

CSU Transportation Research & Workforce Development Request for Proposals

◆ Background

California's Road Repair and Accountability Act of 2017 (SB 1) is a comprehensive transportation funding package designed to address a wide range of transportation-related needs across California. As part of SB 1, annual appropriations of up to \$2 million are made available to the California State University (CSU) for the purpose of conducting transportation research and transportation-related workforce education, training and development. The [Mineta Transportation Institute](#) (MTI) at San José State University (SJSU) leads the California State University Transportation Consortium (CSUTC). CSUTC comprises MTI/SJSU along with partners CSU Chico, CSU Fresno, and CSU Long Beach.

As part of the CSUTC comprehensive research portfolio, MTI/SJSU manages a CSU-wide competitive request for proposals to identify research projects aligned with SB 1 priorities.

◆ General Proposal Information

Who can apply? This research funding opportunity is available to faculty (permanent or temporary) at any California State University campus. Commercial organizations, non-profits, and other universities may not respond to this RFP. The Principal Investigator(s) must be CSU faculty; non-CSU personnel may participate on research teams but funding should be limited. Questions about budgets should be directed to Dr. Hilary Nixon (hilary.nixon@sjsu.edu). All proposals must include funding for CSU students. Proposals submitted by CSU campuses other than SJSU will be required to submit a subrecipient commitment form. **A researcher can submit up to two proposals as PI, but a maximum of one proposal will be funded. A researcher can serve as a team member on two other proposals.** Prior on-time performance and responsiveness to MTI communications in a previously-funded project will be considered during the evaluation process.

Project funding. Proposal budgets, including indirect/F&A/overhead expenses (limited to 15%), must not exceed \$75,000. Applicants must use the budget template provided. The anticipated period of performance is 12 months. Approximately 10 awards will be issued through this competitive selection process.

Deadline. The deadline to apply to this funding opportunity is **11:59 p.m. (Pacific) on Friday, January 23, 2026**. All submissions must be submitted through Calstate InfoReady: <https://calstate.infoready4.com/>

Submittal Deadline:

January 23, 2026

RFP Guidelines,
Subrecipient
Commitment Form,
Proposal and Budget
Template available at:
<https://calstate.infoready4.com/>

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Issued: Nov. 19, 2025

**ALL AWARDS ARE
SUBJECT TO THE
AVAILABILITY OF
APPROPRIATED
FUNDS**

(search for CSU Transportation Research and Workforce Development RFP). For questions specifically about using InfoReady, please contact support@infoready4.com.

Proposal review. Proposals will be reviewed by an external, independent, third-party review committee using the evaluation criteria listed below. No CSU-affiliated faculty or staff will serve as reviewers. The committee will make the final decision regarding projects selected for funding.

Distribution of funds. The authorized contracting entity for SJSU, the SJSU Research Foundation, will award funds for approved proposals. The Principal Investigator will be required to submit monthly progress reports to MTI as a condition of payment.

◆ **Targeted Research Needs and SBI Research Areas**

CSUTC works with stakeholders to identify priority research needs that align with SB I. Proposals must address one of the five targeted research needs listed **or** fall within one of the SBI research areas listed at the end of this section. Proposals that respond to a targeted research need will receive a 10% scoring bonus during evaluation. See the full list of evaluation and scoring criteria at the end of this document.

Targeted Research Needs (eligible for 10% scoring bonus)

For questions about targeted research needs or to obtain contact information to request the required stakeholder letter of support, please contact Dr. Hilary Nixon (hilary.nixon@sjsu.edu).

- 1. Accelerating Delivery: A&E Contracting Efficiency to Accelerate Delivery of SB I Mobility Projects.** California transportation agencies often experience six- to twelve-month delays from project scoping to Notice to Proceed due to complex and inconsistent procurement and contracting practices. These inefficiencies limit competition, increase costs, and delay project delivery, undermining the objectives of SB I. Research is needed to identify and recommend practices that streamline procurement, enhance consistency and transparency, and support timely, equitable project delivery. Key questions include:
 - What are the main timelines and cost drivers in current procurement processes?
 - Which contracting models effectively reduce delays while maintaining accountability?
 - How can standardized scopes, digital tools, and templates minimize rework and improve efficiency?

Research need submitted by CSUTC/MTI Board of Trustees

- 2. Application of Video Analytics to Estimate Design Variables Affecting Crash Risk at Multi-lane Roundabouts.** While roundabouts reduce serious injuries and fatalities, occurrences of PDO crashes on multi-lane roundabouts affect their public acceptance. Hence, studying roundabout design factors that affect not only FI (Fatal and Injury) crashes but all crashes, including PDO (Property Damage Only) crashes, is important from a safety perspective, since elimination of the latter can lead to further acceptance and implementation of roundabouts at more intersections. Some of the potential design factors to evaluate include the size of the entry-circulating conflict zone, the effectiveness of buffered design, visibility to the left, and the location of the minimum speed using trajectory analysis. Research from the US and internationally has found that driver behavior leading

to collisions on multi-lane roundabouts may be caused by the combined effects of geometry and other design elements. Research is needed to examine how the likelihood of all crashes is affected by design on multi-lane roundabouts. The challenge in understanding how design affects safety on multi-lane roundabouts, particularly regarding PDO crashes, is that these crashes are severely under-reported. However, video analytics presents an opportunity to look beyond crash data and consider surrogate measures. Research is needed to support the development of clearer guidance on when to use design tweaks at traditional multilane roundabouts and when to implement novel designs, such as the turbo roundabouts. It will also support surrogate measures of safety at multilane roundabouts.

Research need submitted by Caltrans

- 3. *Estimating Robust and Accurate Capacity Estimates for Quick-build Mini-roundabouts.*** Quick-build mini-roundabouts feature fully traversable central islands, offering a compact and efficient alternative to traditional single-lane roundabouts, particularly in space-constrained areas. Their small footprint and lower costs make them suitable replacements for stop signs or signals at moderately busy intersections, while still accommodating larger vehicles. A series of such roundabouts was recently installed in Caltrans District 7 on Highway 1. These quick-build roundabouts may offer a model to build a safer design of intersections at more locations. However, the capacity estimates for these roundabouts are not well documented, partly because most roundabouts operate at undersaturated conditions, i.e., volume to capacity ratio (v/c) less than 1.0. Federal Highway Administration (FHWA) capacity models from the 2010s, based on simplified assumptions, may not accurately reflect real-world conditions. Hence, there is a need to compare the real-world capacity estimates obtained using video analytics with those available using off-the-shelf packages, such as SIDRA, especially for scenarios with higher percentages of heavy vehicles. The research may also need to explore recalibration of existing well-specified models from international jurisdictions.

Research need submitted by Caltrans

- 4. *Improving Methods for Assessing Walkability Using AI-Based Street-Level Audits.*** Safe, accessible, and comfortable pedestrian environments are critical to promote walking which in turn will help in achieving California's transportation, air quality, and climate goals. However, there are limitations in how walkability metric is currently measured. Most existing approaches—such as Walk Score, the EPA's Smart Location Database, and the National Walkability Index—primarily rely on proximity or density of amenities, offering useful regional indicators but limited insight into the actual quality, safety, and accessibility of pedestrian infrastructure. These amenity-based metrics often fail to capture on-the-ground conditions such as sidewalk continuity, crosswalk safety, lighting, and obstructions that shape real walking experiences. Research is needed to advance walkability assessment beyond these traditional measures by using artificial intelligence (AI) techniques—including image processing and large language models (LLMs)—to generate automated, scalable walk audits from street-level imagery. This new approach would allow direct evaluation of pedestrian infrastructure quality and visual environmental features, providing a complementary and more context-sensitive indicator of walkability. Comparing these AI-derived measures with existing amenity-based indices will reveal methodological distinctions and highlight where current frameworks under- or overestimate true pedestrian accessibility. This research will potentially inform the goals of the Sustainable Transportation Equity Project (STEP) to identify and address

transportation barriers in under-resourced communities, and aligns with CARB's broader objectives under SB 375 to promote equitable, multimodal, and low-carbon mobility. Improved, AI-enhanced walkability measures will strengthen evidence-based planning and guide more equitable transportation and climate investments statewide.

Research need submitted by the California Air Resources Board

- 5. Optimizing Multimodal Freight and Passenger Corridors under SB 1.** Many of California's trade corridors also serve as critical passenger routes, such as I-5, SR-99, and I-80. Under SB 1, freight (TCEP) and passenger (SCCP) mobility improvements are addressed in two programs. Research is needed to develop a coordinated research framework for identifying where freight and passenger investments intersect, and how corridor-level coordination can enhance freight mobility, safety, and reliability while delivering complementary passenger and environmental benefits. The methodologies could be case study corridors, modeling, or GIS-based analysis to simulate investment trade-offs (for example, adding truck climbing lanes vs. express bus lanes), and stakeholder workshops. Research outcomes could lead to a set of guidance principles or evaluation templates to inform future SB 1 program coordination, helping Caltrans, CTC, and regional partners improve system performance through a more integrated multimodal lens, while maintaining each program's statutory intent and funding requirement.

Research need submitted by the California Transportation Commission

General SBI Research Areas (not eligible for 10% scoring bonus)

Proposals are also welcome that fall within one or more of the following research areas. No scoring bonus is provided for projects that fall within this general list of research areas.

- Congestion relief, including traffic management systems
- Trade corridor enhancements
- Improved transit and rail
- Pedestrian and cyclist safety
- Maintenance/rehabilitation of road and bridge infrastructure

◆ **Proposal Contents**

Using the provided template, applicants must respond to the following questions:

1. **Project Goal.**

Briefly state the overall goal of this project in 1-2 sentences.

2. **Project Background.**

Describe (approx. 500-750 words) the background problem/issue the proposed project will address and provide a brief review of the academic and/or professional literature that demonstrates your knowledge of past work in the field. Include references (citations can be listed at the end of the section or at the end of the entire proposal – they do not count towards the overall word count). **Applicants are expected to clearly indicate how their project expands upon existing knowledge in the field.** All applicants should carefully review academic databases and research sites such as TRID ([Transportation Research Integrated Database, trid.trb.org](http://Transportation Research Integrated Database.trid.trb.org)) or RiP ([Research in Progress Database, rip.trb.org](http://Research in Progress Database.rip.trb.org)) to ensure that the proposed project does not duplicate existing research but rather contributes to existing knowledge in the field.

3. **Research Question/Project Objective.**

Concisely state your proposed research question or project objective (1-2 sentences).

4. **Project Methods.**

Describe (<1000 words) how the project objectives will be accomplished. Provide a detailed description of your proposed methods in a manner that can be understood by a wide range of transportation experts. Applicants should describe data collection procedures, including any likely challenges associated with gathering the necessary data, and clearly describe the methods that will be used to analyze the data.

5. **Project Tasks/Timeline.**

List specific project tasks and anticipated timeline for completion (e.g. Task 2: Develop survey and submit to campus Institutional Review Board – Months 2-3). Project duration is a maximum of 12 months and the timeline should account for quarterly meetings with an external advisor. **The task list should end with the submittal of a draft report prepared according to MTI formatting guidelines due 30 days prior to the end of the award period. All project reports will be peer reviewed and authors will be expected to respond accordingly to peer review comments when submitting a final report to MTI for publication.**

6. **Technology Transfer Plan.**

Describe (<250 words) how the results of this project will be disseminated. Journal articles and conference presentations are valued, but also describe what efforts will be made to ensure that the results are made widely available beyond the academic community. **All authors will be required to participate in ongoing technology transfer tracking after completion of the project.**

7. **Benefits to Californians/External Support for Project.**

Describe (approx. 250-350 words) how the results of this project will benefit Californians and how practitioners might apply the anticipated results. Please describe what existing interest there is from transportation professionals in California for the proposed research. **All proposals must include a letter from an external agency/organization/professional that indicates interest in the project and willingness to serve as an informal advisor. The external advisor should be an industry professional and not an academic. For proposals responding to a targeted research need listed in this RFP, the letter must come from the organization who submitted the research need (please contact Dr. Hilary Nixon, hilary.nixon@sjsu.edu, MTI Deputy Executive Director, for more information).** The advisor should be willing to informally review project progress once a quarter during the period of performance and offer advice to the research team as well as review the final draft report. Modest financial compensation for the informal advisor can be included in the project budget (<\$500).

8. Research Team Qualification.

Describe (approx. 250 words per team member) the research team's relevant skills and experiences that will help ensure success. Applicants should describe the role and responsibilities of each team member.

9. Budget Justification.

Provide a budget justification. No capital expenditures (>\$5,000) or international travel expenses are allowed. No computer equipment such as desktop computer, laptop, printer, tablets, etc. will be allowed. General attendance at conferences is not an allowable expense. Student involvement is a requirement and should be explained.

10. Prior CSUTC-funded Project.

If the PI or co-PI has received prior CSUTC funding, please provide the title of the project(s) and briefly summarize how that project (or projects) has led to improvements in the transportation system for Californians, if that work has been leveraged to obtain any additional external funding to support ongoing research, and how the research team disseminated the results of the research. Prior on-time performance and responsiveness to MTI communications in a previously-funded project will be considered during the evaluation process.

◆ **Items Required for Submission**

The following items will be required for submission to InfoReady

1. Proposal, using the template available at Calstate InfoReady
2. Project Budget using template available at Calstate InfoReady
3. Letter of support from external advisor documenting interest in the project and willingness to serve as an informal external advisor. This advisor should not be an academic, but rather an industry professional/representative who can speak to the broader usefulness or applicability of the proposed research. The letter should indicate the advisor's willingness to meet with the research team at least quarterly and to review the final draft report. **For proposals responding to a targeted research need listed in this RFP, the letter of support must come from the organization who submitted the research need.**
4. Subrecipient commitment form for all proposals submitted from non-SJSU campuses
5. Two-page CVs for research team members (not students).

◆ Evaluation Criteria

The criteria and process for evaluating proposals is as follows:

Criteria	Rating Scale	% of Final Score (Weighting)
1. Does the proposal address a specific targeted research need?	Yes/No	Proposals that meet a targeted research need will receive a 10% bonus on their total score.
2. Does the proposal present a clear and concise understanding of the problem and project objectives? Is the research question clearly stated?	0 to 10	25%
3. Are the research methods appropriate for the proposed research? Is the approach to data collection and data analysis clearly explained? Does the proposed methodology address the ability to collect and analyze the data according to sound methodological practices?	0 to 10	35%
4. Are the proposed tasks achievable in the proposed timeline and budget?	0 to 10	10%
5. Are the technology transfer activities likely to achieve broad and appropriate dissemination of the research results and are the benefits to Californians and transportation practitioners clearly described?	0 to 10	10%
6. Is the research meeting a specific need in the transportation industry that will benefit Californians? Does the proposal clearly articulate that need and is the project likely to be successful in meeting that need? Does the letter from the external advisor suggest a strong interest in this project?	0 to 10	10%
7. Are the experiences and qualifications of the research team sufficient to ensure project success? Have they successfully completed similar/relevant research projects?	0 to 10	10%

Review committee members will be asked to comment on the strengths and weaknesses of each proposal and rate each proposal using the criteria and process described above. **In addition, if the PI or co-PI received prior CSUTC funding, on-time performance and responsiveness to MTI communications with that project will be considered in the evaluation.**

◆ **MTI Contact**

For questions about this RFP, please contact:

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