Statewide Transportation Research Program

Request for Proposals

Fiscal Year 2020-21 Research Grants
Institute of Transportation Studies, UC Irvine

<table>
<thead>
<tr>
<th><strong>RFP Issued</strong></th>
<th>Wednesday, April 8th, 2020</th>
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<tbody>
<tr>
<td><strong>Proposals Due</strong></td>
<td>Thursday, May 21, 2020 at 11:59 PM PDT</td>
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<tr>
<td><strong>Apply at</strong></td>
<td><a href="https://forms.gle/pQKME9BYEdggK6TR9">https://forms.gle/pQKME9BYEdggK6TR9</a></td>
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Version 1.1
The most up to date version of this RFP will always be available at:
http://www.its.uci.edu/rfp
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Part I: Description of Funding Opportunity

Section A: Overview

The UC Institute of Transportation Studies (ITS) Statewide Transportation Research Program (STRP) is supported by an annual allocation from the State of California through the Road Repair and Accountability Act of 2017 (SB 1) and the Public Transportation Account (PTA) to support research, education, and outreach activities that directly address and inform transportation policy, planning, and engineering issues in California. The STRP responds to priorities identified by the Assembly Transportation Committee, Senate Transportation Committee, the California State Transportation Agency, and the UC ITS Board of Advisors.

Because the research needs outlined in this RFP were identified prior to the spread of the COVID-19 pandemic to California, the UC ITS is, in addition to this RFP, soliciting requests for information, qualifications, and data gathering related to the COVID-19 pandemic, with a focus on rapid response research to address both direct and indirect transportation issues related to the pandemic. For more information about the separate COVID-19 response and recovery research solicitation, please go to: www.ucits.org/covid-19/.

Section B: Research Priorities

Eligible applicants are invited to submit research proposals that respond to the priorities listed in Part II of this request for proposals. All projects funded through this RFP must be conducted in conjunction with at least one project stakeholder. Many of the topics outlined in Part II suggest possible stakeholders, though researchers may identify alternative stakeholders to those suggested. More information about the stakeholder participation requirements are outlined in Part III, Section B: Proposal Organization, under the Letter(s) of Support item.

Section C: Funding Availability

Approximately $750,000 will be available through ITS-Irvine to projects selected through this RFP and the COVID-19 solicitation. Eligible project types and award ranges for this solicitation are presented in Part II, Section A: Eligibility.
Section D: Project Award Period

Researchers will be notified whether or not their submitted proposal has been funded by July 8, 2020. The anticipated start date for projects is the beginning of the Fall 2020 quarter/semester on each respective UC campus. Principal Investigators (PIs) may request an earlier start date, subject to the constraints of the review and administrative processes. The projects are expected to run for 12 months, followed by a period for disseminating the research results to relevant stakeholders and decision-makers. After the project close-out date, all remaining funds in the project’s account will revert back to ITS-Irvine.

Section E: Key Activities Schedule

Key activities and deadlines for this solicitation are presented below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solicitation Release</td>
<td>Wed, April 8th, 2020</td>
<td></td>
</tr>
<tr>
<td>Deadline to Submit Proposals</td>
<td>Thursday, May 21, 2020</td>
<td>11:59 PM PDT</td>
</tr>
<tr>
<td>Notice of Award</td>
<td>Wednesday, July 8, 2020</td>
<td></td>
</tr>
<tr>
<td>Project Start Date</td>
<td>First day of Fall 2020 quarter/semester (or earlier upon request)</td>
<td></td>
</tr>
<tr>
<td>Project End Date</td>
<td>12 months after the project start date</td>
<td></td>
</tr>
</tbody>
</table>

Note that this schedule differs substantially from the COVID-19 response and recovery research solicitation described in Part I above.

Section F: Contact Information

For questions regarding this RFP, please contact your campus STRP Manager:
Dr. Craig Rindt, Assistant Director for Research Coordination
949-824-1074
crindt@uci.edu

For questions specific to budget preparation, please contact:
Cam Tran, Chief Administrative Officer
(949) 824-6564
camt@uci.edu
To be added to the mailing list to receive this RFP in future years, please email crindt@uci.edu.

Part II: FY 2020-21 Research Priorities

Section A: Transportation and Housing Linkages

Proposals funded in this category will be closely coordinated with the California State Transportation Agency, members of the Transportation and Housing Coordination Workgroup, and other relevant partners as identified by the PI and/or the UC ITS Council of Directors. The UC ITS is interested in funding proposals responding to the following research prompts:

- Analyze how and to what extent transportation policies, rules, plans, and investments affect the development community’s (e.g., developers, financial institutions, and property owners) decisions on whether and where to build housing, especially infill development in job-rich locations.¹

- Evaluate the factors, particularly transportation-related factors, contributing to delays in entitling and building housing in California.²

- Examine the links between transportation and homelessness, including, but not limited to:
  - Whether and to what extent rising transportation costs are contributing to homelessness;
  - The prevalence of people living in motor vehicles including recreational vehicles, the challenges they face, and opportunities for public policy and programs to assist them;
  - The extent people are living in or seeking shelter in public transit vehicles, at stops and stations, or on, under, or adjacent to public transportation infrastructure, such as sidewalks, underpasses, and rights-of-way; and the challenges faced by agencies responsible for these vehicles and infrastructure in responding to these conditions; and

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¹ Suggested stakeholder: the California State Transportation Agency
² Suggested stakeholders: the California State Transportation Agency and/or the Southern California Association of Governments
Ways to better assist unhoused residents in traveling to access care, services, education, and employment.

Assess strategies to preserve affordable housing with expiring covenants, particularly in places with complementary transportation infrastructure.³

Section B: Transportation Equity

Survey and assess how local, regional, state, and federal governments in the U.S. are advancing transportation equity in one or more of four areas: (i) policy, planning, and administrative processes, (ii) access and mobility, (iii) across geographies, and (iv) social and economic outcomes as part of their transportation policies, plans, programs, projects operations, and services. Identify which approaches have proven to be most effective.⁴

Evaluate strategies to enhance state efforts to increase access to zero-emission and near zero-emission transportation and mobility options among low-income residents as identified in the Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents report prepared by the California Air Resources Board.⁵

Assess how the social justice impacts of proposed transportation projects, programs, and investments can be more systematically evaluated.

Section C: Goods Movement and Logistics

Proposals funded on the topics below will coordinate with the Assembly Transportation Committee and additional stakeholders as noted below.

Evaluate cost-effective infrastructure investments and/or operational strategies to improve the efficiency of freight movement while mitigating environmental and health impacts (particularly in disadvantaged communities) in California.⁶

Evaluate global best practices for increasing cargo throughput at seaports and recommend changes to public policy and practice that draw from these best practices.

³ Suggested stakeholders: California State Transportation Agency and Southern California Association of Governments
⁴ Suggested stakeholder: California State Transportation Agency
⁵ Suggested stakeholders: California Energy Commission, Natural Resources Defense Council, and/or California Air Resources Board
⁶ Suggested stakeholder: Natural Resources Defense Council
• Evaluate strategies for integrating goods movement into urban planning and street design, with a particular focus on small goods deliveries. Develop policy recommendations based on this evaluation. Such a study might entail a survey of policies and approaches among cities and counties in California and around the U.S.

• Evaluate the effects on global supply chains broadly, and California goods movement in particular, due to disruptions, such as a public health disruption (like a pandemic), a labor disruption (if, for example, the International Longshore and Warehouse Union were to declare bankruptcy), or technology disruption (such as vehicle automation and artificial intelligence).

• Conduct research to inform the design, delivery, and/or evaluation of the California Trade Corridor Enhancement Program.  

Section D: Innovative Mobility

• Conduct feasibility studies of possible innovative mobility pilot projects or evaluate the performance of innovative mobility pilot projects. Proposals should be coordinated with a local agency partner and focus on pilot projects that test the application of advanced technologies to develop new products/services on the supply side, such as evaluating real-world deployment of connected and/or automated vehicle technologies, microtransit service, electric carsharing programs, partnerships with TNCs for first/last mile public transit access, and intelligent intersections to enhance pedestrian/bicycle safety.

• Evaluate opportunities for increased collaboration among state, regional, and local governments in big transportation data analytics and incorporating continuous data collection and analysis into planning processes, especially with regard to innovative mobility and automated vehicles.

• Evaluate whether and to what extent local governments are gathering and using data to monitor, regulate, or advance innovative mobility services, pilot programs, and/or interventions, especially those that are part of state-funded grant programs to support active transportation and innovative mobility pilots. This should include the development of best practices and guides for requesting and ensuring data collection from private sector partners as well as the development of model data sharing agreements.

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7 Suggested stakeholder: California Transportation Commission and/or Caltrans
Section E: Travel Behavior

- Evaluate the effectiveness of Transportation Demand Management (TDM) strategies with a focus on how and under what circumstances coupling these strategies with other transportation, land use, or fiscal policies may increase (or decrease) TDM effectiveness.\(^8\)

- Synthesize research on the experience of using financial incentives (prices, taxes, fees, subsidies) to influence travel behavior, accounting for efficiency, effectiveness, and equity.\(^9\)

- Identify and evaluate VMT reduction strategies that minimize and/or mitigate burdens on lower-income travelers.\(^10\)

- Conduct research to inform the design, delivery, and/or evaluation of the Solutions for Congested Corridors Program.\(^11\)

Section F: Public Transit

- Synthesize research on the most promising strategies to increase public transit use; this synthesis should include both actions that transit operators can take, as well as public policy actions more broadly that could support increased transit use.\(^12\)

- Evaluate public transit agency performance metrics that account for social and environmental benefits not associated with transit ridership.\(^13\)

- Investigate challenges to and opportunities for statewide transit fare integration, including financial implications for individual agencies.\(^14\)

- Investigate challenges to and opportunities for public transit agencies to participate in / benefit from California’s Low Carbon Fuel Standard.\(^15\)

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\(^8\) Suggested stakeholder: Sacramento Area Council of Governments

\(^9\) Suggested stakeholder: Sacramento Area Council of Governments

\(^10\) Suggested stakeholder: California Air Resources Board

\(^11\) Suggested stakeholders: California Transit Association, San Francisco Transportation Authority, and/or Senate Transportation Committee

\(^12\) Suggested stakeholder: California Transit Association, California Transportation Commission, Southern California Regional Rail Authority, LA Metro, Senate Transportation Committee, and/or Assembly Transportation Committee

\(^13\) Suggested stakeholder: California Transit Association, San Francisco County Transportation Agency, and/or Senate Transportation Committee

\(^14\) Suggested stakeholders: California Transit Association and/or Sacramento Area Council of Governments

\(^15\) Suggested stakeholders: California Transit Association and/or Sacramento Area Council of Governments
Section G: Transportation System Resilience and Adaptation

- Evaluate short-, medium-, and long-term strategies to reduce the vulnerability of transportation infrastructure and/or make infrastructure more resilient to the effects of fires, floods, sea level rise, and other negative effects of climate change. Include methods for prioritizing mitigation efforts.  

- Evaluate strategies to improve transportation system resilience and evacuations related to natural disasters, such as wildfires, earthquakes, tsunamis.

Section H: Electrification and Zero Emission Transport

- Examine the public sector role in implementing the next generation vehicle charging strategies for both passenger and goods movements, including inductive charging and grid integration strategies.

- Evaluate strategies for advancing vehicle electrification among new mobility providers, such as Transportation Network Companies, microtransit companies, and carsharing.

- Evaluate the implications of state and local public transit electrification mandates, including strategies for cost-effectively meeting these mandates.

Section I: Aviation

- Evaluate best practices for reducing aircraft emissions, such as during ground movements and idling time.

- Analyze the economic and environmental effects of policies, programs, and projects aimed at shifting passenger and cargo movements from aircraft to rail transport in California.

Section J: Performance Evaluation and Optimization

- Examine why many major transportation capital projects in California and across the U.S. come in over budget and behind schedule, while some do

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16 Suggested stakeholder: Senate Transportation Committee
17 Suggested stakeholder: Assembly Member Bloom’s Office
18 Suggested stakeholders: Contra Costa Transportation Authority and/or California Energy Commission
19 Suggested stakeholders: California Energy Commission and/or Natural Resources Defense Council.
20 Suggested stakeholders: California Transit Association and/or LA Metro
not; consider as well why some countries have better track records than California and the U.S. in delivering major projects on-budget and on-time. Based on this analysis, offer recommendations for California transportation agencies on ways to more reliably deliver major transportation capital projects.21

- Synthesize research on the promise of and challenges to using performance-based measures for allocating transportation funding.22
- Evaluate the potential of SB 743-related VMT exchanges, drawing on the experience of transferable development rights and carbon credit exchanges.23
- Synthesize research on transportation performance measurement to guide the tracking and evaluation of performance metrics outlined in the Road Repair and Accountability Act of 2017 (SB 1).24
- Evaluate the economic and environmental performance of projects and programs funded by California’s Greenhouse Gas Reduction Fund (GGRF). Based on this evaluation, develop recommendations for state officials on ways to optimize the performance of GGRF expenditures.25
- Evaluate ways to increase the efficiency and effectiveness of state investment in transportation; specifically:
  - opportunities to accelerate project delivery by Caltrans,26
  - processes and/or materials, such as pavements, that are more cost-effective, have lower life-cycle costs, and are more environmentally sustainable than those currently used.27

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21 Suggested stakeholders: San Francisco County Transportation Authority
22 Suggested stakeholders: Contra Costa Transportation Authority and Senate Transportation Committee
23 Suggested stakeholders: Contra Costa Transportation Authority and/or Southern California Council of Governments
24 Suggested stakeholders: California State Transportation Agency, Caltrans, and California Transportation Commission
25 Suggested stakeholder: Assembly Transportation Committee
26 Suggested stakeholders: Assembly Transportation Committee, Caltrans
27 Suggested stakeholder: Senate Transportation Committee
Section K: Safety

- Evaluate the effectiveness of the California Highway Patrol (CHP) in improving roadway safety, especially in light of reductions of CHP officers during the 2010s.\(^{28}\)
- Evaluate the factors, such as time of day, road conditions, weather, etc., contributing to incidents, crashes, and injuries involving micro-mobility devices, such as electric scooters.\(^{29}\)
- Evaluate the factors associated with rail vehicle collisions with pedestrians, motor vehicles, and others, particularly by those trespassing on rail rights-of-way, and offer recommendations on how agencies can reduce such collisions.\(^{30}\)
- Conduct follow-on research on topics and issues outlined in the CalSTA Zero Traffic Fatalities Task Force Report of Findings,\(^{31}\) such as:
  - Evaluate and recommend context sensitive, data-driven approaches to establish speed limits that prioritize the safety of all road users (recommendation C-S1)
  - Develop guidance on how to consider bicyclist and pedestrian safety in a traffic survey (recommendation C-S3)
  - Evaluate the allocation of Highway Safety Improvement Program funds between local roads and the State Highway System to determine if revisions to the allocations could improve statewide safety outcomes. As part of the evaluation, review other funding sources (e.g., sales tax measure funds) and amounts for both State and local safety projects. (recommendation C-EN1)
  - Evaluate how local agencies are implementing traffic control devices and analyze whether updates to the California Manual on Uniform Traffic Control Devices should be made (recommendation C-EN5)
  - Investigate the impact of Level of Service requirements on the implementation of engineering interventions designed to reduce vehicle operating speed (recommendation C-EN8)

\(^{28}\) Suggested stakeholder: Assembly Transportation Committee
\(^{29}\) Suggested stakeholder: Assembly Transportation Committee
\(^{30}\) Suggested stakeholder: Southern California Regional Rail Authority
\(^{31}\) Suggested stakeholders: California Transportation Commission, Caltrans, and/or local government partner
• Evaluate infrastructure, regulatory, and enforcement options to safely integrate bicycle, pedestrian, and micro-mobility use alongside vehicle use on local streets and roads; based on this evaluation, suggest changes to the State’s Vehicle and Streets and Highways codes and/or street design.\(^{32}\)

Section L: Active Transportation

• Evaluate the effectiveness of the State’s active transportation grant programs and complete streets policies for shifting travel to active transportation modes. Based on this evaluation, identify recommendations for improving the effectiveness of the State’s active transportation programs and policies.\(^{33}\)

Part III: Proposal Eligibility, Preparation, and Submission Guidelines

Section A: Eligibility

**Eligible Applicants**

Eligible applicants include full-time ITS-Irvine Faculty Associates who are eligible to serve as a PI at UC Irvine. Other researchers, graduate students, and undergraduate students can be included in the proposal with their salary covered in place of the PI’s in part or in whole; however, the PI remains responsible for the project. Non-UC researchers are not eligible for funding through this RFP, although exceptions may be approved if special circumstances warranting the exception are fully explained in the proposal. Interdisciplinary research teams are strongly encouraged.

PIs who have outstanding deliverables for previously awarded UC ITS projects are not eligible to apply unless all outstanding deliverables are submitted and approved prior to the proposal deadline for this RFP. Those with projects funded in the FY 2019-20 UC ITS RFP cycle are eligible to apply; however, all past due deliverables from the PI’s current FY 2019-20 awards must be completed before FY 2020-21 funds will be dispersed.

PIs who submit proposals to or receive funding through this RFP are also eligible to respond to and receive funding through the COVID-19 solicitation.

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\(^{32}\) Suggested stakeholder: Assembly Transportation Committee

\(^{33}\) Suggested stakeholders: California Transportation Commission, Caltrans, and/or the Assembly Transportation Committee
Multi-Campus Collaborations
The UC ITS is a Multicampus Research Unit and explicitly encourages multicampus collaborations both within the multi-branch UC ITS (Berkeley, Davis, Irvine, UCLA) and with other UC campuses. For multi-campus collaborative projects, the proposal should outline the work to be completed at each institution, identify the PI at each UC campus, and explain in the scope of work whether each task could or could not be completed without funding from the other campus. Separate budgets should be prepared for each campus. The PI at each campus shall submit the full proposal (i.e., describing the complete project representing the contributions of all partners) and the budget for only his/her/their campus using the process outlined in the RFP for his/her/their campus. Partners from UC campuses outside of the UC ITS must submit the proposal and budget via the process defined in the RFP for non-ITS UC campuses posted at http://www.ucits.org/request-for-proposals/. The decision to fund a multi-campus proposal in its entirety or in part will be made collaboratively by the ITS campuses named in the proposal.

Eligible Projects
Eligible projects must respond to one or more of the research priorities listed in Appendix A. The following project types will be considered:

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<tr>
<th>Project Type</th>
<th>Description</th>
<th>Maximum Award Amount</th>
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<tbody>
<tr>
<td>Research Synthesis</td>
<td>A research synthesis should synthesize and summarize existing research on a given topic and identify research gaps for critical policy and/or practice-related questions. The synthesis should be prepared for an informed but non-technical audience. The proposal should include at least one meeting with policymakers and/or practitioners as part of the development process. When applicable, researchers are encouraged to submit these syntheses to scholarly journals.</td>
<td>$25,000</td>
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<tr>
<td>Translational Project</td>
<td>Translational projects support the application or extension of completed research. Activities supported by translational projects can include real-world testing, website development, implementation activities, tool development, training programs, workshops, and/or development</td>
<td>$50,000</td>
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</table>
of practice- or policy-oriented outreach materials (e.g., policy briefs, infographics, blog posts).

| Applied Research Project | Applied research projects close a knowledge gap on an important issue and involve original data acquisition and/or analysis. These projects must be conducted in coordination with a government agency partner. | $80,000 |

PIs may submit multiple proposals in response to this RFP but awards are limited to:
- No more than one (1) Applied Research Project per PI per year; and
- No more than three (3) Research Translational Awards or Research Syntheses (or combination thereof) per PI per year.

Please note: The above limitations apply to this RFP only. PIs may lead additional projects (subject to the limitations described above) awarded through the COVID-19 solicitation; however, total funding for a PI is limited to no more than $130,000 in total direct costs across all awards funded through this RFP and the COVID-19 solicitation.

**Eligible Costs and Budget Guidelines**

All proposals must include a detailed budget. The budget should only include direct costs. These costs will vary depending on the project, but include the salaries and fringe benefits of project staff, travel, materials, supplies, and miscellaneous costs attributed to the project. There is no indirect cost for projects funded through this solicitation (i.e., Facilities and Administrative (F&A) rate is 0%). A budget template is provided. PIs are not required to use the budget template; however, if another format is used, then it must cover all the budget categories listed in the budget template.

For multi-campus collaborative proposals, the lead PI at each campus should submit the proposal budget as outlined by the RFP administered at his/her/their campus and the budget should cover the expenses related to activities and staff at his/her/their campus only. Expenses for other campuses should not be included.

Budgets for project proposals may include salary for one tenured faculty member for one month, or one assistant professor for two months, or one research staff member for up to four months. Teams of investigators may receive prorated shares of these salary levels (e.g., 0.5 months for tenured faculty with two months for
researchers). Project budgets must support the PI’s involvement in engagement activities. Competitive applied research proposals will include funding for one graduate student researcher (49% time during academic terms—unless students are TAs or have other commitments—and preferably for 3 quarters, and preferably 100% during the summer). Funding for graduate students is encouraged but not required in research synthesis and translational project proposals. Non-resident tuition is not an allowable expense. Any budgets that deviate from these guidelines must include an explanation in the budget justification and may receive lower priority for funding.

A limited amount of materials, supplies, and travel for data collection purposes and/or presenting research may be included, provided that they are a direct expense related to completing or disseminating the work. International travel is not allowed. Domestic travel to events and/or meetings to present research results within California is encouraged. Domestic travel outside of California is not an allowable expense except in exceptional circumstances and if formally approved by the STRP Manager at the PI’s campus. Proposers are discouraged from budgeting for computers, equipment, support staff, outside consultants, or any salary that goes beyond normal academic or summer compensation. A written justification for all supplies and travel is required.

Section B: Proposal Organization

The proposal should adhere to the following formatting guidelines:

- **Font:** 11 pt.
- **Margins:** no less than 1 inch on all sides (excluding headers and footers)
- **Spacing:** single spaced, with a blank line between each paragraph
- **File Format:** You may author your proposal using any software you wish. You will be asked to submit the final proposal documents as PDF files, excluding the budget which should be submitted as an Excel spreadsheet.

Proposals must be submitted in three components (A, B, and C) as described in the following sections.

**Component A: Proposal.**

The bulk of your proposal is contained in Component A, which should include the following sections.

1) **Cover page** – Use template provided in Appendix B as a guide. You will be asked to enter the information from the title page template into the proposal submission form.
2) **Proposal Narrative** – Not to exceed five pages. Include page numbers on each page. The proposal narrative must include the following subheadings:

- **Problem Statement**: Discuss the problem and/or challenge you are proposing to address. Name specific state policies and/or goals to provide context. (max. 200 words)

- **Proposal Summary**: Describe how you will address the problem and/or challenge described in the problem statement. Provide an overview of the proposed work plan. (max. 300 words)

- **Expected Impact**: Explain how achieving the goals of the project will help advance transportation policy and/or practice in California. Identify public agencies and/or other external stakeholders involved in your project; and explain how your research will be or could be used by external partners. (max. 300 words)

- **Research Design (this section is only required for applied research proposals)**: Provide an overview of your research design and methods in sufficient detail so that reviewers can evaluate your approach (max. 1,500 words). In particular:
  - If the study relies on existing data, describe the data to be used and its sources.
  - If the study involves original data collection, explain the methods for collecting data, including site selection, sampling, and measurement methods (e.g., observations, surveys).
  - If the study involves the development of a model, explain the process for developing, as well as validating the model.
  - If the study involves the application of a model, explain the nature of the model in terms of inputs and outputs, as well as its internal workings (in easily understandable terms).
  - If the study involves scenario testing, explain the process for defining the scenarios.
  - Proposers are expected to consider changing human subjects public health protections that their Institutional Review Board may put into place due to the project period.

- **Products and Deliverables**: List and describe all anticipated products and deliverables from the project. A final research report and 2-page policy brief are required for all applied research projects and research synthesis projects. Deliverables for translational projects (as well as applied research and research synthesis projects) can include tools, websites, agendas, presentations, video recordings, outlines, draft literature review, working documents, webinars, and other types of products. (max. 500 words)
3) **Scope of Work** – The scope of work identifies the tasks required to complete the work. This section should be 1–2 pages and include a Task Schedule (see Appendix D for scope of work and task schedule example). For multi-campus collaborative proposals, provide a clear explanation of which tasks will be completed by which partner, and indicate the degree to which tasks are dependent on each other; please use a table to present this information. All scopes of work must include an engagement task outlining the target audience for the research and how preliminary and/or final results will be shared with and/or communicated to this audience. Be as specific as possible when describing the type (e.g., organize a workshop, present at a policy conference, share preliminary and/or final reports with practitioners) and quantity of engagement activities. PIs are encouraged to discuss in their proposals how restrictions on travel and social interaction as part of the state’s COVID-19 response may affect their ability to deliver on their proposed research.

4) **Project Budget Summary** – See Section II Eligibility for more information on eligible project costs. The summary provided in the proposal document should include the budget category totals as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
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<tbody>
<tr>
<td>Salaries</td>
<td></td>
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<tr>
<td>Fringe Benefits (incl. tuition)</td>
<td></td>
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<tr>
<td>Travel</td>
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<tr>
<td>Materials and Supplies</td>
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<td>Equipment</td>
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<tr>
<td>Subcontracts</td>
<td></td>
</tr>
<tr>
<td>Other Costs</td>
<td></td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td></td>
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</tbody>
</table>

5) **Budget Justification** – A narrative should preemptively address questions that budget reviewers may have about the amount of personnel costs, equipment expenses, subcontracts, travel, etc., and why these are necessary to accomplish the project’s objectives.

6) **Staffing and Collaboration Plan** – Not to exceed one page. The plan must include:

- Proposed role of each research participant, including student participants, as well as budgeted and pro bono time on the project.
- Project-related collaborations with other researchers at UC ITS branch campuses, researchers at other ITS and non-ITS UC campuses (if applicable), and/or other organizations.
Component B: Supporting Information

Supplemental information should be submitted in component B.

7) **2-page CV for the Principal Investigator and any Co-PI(s)** (required)

8) **References** (Optional) – Proposals can include a separate bibliography of references cited in the proposal.

9) **Letter(s) of support** – A letter of support from a public sector stakeholder outlining the relevance and intended use of the research is required for all proposals. The only expectation to this requirement is if the PI identifies Caltrans, the California Energy Commission (CEC), and/or the California Air Resources Board (CARB) as a public sector stakeholder. In lieu of a letter, the PI must provide the name and contact information for a point person at Caltrans, CEC, and/or CARB that the PI intends to work with. If the PI would like help in connecting with a potential stakeholder, then they are encouraged to reach out to Craig Rindt <crindt@uci.edu> no later than Monday, April 15, 2020 to request assistance.

10) **Letter(s) of participation and/or commitment** (if applicable) – PIs must provide a letter of support from an outside stakeholder that will be providing data, access to private or public facilities, cooperation of private or public entities, and/or commitment of match funding.

Component C: Budget Spreadsheet

Submit your budget spreadsheet in excel format as component C. See Section II Eligibility for more information on eligible project costs and budget format.

Section C: Proposal Submission

**Proposals responding to this RFP are due no later than Thursday, May 21, 2020 at 11:59 PM.** Proposals must be submitted via the form at this link: https://forms.gle/VgxHxx9EEbSoDxseA. If you are having difficulty with the form, please contact Craig Rindt <crindt@uci.edu> for assistance. Proposals received after this deadline will not be considered. Review by UCI’s Sponsored Projects Administration is not required for this internal solicitation.
Section D: Evaluation and Review Process

Proposals will be evaluated and scored based on responses to the information requested in this solicitation. The following process and criteria will be used to screen and evaluate projects:

1. **Submission Screening** – Proposals will be reviewed first by program staff for:
   (1) completeness and compliance with the requirements detailed in Section III. Proposal Organization, (2) meeting eligibility requirements of this RFP, (3) an explicit link to one or more of the research priorities listed in Appendix A, and (4) confirmation that a state, regional, or local government agency in California has expressed interest in the proposed work (if applicable).
   Proposals that pass initial screening will be evaluated for technical merit, relevance to transportation policy and practice in California, and prior performance on other grants awarded by ITS-Irvine.

2. **Proposal Review** – Proposals will be externally peer reviewed. Expert reviewers may include faculty, other researchers and practitioners. All proposals will be evaluated according to the following criteria:
   - Relevance to research priorities
   - Level of support from public agency stakeholder and demonstration of how research will inform policy and/or practice if applicable
   - Quality of research design and methodology
   - Reasonableness of budget and cost-effectiveness
   - Qualifications to perform work
   - Level of collaboration, including collaborations across UC ITS and/or other UC institutions, with outside organizations, and/or interdisciplinary research teams
   - Prior performance on projects funded through other ITS solicitations (as applicable)
   - Level of student involvement
   - Match funding and/or potential for attracting larger grant funding.

Section E: Award and Administration Information

**Award Notice**

It is anticipated that researchers will be notified by July 8, 2020, whether or not the proposal is selected for funding. Some proposals may be funded at a reduced level, or funding may be contingent on a revision to the proposal.
In accepting an award, the PI agrees to complete the following in a timely manner. Failure to do so may result in the revocation of the award:

- Revise and resubmit scope of work based on reviewer feedback (if applicable),
- Revise and resubmit budget based on review feedback (if applicable), and
- Sign and submit a UC ITS Grant Award Guidelines and Expectations Agreement (Appendix D).

**Award Administration**

All funds will be administered by ITS Irvine with an account assigned for every project. Any expenditures, such as payroll, purchase orders, and/or reimbursements, may be processed through either the Awardee’s home department or ITS, following established university policies and procedures.

**Grant Agreement Requirements**

In accepting a STRP grant award, the PI agrees to the grant requirements and expectations as outlined in Appendix D. Failure to meet these requirements will jeopardize the PI’s consideration for funding in future years.
Appendix A - Cover Page Template

PROJECT TITLE:

PRINCIPAL INVESTIGATOR
Name:
Department:
Phone:
E-mail:
ORCID:

OTHER KEY ACADEMIC PARTICIPANTS (provide up to 3)
Name:
Department:
Phone:
E-mail:
ORCID:

ABSTRACT (200 word max)

KEY WORDS (provide 5):

SPECIFIC PRIORITY BEING ADDRESSED (copy and paste exact language from RFP):

EXTERNAL STAKEHOLDER(S) INFORMATION
If you are attaching a letter of support, then please list the name and contact information for the signee of the letter in addition to the name and contact information for any other external partner(s) involved in the proposal. If you are proposing to work with CEC, CARB, and/or Caltrans, then list no more than 2 contacts at each organization you plan to work with below.

Stakeholder Contact 1
Name:
Title:
Affiliation/Organization:
Phone:
E-mail:
Stakeholder Contact 2
Name:
Title:
Affiliation/Organization:
Phone:
E-mail:

TOTAL DIRECT COST REQUESTED: $______________

TYPE OF RESEARCH PROPOSAL (check one):
___ Research Synthesis
___ Translational Research Project
___ Applied Research Project

Is this a collaborative proposal with another UC ITS or non-ITS campus? If yes, list the PI name, title, and affiliation for each partner university:

What (if any) are other sources of secured and/or anticipated funding supporting the proposed research?

Does the proposed project build upon completed and/or current research projects funded through other ITS programs (e.g., SB1/STRP, PSR, etc)? If so, then please explain the connection below:

Potential Reviewers: Reviewers cannot have direct involvement in proposed research and cannot be former students or advisors of the PI(s). Include at least two from academia and one additional reviewer; other reviewers can be practitioners from industry, public sector, or non-governmental organizations:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution/Org.</th>
<th>e-mail address</th>
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<tbody>
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</tbody>
</table>
Appendix B - Example Scope of Work and Task Schedule

**Task 1: Literature Review**  
We will begin with a review of the literature...

- Work Product A: Literature Review

**Task 2: Additional Task**  
A brief description of the task

**Task 3: Additional Task**  
A brief description of the task

**Task 4: Complete Final Deliverables (required)**  
We will produce a final report using the SB 1 report template for my campus, policy brief following SB 1 guidance, etc...

- Work Product B: Final Report
- Work Product C: Policy Brief

**Task 5: Engagement Task (required)**  
We plan to share results of our work with << describe target audience>> by presenting at a meeting, via webinar, briefing, conference, etc.>>

- Work Product D: Webinar (just an example)

**Sample Task Schedule with Work Products**

<table>
<thead>
<tr>
<th>Task</th>
<th>Work Product</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2</td>
</tr>
<tr>
<td>1</td>
<td>A - Literature Review</td>
<td>✔ ✔ ✔</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>B - Final Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C - Policy Brief</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>C - Webinar</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C - UC ITS Grant Award Requirements and Expectations Agreement

When accepting State Transportation Research Program (STRP) funding from the UC ITS, the PI agrees to the following requirements and expectations. Failure to meet terms will negatively impact future award decisions.

**The PI acknowledges that his/her/their project must address and inform transportation science, engineering, policy, or planning issues in California and must engage public sector partners.** The UC ITS STRP is funded by the State of California through the Public Transportation Account and the Road Repair and Accountability Act of 2017 (Senate Bill 1) with the expressed purpose of supporting research activities that directly address and inform transportation engineering, policy, and/or planning issues in California. PIs shall actively engage policymakers and/or practitioners at all stages of their research and report all engagement activities in their 6-month progress report and at the close-out of their project. The PI agrees to provide at least one presentation sharing his/her/their work with practitioners and policymakers through a UC ITS organized webinar or event, if requested. The PI is encouraged to reach out to the STRP Program Manager at his/her/their campus and/or UC ITS Assistant Director Laura Podolsky for consultation on strengthening the project’s connection with policy and/or practice in California.

**The PI agrees to acknowledge the support provided by the UC ITS and the State of California in all presentations and publications resulting in whole or in part from the PI’s research award.** The PI agrees to disclose the support from the UC ITS and State of California in all primary and derivative work products and presentations. The PI shall use the following language for publications when acknowledging the support provided by the UC ITS and the State of California. The language may be augmented for other products (e.g., presentation, website).

*This study was made possible through funding received by the University of California Institute of Transportation Studies from the State of California through the Public Transportation Account and the Road Repair and Accountability Act of 2017 (Senate Bill 1). The contents of this report reflect the views of the author(s), who is/are responsible for the facts and the accuracy of the information presented. This document is disseminated under the sponsorship of the State of California in the interest of information exchange and does not necessarily reflect the official views or policies of the State of California.*

**The PI agrees to disclose other proposed or in-kind research funding for a project substantially similar to the project being supported by the UC ITS.**
Multiple sponsors are encouraged, but full disclosure is required. A specific agreement for joint funding is required for research that is being funded or proposed for funding in whole or in part by other agencies or organizations. Failure to disclose other proposed or in-kind research funding for a project substantially similar to a UC ITS project is grounds for termination of a UC ITS grant.

**The PI understands that the period of performance for his/her/their grant award is 12 months.** The start and end dates for the PI’s grant will be provided by the STRP Program Manager at the PI’s campus. The PI agrees to submit all final deliverables and products by the end of the grant period. In the event that the project cannot be completed by the expected end date, a formal request for a no-cost extension must be submitted via email to the STRP Program Manager at the PI’s campus at least one month prior to the grant end date. Failure of the PI to submit final products on schedule will adversely impact future award decisions.

**The PI agrees to use the awarded funding in a manner consistent with the submitted budget.**

**The PI agrees to submit a 6-month progress report.** For the 6-month progress report, the PI shall submit a high-level summary of accomplishments over the past six months, plans for the next six months, and a completed spreadsheet that provides supplementary information about his/her/their project. Progress reports will be submitted online and due when specified by the campus STRP Program Manager.

**The PI agrees to produce a final report and policy brief for his/her/their project.** Each of these deliverables are described in more detail below:

**Research Report:** The PI agrees to deliver a final report as an electronic file before the end of the grant term. The report should be complete, original, organized, and accurate; and the length should be commensurate with the scope and budget. The PI shall use the report template provided. The report is subject to both review by UC ITS staff and external referees. If the report is reviewed, then the PI is required to respond to all questions and suggestions in a timely manner. Each report will be given a Digital Object Identifier (DOI) upon completion and will be posted on the UC eScholarship repository. The PI may share the eScholarship link with others but shall not post the report PDF in other locations.

**Policy Brief:** The PI agrees to prepare a two-page policy brief targeted to a policymaker and/or practitioner audience. The policy brief should be suitable for an educated but non-technical audience and summarizes the main findings of the research relevant to practice and/or policy. The brief should be submitted along with the report. The brief will be finalized through an iterative process.
with the UC ITS or campus ITS staff and the PI. Guidelines, a template, and an example are available and completed briefs appear on eScholarship. The posting and sharing requirements for research reports also apply to policy briefs.

**The PI agrees to complete a project close-out online survey.** The project close-out survey will ask the PI for information about engagement activities (including how external stakeholders identified in his/her proposal were engaged throughout the research process); future plans for and/or extensions of the project; and feedback on the STRP overall.

**The PI agrees to provide and update annually a statement listing all publications, presentations, inventions, and subsequent grants resulting from the project.** Every year for the subsequent three years, the PI will be asked to update the supplementary spreadsheet submitted with the 6-month progress report with information on students who contributed to the project (i.e., graduation status), publications, presentations, inventions, and engagement activities.