOE ST	0		3	Yes
8827953	20190221	UNIVERSITY AV	KAVANAUGH ST	2	W	3	0
8872183	20190509	UNIVERSITY AV	RUNNYMEDE ST	0		3	0
8881229	20190531	UNIVERSITY AV	KAVANAUGH DR	0		3	0
8906210	20190508	DONOHOE ST	UNIVERSITY AV	72	S	3	0
8907243	20190713	UNIVERSITY AV	NOTRE DAME	0		3	Yes

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
8907930	20190802	UNIVERSITY AV	RUNNYMEDE	70	E	3	0
8908092	20190714	UNIVERSITY AV	WOODLAND AV	103	W	3	0
8921896	20190727	UNIVERSITY AV	BAY RD	0		3	0
8946551	20190331	UNIVERSITY AV	RUNNYMEDE ST	108	E	3	0
9012852	20190317	UNIVERSITY AV	WOODLAND AV	0		3	Yes
9050662	20190111	UNIVERSITY AV	BAY RD	0	E	3	0
6804885	20150113	DONOHOE ST	UNIVERSITY AV	32	N	4	0
6888739	20150212	BAY RD	UNIVERSITY AV	0		4	0
7114114	20151025	UNIVERSITY AV	RUNNYMEDE	0		4	0
7120260	20151109	DONOHOE ST	UNIVERSITY AV	0		4	Yes
7136624	20151125	BAY RD	UNIVERSITY AV	0		4	0
7150574	20151226	DONOHOE ST	UNIVERSITY AV	0		4	Yes
7164754	20160112	BAY RD	UNIVERSITY AV	190	N	4	Yes
8033753	20160401	UNIVERSITY AV	DONOHOE ST	225	E	4	0
8033814	20160426	BAY RD	UNIVERSITY AV	0		4	0
8046327	20160406	UNIVERSITY AV	DONOHOE ST	0		4	0
8157015	20161016	UNIVERSITY AV	WOODLAND AV	0		4	0
8173327	20161017	UNIVERSITY AV	RUNNYMEDE ST	0		4	0
8292031	20170103	UNIVERSITY AV	DONOHOE ST	250	W	4	0
8351710	20170321	RUNNYMEDE ST	UNIVERSITY AV	0		4	0
8381126	20170523	KAVANAUGH DR	UNIVERSITY AV	0		4	0
8384319	20170514	RUNNYMEDE ST	UNIVERSITY AV	0		4	0
8393902	20170526	UNIVERSITY AV	RUNNYMEDE ST	11	W	4	Yes
8447229	20170730	UNIVERSITY AV	KAVANAUGH DR	10	W	4	Yes
8450837	20170830	DONOHOE ST	UNIVERSITY AV	0		4	0
8466725	20170831	UNIVERSITY AV	KAVANAUGH DR	31	W	4	0
8669814	20180629	UNIVERSITY AV	RUNNYMEDE ST	0		4	0
8718986	20180912	UNIVERSITY	DONOHOE	0		4	Yes
8808689	20190616	KAVANAUGH DR	UNIVERSITY AV	0		4	0
9010569	20191031	UNIVERSITY AV	DONOHOE ST	0		4	0
9035035	20191117	UNIVERSITY AV	WOODLAND AV	0		4	0
9071883	20191208	DONOHOE ST	UNIVERSITY AV	0		4	Yes
6814550	20150303	UNIVERSITY AV	NOTRE DAME AV	0		0	0
6837908	20150124	UNIVERSITY AV	DONOHOE ST	0		0	0
6838543	20150224	DONOHOE RD	UNIVERSITY AV	0		0	0
6847404	20150214	UNIVERSITY AV	DONOHOE ST	0		0	0
6849070	20150301	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
6856299	20150214	UNIVERSITY AV	DONOHOE ST	0		0	0
6888150	20150226	UNIVERSITY AV	WOODLAND AV	196	E	0	0

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
6900565	20150404	UNIVERSITY AV	DONOHOE ST	0		0	0
6910345	20150331	DONOHOE ST	UNIVERSITY AV	0		0	0
6995139	20150717	NOTRE DAME AV	UNIVERSITY AV	44	S	0	0
6999763	20150615	DONOHOE ST	UNIVERSITY AV	0		0	0
7000778	20150630	UNIVERSITY AV	DONOHOE ST	170	E	0	0
7000786	20150619	UNIVERSITY AV	WOODLAND AV	7	E	0	0
7011129	20150910	DONOHOE ST	UNIVERSITY AV	4	N	0	0
7011143	20150831	UNIVERSITY AV	DONOHOE ST	0		0	0
7047798	20150815	NOTRE DAME AV	UNIVERSITY AV	0		0	0
7048222	20150821	UNIVERSITY AV	WOODLAND AV	189	E	0	0
7088903	20150817	DONOHOE ST	UNIVERSITY AV	0		0	0
7105730	20150921	UNIVERSITY AV	BAY RD	0		0	0
7118255	20151027	DONOHOE ST	UNIVERSITY AV	0		0	0
7137481	20151113	UNIVERSITY AV	WOODLAND AV	0		0	0
7150495	20151213	DONOHOE ST	UNIVERSITY AV	0		0	0
7165785	20150106	BAY RD	UNIVERSITY AV	160	S	0	0
7184158	20160114	UNIVERSITY AV	RUNNYMEDE ST	29	W	0	0
7191490	20160205	RUNNYMEDE ST	UNIVERSITY AV	28	N	0	0
7194145	20160119	UNIVERSITY AV	DONOHOE ST	12	E	0	0
8033749	20160415	DONOHOE ST	UNIVERSITY AV	21	S	0	0
8046501	20160304	UNIVERSITY AV	BAY RD	130	W	0	0
8046521	20160320	BAY RD	UNIVERSITY AV	0		0	0
8076302	20160601	DONOHOE ST	UNIVERSITY AV	0		0	0
8105103	20160630	UNIVERSITY AV	KAVANAUGH DR	224	E	0	0
8105107	20160630	UNIVERSITY AV	KAVANAUGH	202	E	0	0
8108129	20160728	DONOHOE ST	UNIVERSITY AV	0		0	0
8141409	20160919	UNIVERSITY AV	DONOHOE ST	0		0	0
8141565	20160922	WOODLAND AV	UNIVERSITY AV	180	N	0	0
8157156	20161004	RUNNYMEDE ST	UNIVERSITY AV	110	N	0	0
8160299	20161026	UNIVERSITY AV	DONOHOE ST	59	W	0	0
8165639	20161005	UNIVERSITY AV	WOODLAND AV	0		0	0
8166218	20161013	BAY RD	UNIVERSITY AV	0		0	0
8174992	20161115	WOODLAND AV	UNIVERSITY AV	0		0	0
8177046	20161116	UNIVERSITY AV	BAY RD	35	W	0	0
8188067	20161111	DONOHOE ST	UNIVERSITY AV	190	S	0	0
8280807	20161217	DONOHOE ST	UNIVERSITY AV	0		0	0
8290876	20161217	UNIVERSITY AV	DONOHOE ST	0		0	0
8290918	20170114	BAY RD	UNIVERSITY AV	250	N	0	0
8301375	20170125	RUNNYMEDE ST	UNIVERSITY AV	63	N	0	0

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
8301379	20170118	KAVANAUGH AV	UNIVERSITY AV	0		0	0
8313342	20170125	DONOHOE ST	UNIVERSITY AV	0		0	0
8326466	20160707	DONOHOE ST	UNIVERSITY AV	0		0	0
8326478	20160711	DONOHOE ST	UNIVERSITY AV	0		0	0
8326578	20160422	DONOHOE ST	UNIVERSITY AV	0		0	0
8326582	20160330	DONOHOE ST	UNIVERSITY AV	35	N	0	0
8326590	20160409	BAY RD	UNIVERSITY AV	61	S	0	0
8327781	20170306	UNIVERSITY AV	BAY RD	0		0	0
8336907	20170425	DONOHOE ST	UNIVERSITY AV	0		0	0
8349938	20170327	UNIVERSITY AV	DONOHOE ST	0		0	0
8370561	20170429	UNIVERSITY AV	WOODLAND AV	0		0	0
8393925	20170428	WOODLAND AV	UNIVERSITY AV	17	S	0	0
8394069	20170530	BAY RD	UNIVERSITY AV	20	S	0	0
8438783	20170711	RUNNYMEDE ST	UNIVERSITY AV	0		0	0
8439335	20170721	DONOHOE ST	UNIVERSITY AV	0		0	0
8442420	20170719	UNIVERSITY AV	BAY RD	0		0	0
8471561	20170911	UNIVERSITY AV	DONOHOE	132	W	0	0
8473694	20171016	UNIVERSITY AV	DONOHOE ST	0		0	0
8476075	20170921	UNIVERSITY AV	BAY RD	25	W	0	0
8489687	20171022	BAY RD	UNIVERSITY AV	58	S	0	0
8489695	20171031	DONOHOE ST	UNIVERSITY AV	0		0	0
8491954	20171107	UNIVERSITY AV	WOODLAND AV	0		0	0
8499029	20171024	DONOHOE ST	UNIVERSITY AV	40	N	0	0
8500208	20171115	WOODLAND AV	UNIVERSITY AV	73	N	0	0
8508922	20171114	DONOHOE ST	UNIVERSITY AV	148	N	0	0
8508933	20171116	WOODLAND AV	UNIVERSITY AV	0		0	0
8515992	20171209	UNIVERSITY AV	DONOHOE ST	62	E	0	0
8528988	20171202	DONOHOE ST	UNIVERSITY AV	147	N	0	0
8548887	20180202	RUNNYMEDE ST	UNIVERSITY AV	42	S	0	0
8548941	20180112	UNIVERSITY AV	DONOHOE ST	0		0	0
8552993	20180130	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
8557409	20180205	UNIVERSITY AV	DONOHOE ST	0		0	0
8577550	20180226	BAY RD	UNIVERSITY AV	174	N	0	0
8581725	20180306	DONOHOE ST	UNIVERSITY AV	0		0	0
8586061	20180327	DONOHOE ST	UNIVERSITY AV	25	S	0	0
8587792	20180420	UNIVERSITY AV	RUNNYMEDE ST	39	E	0	0
8589860	20180323	UNIVERSITY AV	BAY RD	175	W	0	0
8598259	20180403	UNIVERSITY AV	KAVANAUGH DR	0		0	0
8601518	20180329	DONOHOE ST	UNIVERSITY AV	0		0	0

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
8615427	20180420	UNIVERSITY AV	NOTRE DAME AV	0		0	0
8632823	20180517	UNIVERSITY AV	DONOHOE ST	44	W	0	0
8666841	20180406	UNIVERSITY AV	DONOHOE	100	N	0	0
8667303	20180617	UNIVERSITY AV	DONOHOE ST	236	E	0	0
8682441	20180728	UNIVERSITY AV	BAY RD	200	W	0	0
8704924	20180812	KAVANAUGH DR	UNIVERSITY AV	24	S	0	0
8718737	20180806	DONOHOE ST	UNIVERSITY AV	196	N	0	0
8723462	20180830	DONOHOE ST	UNIVERSITY AV	0		0	0
8727862	20180827	UNIVERSITY AV	WOODLAND AV	0		0	1
8742117	20180912	UNIVERSITY AV	RUNNYMEDE ST	135	W	0	0
8742121	20180912	DONOHOE ST	UNIVERSITY AV	7	N	0	0
8753494	20180923	UNIVERSITY AV	DONOHOE ST	15	E	0	0
8776592	20181001	DONOHOE ST	UNIVERSITY AV	48	N	0	0
8781574	20181115	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
8788730	20181118	BAY RD	UNIVERSITY AV	41	W	0	0
8788750	20181104	DONOHOE ST	UNIVERSITY AV	0		0	0
8788941	20181106	UNIVERSITY AV	DONOHOE ST	108	E	0	0
8801962	20190124	RUNNYMEDE ST	UNIVERSITY AV	0		0	0
8815240	20190218	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
8815248	20190202	DONOHOE ST	UNIVERSITY AV	44	S	0	0
8822533	20190305	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
8836077	20190311	DONOHOE ST	UNIVERSITY AV	50	S	0	0
8841537	20190322	BAY RD	UNIVERSITY AV	55	N	0	0
8868019	20190427	UNIVERSITY AV	DONOHOE ST	45	E	0	1
8870104	20190506	UNIVERSITY AV	DONOHOE ST	50	W	0	0
8872486	20190315	DONOHOE ST	UNIVERSITY AV	38	S	0	0
8875512	20190521	UNIVERSITY AV	DONOHOE ST	239	W	0	0
8883481	20190514	RUNNYMEDE ST	UNIVERSITY AV	27	S	0	0
8883517	20190523	DONOHOE ST	UNIVERSITY AV	0		0	0
8887310	20190606	UNIVERSITY AV	RUNNYMEDE ST	0		0	0
8895491	20190611	UNIVERSITY AV	DONOHOE ST	0		0	0
8906274	20190522	UNIVERSITY AV	DONOHOE ST	13	W	0	0
8908447	20190513	UNIVERSITY AV	DONOHOE ST	99	S	0	0
8945596	20190907	RUNNYMEDE ST	UNIVERSITY AV	0		0	0
8946580	20190427	UNIVERSITY AV	BAY RD	73	W	0	0
8996617	20190921	UNIVERSITY AV	WOODLAND AV	0		0	0
8997219	20190916	UNIVERSITY AV	DONOHOE ST	125	E	0	0
9010595	20190923	UNIVERSITY AV	BAY RD	0		0	0
9019785	20191219	BAY RD	UNIVERSITY AV	0		0	0

Case ID	Collision Date	Primary Road	Secondary Road	Distance	Direction	Collision Severity	Bike or Ped
9033206	20191119	DONOHOE ST	UNIVERSITY AV	228	N	0	0
9064993	20191205	RUNNYMEDE ST	UNIVERSITY AV	0		0	0
9065009	20191108	DONOHOE ST	UNIVERSITY AV	25	S	0	0
9083453	20190823	BAY RD	UNIVERSITY AV	49	S	0	0
9083458	20191009	DONOHOE ST	UNIVERSITY AV	35	N	0	0
9083566	20191220	UNIVERSITY AV	NOTRE DAME AV	0		0	0
9090984	20191107	UNIVERSITY AV	WOODLAND AV	90	W	0	0
90981821	20190424	DONOHOE STREET	UNIVERSITY AVE	200	S	0	0

Collision Summary	
	Subtotal
Collision Severity 1	1
Collision Severity 2	3
Collision Severity 3	41
Collision Severity 4	26
Collision Severity 0	132
Total:	203

CITY OF EAST PALO ALTO

Desk of the Mayor

September 29, 2020

Kamal Fallaha, Director of Public Works
City of East Palo Alto
2415 University Avenue
East Palo Alto, CA 94303

RE: Letter of Support for the City of East Palo Alto HSIP Application

On behalf of the City of East Palo Alto, I am writing to express our support for the City's Highway Safety Improvement Program (HSIP) application for intersections improvements on University Avenue between Woodland Avenue and Bay Road. The grant seeks to fund design, environmental and construction of multimodal safety improvements in the project corridor.

University Avenue is the City's main vein and provides many residents and communities access to US 101, State Route 84, employment centers, shopping, schools, and destinations. On a local level, the City has taken ardent steps to revitalize the community through redevelopment and infrastructure improvements. Recently, the City of East Palo Alto has welcome large employers such as Amazon; and has supported mixed use development which includes office buildings, new civic uses, retail, housing and affordable housing. As the community adds dozens of new development projects, it is pertinent to have the safety in place to accommodate the growth, vehicle volume, and provide and welcome infrastructure that supports pedestrians and bicyclists to travel throughout the City.

The project supports our City's Vision Zero goals of fatal and severe injury to zero. Improvements will include high visibility crosswalks, pedestrian signal upgrades, ADA curb ramps, signal phasing improvements, and improved signal hardware. These improvements will get the City closer to our goal of eliminating traffic fatalities reducing the number of non-fatal injury collisions by 50% by 2030.

We strongly support the HSIP grant application for traffic safety improvements along University Avenue.

Sincerely,

Regina Wallace-Jones
Mayor, City of East Palo Alto

CITY OF EAST PALO ALTO
POLICE DEPARTMENT
141 Demeter Street
East Palo Alto, CA 94303

ALBERT PARDINI
CHIEF OF POLICE
(650) 853-3125 Phone
apardini@cityofepa.org

September 29, 2020

Mr. Kamal Fallaha, PE
Director of Public Works
City of East Palo Alto
1960 Tate Street
East Palo Alto, CA 94303

Dear Mr. Fallaha,

The East Palo Alto Police Department support the City of East Palo Alto Highway Safety Improvement Program (HSIP) Cycle 10 Grant Application for the systemic intervention improvements along University Avenue.

The Police Department recognizes the safety concerns along University Avenue for motorists and fully supports the improvements that will reduce collisions along our City's main roadway. It is critical to the City that the community can safely walk and bike to our local and regional destinations by improving the left turn phasing, upgraded signal equipment, adding pedestrian enhancements and upgrades such as high visibility crosswalks, pedestrian signals, and curb ramps.

University Avenue at Runnymede Street has one of the highest traffic collision rates in the City. Safety Improvements along this intersection and along the University Avenue corridor are vital to safety in the City of East Palo Alto. The East Palo Alto Police Department strongly supports the City of East Palo Alto's HSIP Grant application and we are excited about the safety improvements along University Avenue, which is not only the City's main arterial, but also a major regional highway.

Sincerely,

Albert Pardini
Chief of Police

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS
OF SAN MATEO COUNTY

Atherton ■ Belmont ■ Brisbane ■ Burlingame ■ Colma ■ Daly City ■ East Palo Alto ■ Foster City ■ Half Moon Bay ■ Hillsborough ■ Menlo Park
Millbrae ■ Pacifica ■ Portola Valley ■ Redwood City ■ San Bruno ■ San Carlos ■ San Mateo ■ San Mateo County ■ South San Francisco ■ Woodside

October 30, 2020

Highway Safety Improvement Program
1120 N Street, MS 1
Sacramento, CA 95814

RE: Support for City of East Palo Alto's HSIP Application

To Whom it May Concern:

I am writing to express support for the City of East Palo's Highway Safety Improvement Program (HSIP) Cycle 10 Grant Application, for the University Avenue Systemic Intersection Improvement Project.

As a major thoroughfare from the East Bay to the San Francisco Bay Area Peninsula and Silicon Valley, University Avenue experiences large volumes of vehicles travelling throughout the day. For the City's residents and community, it is critical that safety of pedestrians and bicyclists is improved, and overall collisions are reduced along this main roadway. The project will improve the signals between Woodland Avenue and Bay Road by upgrading the equipment, adding pedestrian countdowns and push buttons where needed, adding high visibility crosswalks, improving the curb ramps and adjusting the signal phasing.

As the County's Congestion Management Agency, C/CAG is committed to support local agency in their effort to provide safe and accessible pedestrian facilities to increase mobility, provide access to affordable and reliable transportation options, and reduce air pollutions. I urge your consideration and approval City of East Palo Alto's HSIP Grant application.

Sincerely,

Sandy Wong
Executive Director