

Highway Safety Improvement Program (HSIP) CYCLE 11 Application Instructions

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GENERAL INFORMATION

The instructions included in this file are for applicants in completing the applications in Highway Safety Improvement Program (HSIP) Cycle 11 Call for Projects. Applicants must prepare their electronic applications and the attachments as defined in these instructions. Failure to follow this procedure will result in the applications being rejected or not being properly received. The Call-for-projects was announced on Monday, May 9, 2022. The application deadline is **Monday, September 12, 2022 (midnight)**.

At a minimum, Adobe Acrobat Reader DC is needed in order to complete, save and submit the application form. You may download Adobe Acrobat Reader DC for free at <https://www.adobe.com/acrobat/pdf-reader.html>.

Eligible applicants

Any local agency that owns, operates, and maintains the public roadways in California may be eligible to apply for the HSIP funding. This includes cities, counties, federally recognized tribes and other local agencies that meet the criteria.

Local Roadway Safety Plan (LRSP)

Section 9.3 of the [HSIP Program Guidelines](#):

In order to apply for the HSIP funds, an agency must have completed their LRSP or an equivalent of the LRSP, such as Systemic Safety Analysis Report (SSAR) or Vision Zero Action Plan. Other equivalents of the LRSP may be reviewed and determined on a case-by-case basis. The LRSP or its equivalent must be updated and validated at least every five years. When an agency submits an HSIP funding application, the agency must self-certify that an LRSP or its equivalent has been completed. The agency must provide a copy of the safety plan upon request.

It is strongly recommended that the LRSP (or its equivalent) and its update be approved by the agency's Board or Council. If an LPA has finalized their LRSP at the application due date of the call-for-projects but the LRSP has not yet been approved by the Board or Council, the LPA is eligible to submit project applications.

Local Roadway Safety Plan (LRSP) Certification is a required attachment at the last page of the application form.

Agencies with existing HSIP projects that have been delayed in project implementation

The below local agencies are not eligible for applying HSIP funds in Cycle 11:

- 1) Local agencies that have existing HSIP projects red-flagged for not meeting the HSIP delivery requirements and the red-flags cannot be resolved as of 9/30/2022; and
- 2) Local agencies who have more than one existing HSIP projects that have not been in construction phase five years after the project selection (as of 9/30/2022), even if time extension has been approved by Caltrans.

If your agency has existing HSIP projects, please review [the HSIP project delivery requirements and the delivery status of your projects](#).

Application preparation and submittal process

Please review the [HSIP Program Guidelines](#) as the program may have on-going changes.

Please also review [Local Roadway Safety Manual for California's Local Road Owners](#), which should help you in selecting good safety projects to compete for the HSIP funds. This manual provides the detailed information regarding what safety countermeasures are eligible for using the HSIP funds.

Steps to complete and submit an application in HSIP Cycle 11 Call for Projects:

- 1) Download the Application Form, Application Instructions, HSIP Analyzer, HSIP Analyzer Manual, the LRSP Certification template and the Engineer's Checklist template at <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/apply-now>.
- 2) Review the HSIP Analyzer and its instructions to become familiar with the construction cost estimate, the overall project cost estimate, and the calculations of the project benefit and the Benefit Cost Ratio (BCR).
- 3) Review the Engineer's Checklist. The checklist must be completed by a licensed Engineer who is in "responsible charge" of the preparation of the HSIP application. This checklist has been developed to help ensure all of the primary elements of the application are included and the application is free of errors, so the application can be accurately ranked in the statewide selection process. Engineers are encouraged to print the checklist and then review the corresponding checklist items as they work through these instructions and prepare the final application.
- 4) Complete the application form and attach the required documents to the last page of the application form. Save the application form by using the Application ID as the file name, e.g. "03-Los Angeles-1.pdf". Using a generic file name such as "HSIPapplication.pdf" may result in your application being overwritten by another application from a different applicant with the same file name. If multiple applications are to be submitted for the same project (see "Multiple applications for the same project" for the reason why you may want to submit more than one application for the same project), please use a letter to differentiate. For example, if you submit 3 applications for "07-Los Angeles-1", use "07-Los Angeles-1a", "07-Los Angeles-1b" and "07-Los Angeles-1c" as their application IDs and application file names.
- 5) Click the "Save and submit" button on the last page of the application.
 - If some mandatory information is not provided, a message will appear to warn the applicant, and all unfilled mandatory fields will have a red box. Fill in these fields prior to clicking the "Save and submit" button again.
 - If the submittal is successful, the applicant will receive a confirmation email at the email address provided on page 2 of the application form under "Contact Person Information". Please keep a copy of the email as proof of the application submittal.

Note: a minimum BCR of 3.5 is required for a BCR application to be submitted.

Applicants must submit the applications electronically before the deadline. Any submittal after midnight of 9/12/2022 will not be accepted. **It is highly recommended that you submit the applications as early as possible after completion.** The submittal concentration in the last few days before the due date may make the server unstable. Early submittals will also help Caltrans to even the workload and expedite the review process.

Important: *Read the entire instructions before attempting to prepare and submit any application. Applicants are expected to follow these instructions in a step-by-step process as they complete their applications. Completing an application without referencing to these instructions may result in an incomplete application or an application with fatal flaws that will be excluded from the ranking and selection process. Due to time and resources constraints, the applicant will not be notified of Caltrans findings until after the selection process is complete. If an applicant has questions relating to potential fatal flaws in their application, they should seek assistance from their Caltrans [DLAE](#) before submitting their application.*

Funding level and funding type

The total funds available for HSIP Cycle 11 are estimated at \$210 million. SB 137 allows the exchange of state funds with federal funds. It is expected that State funds will be used for all projects selected for funding in HSIP Cycle 11.

Note:

The Infrastructure Investment and Jobs Act (IIJA) continued the High-Risk Rural Roads (HRRR) Special Rule and established a new Vulnerable Road User (VRU) safety Special Rule.

Special Rule	Trigger	State Action
HRRR Special Rule	The fatality rate on rural roads in a State increases over the most recent 2-year period	Obligate in the next fiscal year for projects on high risk rural roads an amount equal to at least 200 percent of the amount of funds the State received for fiscal year 2009 for high risk rural roads
VRU Safety Special Rule	the total annual fatalities of vulnerable road users (nonmotorists) in a State represents not less than 15 percent of the total annual crash fatalities in the State	State shall be required to obligate not less than 15 percent of the amounts apportioned to the State under section 104(b)(3) for the following fiscal year for highway safety improvement projects to address the safety of vulnerable road users.

If the above Special Rules are triggered in California, the HRRR and/or VRU eligible projects selected for funding in HSIP Cycle 11 may be required to use federal funds.

Application categories: Benefit Cost Ratio (BCR) and Set-asides (SA)

There are two application categories in HSIP Cycle 11: Benefit Cost Ratio (BCR) and Funding Set-asides (SA). \$174 million will be for BCR applications and \$36 million for five (5) funding set-asides (Guardrail Upgrades, Pedestrian Crossing Enhancements, Installing Edgelines, Bike Safety Improvements and Tribes). Unlike BCR applications, SA applications do not require any BCR calculation.

Benefit Cost Ratio (BCR)

For applications under the BCR category, a benefit cost analysis must be performed to have a BCR using the HSP Analyzer. The applications under this category will be selected for funding based on the BCRs, from the largest to the smallest. **A minimum BCR of 3.5 is required for a BCR application to be submitted.** Please do not submit any application with a BCR lower than 3.5.

There is no limit to the number of applications an agency may submit under the BCR category in Cycle 11. However, the maximum HSIP funds that one agency may be awarded under the BCR category is \$10 million.

There are 3 different categories of locations: Signalized Intersections (SI), Non-Signalized Intersections (NS) and Roadway segments (R). Normally a BCR application only includes locations of one of the above 3 categories (S, NS, or R). Multiple categories may be selected if the application proposes corridor safety improvements or uses a systemic approach, or the applicant chooses to bundle multiple locations in the same vicinity together.

Multiple applications for the same project

Multiple applications may be submitted for the same project under two different situations:

- a) A BCR project that uses a “systemic approach” and includes multiple locations:
- b)

The systemic approach is to identify multiple locations with similar geometric features and experiencing similar crash types and treat these locations systemically with low-cost, proven safety countermeasures. The systemic approach is proactive since it will not only treat locations with crashes, but also improve the safety of similar locations that have not yet experienced high level of crashes. The benefits of the systemic approach include the widespread effect by improving the safety

of a group of similar locations, the crash type prevention, the cost effectiveness and the reduced data needs.

An example of this type of project could be upgrading pavement delineation and warning signs along a rural corridor: crashes may not have occurred on every curve or segment along the corridor, but all the corridor's pavement delineation and warning signs can be upgraded at one time. For urban applications, an example could be the protected left-turn phase of signalized intersections with existing left-turn pockets: severe crashes may not have occurred at each of the intersections without left-turn phase; however, all or many of your agency's unprotected left-turn phases can be protected with one safety project. For more information regarding the systemic approach, please refer to the [Local Roadway Safety Manual \(LRSM\)](#).

The HSIP project selection for funding is based on the BCR. Each application has a single BCR. The individual locations may have experienced different levels of crashes. Some locations may not have any crashes at all though the crash potential is the same. The BCR of the project may differ depending on the number of similar locations included in the project. For example, if the project includes 5 locations with the highest numbers of crashes, the BCR may be 14. The project's BCR may be 10 or 5 if it includes 7 or 11 locations. The dilemma is, the BCR cutoff of the call for projects is unknown before the call has concluded. By adding more locations to a systemic-type project, the risk is that the project may not be selected for funding due to the lower BCR as a result of having more locations. To resolve this dilemma, we allow applicants to submit more than one application for the same project. The prioritization of the BCR projects will make sure this project will be funded as long as the highest BCR of the applications for this project can make the cutoff.

Please use the Application IDs to identify the multiple applications submitted for the same project. For example, if 3 applications are to be submitted for the same project 07-Los Angeles-1, please use 07-Los Angeles-1a, 07-Los Angeles-1b and 07-Los Angeles-1c as the application IDs.

- c) The local agencies may choose to submit the same project twice, one as a funding set-aside application and the other as a BCR application. If this is the case, please also use the Application IDs to identify them, such as 07-Los Angeles-1a and 07-Los Angeles-1b. In the project selection process, the BCR application will be considered first. If it does not make the BCR cutoff, the set-aside application will then be considered.

Funding Set-asides (SA)

For applications under the Funding Set-asides (SA) category, a benefit cost analysis or a BCR is not needed. In Cycle 11, there are five (5) Funding Set-asides:

- **Set-aside for Guardrail Upgrades** (total funding: \$12 million; max. \$1 million per agency)
- **Set-aside for Pedestrian Crossing Enhancements** (total funding \$15 million; max. \$250,000 per agency)
- **Set-aside for Installing Edgelines** (total funding: \$2 million; max. \$250,000 per agency)
- **Set-aside for Bike Safety Improvements** (total funding: \$5 million; max. \$250,000 per agency)
- **Set-aside for Tribes** (total funding: \$2 million; max. \$250,000 per tribe). The applicants must be federally recognized tribes in California.

The funding level of the Funding Set-asides may be adjusted based on the applications received. However, the total funding of the Set-asides should not be more than 25% of the total funds in Cycle 11, or \$52.5 million.

In the project selection under the SA category, the following agencies will have higher priorities (in the below order):

- The agencies who did not have any projects awarded in HSIP Cycles 9&10;
- The agencies who did not have projects awarded under the same set-aside in HSIP Cycles 9&10;
- The agencies who have had more Fatal & Severe Injury (F+SI) crashes within the boundaries of their jurisdictions in the last three years with data available from California Highway Patrol (CHP) Statewide

Integrated Traffic Records System (SWITRS). (The applicant does not need to provide this number as Caltrans will obtain from the SWITRS if needed.)

Eligible work items under each Set-aside are:

a) Set-aside for Guardrail Upgrades

Upgrade existing guardrails and end treatments. New guardrail installations and bridge rail upgrades are not eligible.

b) Set-aside for Pedestrian Crossing Enhancements

Install pedestrian countdown signal heads, Rectangular Rapid Flashing Beacons (RRFB) and other flashing beacons, pedestrian crossing/signs, advanced yield lines/signs, and other signs/stripping. Basically, any work consistent with the below safety countermeasures is eligible under this set-aside:

- S17PB: Install pedestrian countdown signal heads
- NS22PB/R37PB: Install Rectangular Rapid Flashing Beacon (RRFB)
- NS21PB: Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)
- R35PB: Install/upgrade pedestrian crossing (with enhanced safety features)

Other work related to pedestrian crossing enhancements may be allowed as long as the cost is no more than 20% of the project total cost.

c) Set-aside for Installing Edgelines

Installing edgelines along roadways. Other work along the same roadways (such as signs and other stripping/markers) is allowed as long as the cost is no more than 20% of the project total cost.

d) Set-aside for Bike Safety Improvements

R32PB Installing bike lanes (CM No. R32PB) and/or installing separated bike lanes (CM No. R33PB). Other safety work along the same roadways is allowed as long as the cost is no more than 20% of the project total cost.

e) Set-aside for Tribes

Any work items eligible under the above 4 Set-asides, plus:

- Install/Upgrade signs with new fluorescent sheeting (regulatory or warning);
- Install chevron signs on horizontal curves;
- Install curve advance warning signs/flashing beacons;
- Install dynamic/variable speed warning signs;
- Install delineators, reflectors and/or object markers;
- Install edge-lines, centerlines, no-passing lines; and
- Install centerline/edge-line rumble strips/stripes.

Summary of Application Categories for HSIP Cycle 11

Application Category	Description	Total Funding Statewide	Max Number of applications per agency	Max amount per agency
Benefit Cost Ratio (BCR)	Benefit Cost Ratio (BCR)	\$174 million	No Limit	\$10 million
Funding Set-asides (SA)	Guardrail Upgrades	\$12 million	1	\$1 million
	Pedestrian Crossing Enhancements	\$15 million	1	\$250,000
	Installing Edgelines	\$2 million	1	\$250,000
	Bike Safety Improvements	\$5 million	1	\$250,000
	Tribes	\$2 million	1	\$250,000

HSIP Analyzer

The use of the HSIP Analyzer is required for all applications for HSIP Cycle 11 Call for Projects. The completed HSIP Analyzer is one of the required attachments to the HSIP Application Form. There are two HSIP Analyzers:

- **HSIP Analyzer for BCR applications** streamlines the process of cost estimate, safety improvement countermeasure evaluation, crash data input and the BCR calculation.
- **HSIP Analyzer for Funding Set-aside applications** is for entering project general information, providing project schedule and estimating the construction cost and overall project cost.

DETAIL INSTRUCTIONS

Application Summary (cover page)

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

NOTE: The Application ID shown on this summary page is generated automatically based on the Caltrans District, the agency name, and the Application Number. This exact Application ID is to be used as the file name for saving the final Application Form. In addition, this Application ID must also be entered in the HSIP Analyzer.

Basic Information

Agency

From the drop-down list, **select** the agency name. You may enter your agency's name as text if it is not available in the drop-down list.

County

Select from the drop-down list.

Caltrans District

Select from the drop-down list.

MPO

From the drop-down list, select the MPO (Metropolitan Planning Organization) that will be involved with the programming of the project in the FTIP. Select "Other" if not applicable. For information about MPOs, visit [this link](#).

Application Number

If multiple applications are submitted from your agency, each application must have a unique number (1, 2, 3, etc). As stated above, this number is used to generate a unique Application ID. It does not imply any priority among the applications from your agency.

If you will submit multiple applications for the same project (why? Please see the explanation on "Multiple applications for the same project" of this document), please add a letter to the application number. For example, if you will submit 3 applications for your no. 2 project, enter "2a", "2b" or "2c" here.

Contact Person Information

This information will be used to contact the agency relating to project selection results and later for project delivery questions. **NOTE:** the email address will be used to notify the applicant once the electronic submittal has been successful. Please make sure the email address is entered correctly.

Application Category

Select one of the two application categories from the drop-down list: Benefit Cost Ratio (BCR) or Funding Set-asides (the particular set-aside name is provided in HSIP Analyzer).

Basic Project Information

Project Title

Provide a brief title for the project (limited to 100 characters).

Project Location

Provide road name, intersection cross street names, and/or geographical references of where the project is located. Be brief (limited to 250 characters). Examples: *“On Elm St. between Oak Ave. and Cherry Blvd.”* or *“The Intersection of Elm St. with Oak Ave.”* or *“Various locations along Oak Ave.”* or *“Various locations throughout the County.”*

Project Description

Describe, in general, the types of work that are proposed for the project. Be brief (limited to 250 characters). Examples: *“Install traffic signal; Construct curb, gutter, sidewalk, and curb ramps”* or *“Install traffic signs, stripes and pavement markings”*

Narrative Questions

These narrative questions are intended to provide additional project details for the application reviewers and project files. Application reviewers will use this information in their assessment of the application. If significant inconsistencies are found in the application information, Caltrans reviewers may conclude that the application includes “fatal flaws” and the application will be dropped from further funding considerations.

Each answer is limited to 5000 characters. The intent is to keep the answers short and to the point. Bulleted answers are acceptable. Applicants can type the answers directly into the fields or copy text from other documents and paste.

Application Attachments

Attach all documents needed for this application. Many of the attachments are listed as “Required for all projects” or “Required for this project” (based on the information you have entered in the Application Form). Failure to include the required attachments will result in the disqualification /rejection of the application.

You may attach multiple files for each item if needed. Files may not be attachable when they are open. Make sure to close the files then attach.

For items (1), (2) and (5), applicants must use the existing templates or files which are available for downloading at [the Call-for-projects website](#).

(1) Local Roadway Safety Plan (LRSP) Certification

- a) In order to apply for the HSIP funds, an agency must have completed their LRSP or an equivalent of the LRSP.
- b) Applicants must use Caltrans template. Download the template at [the Call-for-projects website](#). Complete and attach.

(2) Engineer’s Checklist (Required for all projects)

- a) The checklist is to be completed by the engineer in “responsible charge” of the preparation of this HSIP application to ensure all the primary elements of the application are included and the application are free of errors.
- b) Applicants must use Caltrans template. Download the template at [the Call-for-projects website](#). Complete and attach.

(3) Vicinity map/Location map (Required for all projects)

The application reviewers and the Program Managers must be able to quickly pinpoint the project's location in the local agency. This map needs to show where the project is located within the overall agency. It is not intended to show the specific project limits.

(4) Project maps/plans showing existing and proposed conditions (Required for all projects)

- a) These plans need to show the limits of the proposed improvements and that the proposed improvements are technically feasible and design standard are expected to be met including: lane widths, turning movements, lane transitions/off-sets sight distance, etc.
- b) The application reviewers must be able to confirm whether the proposed improvements fall within the existing right-of-way or they require new right-of-way acquisition. If the project encroaches on right-of-way of State Highway System, railroad or other agencies, include a copy of an email or letter of support from the owner.

(5) Pictures of existing condition (Required for all projects)

A minimum of two pictures is required, showing the existing safety conditions/concerns that will be altered by project. If the project proposes the same treatments for a large number of similar locations, you may just provide the pictures of some typical locations.

(6) HSIP Analyzer (Required for all projects)

Download the blank HSIP Analyzer at [the Call-for-projects website](#). Attach the completed fillable HSIP Analyzer pdf form, not its printed/scanned copy.

(7) Collision Diagram(s) (Required for a BCR application)

Application reviewers will be looking for a pattern of collisions amongst the various collision types within the collision diagram that are susceptible to be reduced by the countermeasure being proposed. Even though all

crashes may be used in the BCR calculation for many safety countermeasures, only a percentage (e.g. 25%) are used to estimate the project's expected benefits.

(8) Collision List(s) (Required for a BCR application)

- a) Applicants must include a list of crashes (by location) that matches the crashes shown on the collision diagrams and applied to a countermeasure in the BCR calculation. This list is often a direct output from SWITRS, Crossroads, TIMS or other crash databases.
- b) If the output list includes crashes that were not appropriate to include in the BCR calculation, these crashes must be crossed through.
- c) This report/list must show the total number of crashes (not number of victims) summarized by crash severity.

(9) Warrant studies (Required when applicable)

- a) If the project includes new installation of certain traffic control devices (e.g., traffic signals, pedestrian signals, etc.), it is the responsibility of the applicants to ensure all requirements of the latest [California Manual on Uniform Traffic Control Devices \(CA MUTCD\)](#) are met. Failure to include required warrants per CA MUTCD will result in the project being disqualified. See the Engineer's Checklist for more details on Warrant Studies.
- b) For new traffic signals, Traffic Signal Warrant 4, 5 and/or 7 must be met (CA MUTCD Chapter 4C).
- c) 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. Please refer to Chapter 4F of CA MUTCD for more details.

(10) Letter/email of Support from Caltrans (Required when applicable)

Work on the State Highway System (SHS):

- a) All projects that encroach within Caltrans' rights-of-way must have a letter or email from Caltrans conveying district Traffic Office's "support" or at least "neutral-support" for the project. Projects that do not contain documentation of Caltrans' position will be disqualified.
- b) All "joint funded" projects with Caltrans must have a letter of support from Caltrans indicating the project's scope, schedule, cost and cost sharing ratios. Applications for joint funded projects that do not contain a letter of support will be disqualified.
- c) For intersection improvements on state highways, an Intersection Control Evaluation (ICE) analysis and a cost sharing agreement with Caltrans are required. For more information regarding the ICE analysis, see Chapter 4C, Traffic Control Signal Needs Studies, of the [California Manual on Uniform Traffic Control Devices \(CA MUTCD\)](#).

[Caltrans District Local Assistance Engineer \(DLAE\)](#) will assist the applicants coordinating with Caltrans-District Traffic staff. If no SHS is involved in this project, this attachment is not required.

(11) Additional narration, documentation, letters of support, etc. (Optional)

- a) These may be used to help illustrate the safety concerns within the project limits.
- b) These should be directly related to documenting the merits of the need, purpose, and scope of the project.
- c) General documents and/or full reports should not be included.