Competition Details

Institute of Transportation Studies Mobility Research Program (SB1)

Administrator(s):	Craig Ross Rindt (Owner)
Category:	Internal Funding Opportunity
Award Cycle:	2017-19
Discipline/Subject Area:	Transportation Research
No. of Potential Awardees:	Unlimited
Maximum Applications Allowed Per Applicant:	99
Participating Organization(s):	--
Internal Submission Deadline:	Friday, July 13, 2018
Letter of Intent Deadline:	Sunday, June 3, 2018
Applications Submitted:	15

Description:

This UCI MRP RFP will allocate up to approximately $425,000 in Year 1 (FY 2017/18) research funding, and up to approximately $750,000 in Year 2 (FY 2018/19) research funding. These amounts are for direct costs as there is no overhead on these awards. The exact amounts awarded under this RFP will be determined by the quality and relevance of proposals received. Selected projects may receive funding from one or both fiscal year sources. All projects are expected to have a maximum term of 12 months, though this requirement may be modified in exceptional circumstances. Year 1 proposals should expect to begin on July 1st, 2018 and be for projects that can produce tangible results for stakeholders within 6 months, though they may extend for a full 12 months to produce additional results. Year 2 projects are contingent on the continued availability of MRP funding and should anticipate a start date of January 1st, 2019. Given the anticipated competition for these funds, prospective applicants should carefully consider their expertise relative to the thematic areas and topics, and ability to obtain agency support as described in the Selection Criteria for all Proposals.

Researchers are strongly encouraged to email a letter of intent to submit a proposal to Craig Rindt <crindt@uci.edu> on or before Sunday, June 3rd. Please include your proposal's Title, PI, Topic Area, and a brief summary of the planned research idea. This letter is not binding, but will help in the planning of reviews and more rapid award decisions.

UC ITS Mobility Research Program
Request for Proposals
UCI FY 2017-2019 Research Projects

RFP Issued: May 22, 2018
Proposals Due: June 18 , 2018
Anticipated project start date: July 1, 2018 (for funded FY 17-18 projects)
Maximum project duration: up to 12 months

ITS·IRVINE
INSTITUTE of TRANSPORTATION STUDIES

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Introduction

In recent years, the continuing efforts of the four UC Institute of Transportation Studies (ITS) branch Directors (at Berkeley, Davis, Irvine and UCLA), working closely with the UC Office of the President (UCOP), have resulted in a significant increase in UC ITS core funding support from the State of California. UC ITS received a $3 million one-time allocation from the Public Transportation Account for FY 16-17, and in 2018 began receiving an ongoing $5 million annual allocation as directed by Senate Bill 1 (SB 1) the Road Repair and Accountability Act, passed in April 2017. This SB 1 funding permitted creation of the UC ITS Mobility Research Program (MRP), with funds allocated by formula fairly equally among the four ITS branches. In addition to supporting research projects at ITS and non-ITS campuses, some of this funding must support projects specifically requested by the Legislature, some must support ITS systemwide administration, reporting and outreach activities, as well as research alignment and coordination activities at each branch.

UC ITS research supported by SB 1 funding will be selected through a competitive RFP process. Each campus will administer its own RFP. These projects must address transportation policy questions in California—while preferably strengthening the transportation research and education enterprise on the UCI campus. Researchers are thus invited to submit a proposal under the following broad transportation research areas:

- Performance evaluation and optimization;
- Shared, connected, and autonomous vehicles;
- Environment, energy, health, and transportation;
- Logistics and goods movement;
- Transportation equity;
- Integrated, low-carbon transportation and land use; and
- Safety for all road users

IMPORTANT: As was required with PTA proposals last year (2016-17), each MRP proposal MUST clearly identify one or more “champions” from a state, regional, local or NGO transportation stakeholder agency in California. Each proposal MUST have a letter of support, from the respective agency(ies). Only in exceptional circumstances will this requirement be waived, and proposals without such supporting letters will not ordinarily be considered for funding. This requirement ensures that the research is valued and makes it more likely to be impactful. ITS-Irvine staff will provide guidance to researchers in finding champions, if requested. The remainder of this RFP describes who is eligible to apply, eligible research topics and example projects, selection criteria, funding guidelines and restrictions, and proposal instructions and guidelines as well as budget instructions and sample budget sheets.

Funding for this RFP

This UCI MRP RFP will allocate up to approximately $425,000 in Year 1 (FY 2017/18) research

funding, and up to approximately $750,000 in Year 2 (FY 2018/19) research funding. These amounts are for direct costs as there is no overhead on these awards. The exact amounts awarded under this RFP will be determined by the quality and relevance of proposals received. Selected projects may receive funding from one or both fiscal year sources. All projects are expected to have a maximum term of 12 months, though this requirement may be modified in exceptional circumstances. Year 1 proposals should expect to begin on July 1st, 2018 and be for projects that can produce tangible results for stakeholders within 6 months, though they may extend for a full 12 months to produce additional results. Year 2 projects are contingent on the continued availability of MRP funding and should anticipate a start date of January 1st, 2019. Given the anticipated competition for these funds, prospective applicants should carefully consider their expertise relative to the thematic areas and topics, and ability to obtain agency support as described below in the section Selection Criteria for all Proposals.

The remainder of this RFP describes eligibility requirements, research topics, selection criteria, funding guidelines and restrictions, project requirements, and proposal instructions as well as budget instructions and sample budget sheets. Submission instructions and a cover page are also provided.

Eligibility

Full-time ITS-Irvine Faculty Associates who are tenure track faculty or researchers eligible to serve as Principal Investigators at UCI are eligible to serve as Principal Investigators on MRP research grants. Proposals may include multiple investigators.

Proposals that involve collaboration with other UC ITS partners (at Berkeley, Davis, and UCLA) and interdisciplinary proposals that cross academic boundaries, are encouraged. There is also some UC ITS MRP funding set aside (currently $199,000/yr) to support research at non-ITS UC campuses (Merced, Riverside, San Diego, San Francisco, Santa Barbara, or Santa Cruz). Those funds are being made available via a separate RFP. For projects involving another UC ITS branch or non-ITS UC campus, the proposal should outline the work to be completed at each institution. Separate budgets for each institution should be submitted; non-UC Irvine researchers should not be included in the UC Irvine budget. The decision to fund the collaborative proposal in its entirety or in part will be made by the four UC ITS Directors.

Non-UC researchers, including visiting scholars, are not eligible for funding through this RFP. Exceptions may be approved if special circumstances warranting the exception are fully explained in the proposal. Any project that involves data collection, access to facilities, or cooperation of a private or public entity must include a letter of participation from the entity in the proposal. Proposers are encouraged to include students, including undergraduate students. The amount of the proposed budget devoted to students and post-doctoral scholars will be considered in evaluating the proposals.

Research Program Themes and Topic Areas

Our research program is organized around seven primary topic areas:

1. **Performance evaluation and optimization**
2. **Shared, connected, and autonomous vehicles**
3. **Environment, energy, health, and transportation**
4. **Logistics and goods movement**
5. **Transportation equity**
6. **Integrated, low-carbon transportation and land use**
7. **Safety for all road users**

Preference will be given to proposals addressing one or more of these themes, while also maintaining a primary focus on informing transportation policy, planning, operations and management in California. Other proposal ideas will be considered, if a request is sent beforehand to the ITS-Irvine Director – Stephen Ritchie (sritchie@uci.edu). Additional details on topic areas along with example projects can be found in Appendix A.

Selection Criteria for All Proposals

Transportation researchers and practitioners will evaluate proposals. Proposals will be selected on the basis of their evaluations along with programmatic priorities. Proposals will compete both within topics and across topics. ITS-Irvine does not guarantee that proposals will be funded in all topic areas, or that any proposal will be funded.

Reviewers will evaluate proposals according to the following selection criteria:

1. Demonstrated relevance to the above research program themes (a requirement)
2. Quality and research significance
3. Student involvement
4. Reasonableness of budget and cost-effectiveness
5. Qualifications to perform work and likelihood of successful completion
6. Matching funding, if any, and potential for attracting larger grant funding
7. Prior performance on grants (as applicable)

Proposals that involve collaboration between partner universities, interdisciplinary proposals that cross school boundaries as well as participation from outside organizations are encouraged.

Proposers are encouraged to communicate with members of the UC-ITS Mobility Research Program Board of Advisors or other outside organizations in the development of research proposals. A list of Board of Advisors members can be found in Appendix D.

*PIs are **required** to submit with their proposal a letter of support from a California public agency or NGO outlining the relevance, timeliness and need for the research, how the research*

results will be used by the agency, and what role or involvement the agency will have in the research. Note that Caltrans has outlined a specific procedure for obtaining letters of support from the agency, which is described in Appendix B.

Commitments of participation (for example data sharing or match funding) from outside of ITS-Irvine will be a consideration in making awards. *Any project that involves data collection, access to facilities, or cooperation of a private or public entity* ***must*** *include a letter of participation from the entity in the proposal*.

Proposers are encouraged to include undergraduate students in the research project if appropriate. There are potential funding opportunities through various university programs that could support students working on MRP projects. Proposers are strongly encouraged but not required by this RFP to explore such opportunities with the University.

Project Selection

Project selection will be competitive and be administered according to the following process:

1. Proposals will be reviewed by the ITS-Irvine Director for (1) an explicit link to one or more of the research themes listed in this RFP, and (2) to confirm that a state, regional, local government agency or NGO in California has expressed a compelling interest in the proposed work. PIs are required to submit a letter of support from a public agency outlining the relevance, timeliness, and need for the research, how the research results will be used by the agency, and what role or involvement (if any) the agency will have in the research. If the agency offers to provide matching or followup funding, that will increase the rating of the proposal.
2. Proposals will then be reviewed by panels of researchers and practitioners to evaluate significance, rigor, and California stakeholder agency commitment for the proposed research.
3. The ITS-Irvine MRP Executive Committee will make final project recommendations, taking into account reviewer evaluations, programmatic priorities, prior project performance, and partner recommendations. Executive Committee members are allowed to submit proposals, but are not allowed to be present during deliberations and voting related to their proposals.
4. Final project selections will be made by the ITS-Irvine Director, on the basis of proposal reviews and MRP Executive Committee recommendations, as the overall ITS-Irvine MRP Principal Investigator.

Funding decisions are expected by Friday, June 29th, 2018.

Funding Guidelines and Restrictions

Budgets should be conservative and cost-effective. Funding should be directed at new and original work. In some cases, ITS-Irvine will consider continuations of prior PTA or MRP

projects that have achieved significant results and have a high potential for deployment, scholarly products or large grants. PIs may submit multiple proposals, though it is unlikely that any PI will be awarded more than one grant. PIs with current PTA or MRP grants are eligible to apply. However, grants will not be awarded to PIs with outstanding deliverables (draft or final report; policy brief) on prior PTA or MRP grants.

Funds should be spent in a manner that provides publishable results, especially in refereed journals. In general, faculty summer salary (usually up to one month, but no more than two months), student support, in-state tuition/fee reimbursement (non-resident tuition is not allowed), and project scientist/postdoc salary, are allowed expenses . Funding for students is expected in all projects, including GSR salary and any additional costs for student presentations at in-state conferences. Faculty, researcher and student fringe benefits should also be included in the budget, but not campus indirect costs as these funds are for direct costs only. A limited amount of in-state travel for data collection purposes, materials, and supplies may be included, provided that it is a direct expense related to completing the work. Out-of-state travel is discouraged and unlikely to be approved, but if proposed must be justified in terms of benefits to the research and to stakeholder agencies and/or the state. International travel is not permitted.

Proposers are discouraged from budgeting for computers, equipment, support staff, outside consultants, or any salary that goes beyond normal academic or summer compensation. These may only be included if specific justification is provided as to why the work cannot be completed without the expense. In no case shall UC Irvine be hired on a consulting basis.

All UCI MRP funded proposals will have accounts administered by ITS-Irvine. PIs *will not* have individual contracts or grants from funding agencies.

Funding Guidelines:

1. Research project awards have a maximum of approximately $75,000 per year (there are no indirect costs on MRP projects)
2. The typical project duration is one year
3. **Note that conservative and cost-effective budgets are strongly encouraged.** ITS-Irvine reserves the right to request modifications to the budgets of submitted proposals. FY 17-18 projects should be budgeted to begin on July 1, 2018 and end by June 30, 2019. FY 18-19 projects should be budgeted to begin on January 1, 2019 and end by December 31, 2019. If FY 18-19 funds are received at UCI earlier than expected an earlier start date than January 1, 2019 might become possible.

Project Requirements:

All research projects have the following requirements (a link to online guidelines and templates will be provided soon):

1. A Draft Final Report, conforming to MRP guidelines, which must be delivered 30 days prior to the completion date of the project. Contact Dr. Craig Rindt <crindt@uci.edu> for help with the MRP guidelines. The Draft Final Report is subject to peer review. The

Draft Final Report should include an executive summary and documentation of the research project. It should be complete, original, well organized and accurate; and comply with report content and format guidelines

2. A Final Report that complies with the review comments and requirements must be delivered within 30 days after the review of the Draft Report. Draft Final and Final Reports are distributed via the MRP website, and are submitted to stakeholders and State sponsors and to various publication databases
3. A separate statement listing publications, presentations and inventions resulting from the research; names of students supported along with their degree status; and a summary of project results. This statement is to be submitted with the Draft Final Report
4. A 2-page Policy Brief suitable for a general audience that summarizes the main findings of the research and its contribution to practice or policy. This brief is to be submitted with the Final Report. Contact Dr. Craig Rindt <crindt@uci.edu> for help with policy brief formatting.
5. Timely reporting of all information requested for the MRP Annual Report
6. Copies of all papers submitted to journals or conferences that are based on the project's research. Copies should be provided to Dr. Craig Rindt, the Assistant Director for Research Coordination at ITS-Irvine: <crindt@uci.edu>.
7. Acknowledgement of MRP support in all work that results from MRP funding, including peer-reviewed publications and conference presentations
8. **PI ORCID number.** PIs are encouraged to obtain and provide this number to Dr. Craig Rindt <crindt@uci.edu> within 30-days of notification of project selection. Numbers can be obtained at https://orcid.org/register

Proposal Instructions

Research Proposal Instructions

Research proposals should be succinct and clearly written for a mixed technical and non-technical audience. Proposals are limited to no more than 8 pages in sections 3 – 7. Budget and other forms are included in Appendix C. Each proposal must include the following sections:

1. Cover page (see sample in Appendix C)
2. Project objective and project abstract
3. Background and motivation for the topic to be addressed (problem to be addressed, what has been done previously, why it is important, and relevance to selected research areas)
4. Methodology (the methodology by which project objectives will be accomplished)
5. Tasks, Schedule and Deliverables (steps that will be followed in executing the methodology, and when they will be completed)
6. Description of the expected research products and contributions to practice (e.g. peer-reviewed publications)
7. Qualifications (the research team's relevant skills and experience that will help ensure success)
8. Budget justification (strong justification should be provided for unusual expenses, e.g.,

equipment). The extent of student involvement should be clearly stated
9. Reference List (no limit)
10. Budget (1 page.) Use the form provided in Appendix C as a guideline. Other formats are acceptable as long as equivalent information is provided.
11. Letters of support, participation, or match funding commitment (attached, any number and length) *Letters of participation are required for any project that involves data collection from private or public entities, access to private or public facilities, or cooperation of private or public entities.*
12. Short bios for all investigators and a list of recent (past 5 years or less) publications and funded research projects (2-page maximum)

Proposals should demonstrate their responsiveness to MRP selection criteria, according to the following guidelines:

Selection Criteria	**Most Relevant Section(s)**
Relevance to research theme areas	Background/Objective
Quality and research significance	Methodology/Tasks
Student involvement	Budget justification
Reasonableness of budget and cost-effectiveness	Budget justification
Qualifications	Qualifications
Match funding & potential for other grant funding	Budget justification,
Methodology/Tasks	
Prior performance	Prior project accomplishments

Budget Instructions
Please use UCI Office of Research guidelines in preparing your budget, see http://www.research.uci.edu/sponsored-projects/contracts-grants-admin/proposal-prep/budget-general-info.html. Contact ITS CAO Cam Tran <camt@uci.edu> for budget assistance. The F&A cost rate is 0%.

Submission Instructions

Researchers are strongly encouraged to email a letter of intent to submit a proposal to Craig Rindt <crindt@uci.edu> on or before Sunday, June 3rd. Please include your proposal's Title, PI, Topic Area, and a brief summary of the planned research idea. This letter is not binding, but will help in the planning of reviews and more rapid award decisions.

Please submit your final proposal on or before 5:00 pm on Monday, June 18, 2018 at the following website:

https://uci.inforeadv4.com/#competitionDetail/1772481

NOTE to PIs: If more than one proposal is to be submitted, you must submit these separately via

the website. Proposals received later than the deadline will be rejected. **It is the responsibility of the PI to deliver the proposal by the deadline.** The submission website will send a confirmation email upon successful submission.

Please note that all proposals must include a budget; proposals submitted without budgets will be determined to be incomplete and rejected.

ITS-Irvine will reject MRP proposals that: (1) are received after the deadline, (2) do not conform to eligibility requirements, (3) are incomplete, or (4) do not conform to thematic requirements.

Further Information

For further information, ITS-Irvine Director Prof. Stephen Ritchie can be reached at (949) 824-4214 or srtichie@uci.edu. For further information regarding program rules and procedures contact ITS Assistant Director for Research Coordination, Dr. Craig Rindt at (949) 824-1074 or crindt@uci.edu.

Appendices

Appendix A: Priority Research Areas for Fiscal Year 2018/19

1. **Performance evaluation and optimization** - Research proposals should focus on system, organization, or program/project performance, evaluation, and optimization as outlined below:

    - Transportation *system* performance measurement, evaluation, and optimization

      2018-19 Priority Projects:
      - Congestion pricing:
        - Measure the economic, social, and environmental impacts of traffic congestion and evaluate strategies for improving congestion management
        - Evaluate congestion pricing implementation around the U.S. and the globe, and offer lessons learned for California
        - Evaluate the effects of congestion pricing on:
          - Public transit ridership
          - Low-income car commuters and social equity more broadly, and
          - Commercial vehicles, including delivery or construction trucks
        - Evaluate how congestion pricing revenues could be used to mitigate negative impacts
      - Public transit ridership:
        - Compare Southern California transit patronage trends with other parts of the state
        - Evaluate the impact of various factors on transit ridership, including:
          - Safety
          - Residential choice and the suburbanization of poverty
          - Household income and demographics
          - Policy and service interventions such as deep-discount group passes (e.g. for students), and comprehensive transit network and service restructuring
      - Innovative transportation finance:
        - Potential of value capture finance strategies around high-speed rail stations
        - Research that informs the continued study and pilots of California's SB 1077 Road User Charge

      Other possible topics include:

      - Evaluate the effects of improved goods and person movements on the California economy

- Big transportation system data, analytics, and management, with an emphasis on cost-effectiveness and sustainability applications
- Develop and testing multi-modal performance metrics
- New financing innovations for the transportation system
- Evaluate HOV to HOT lane conversions
- Quantify the economic, social, and environmental benefits of public transit investments, and evaluating strategies to maximize these benefits

- Transportation *organization* performance measurement, evaluation, and optimization

  2018-19 Priority Projects:

  - Evaluate the potential of public transit fare and schedule integration to increase transit ridership and improve the cost-effectiveness of operations
  - Evaluate the potential of inter-agency collaborations to increase public transit ridership and improve the cost-effectiveness of operations
  - Evaluate transit agency partnerships with innovative mobility service providers
  - Provide guidance on more frequent and robust consumer and travel behavior surveys to identify and respond to trends
  - Evaluate multi-jurisdictional mobility coordination, with an emphasis on new mobility services (e.g. bikeshare)
  - Provide guidance on data, metrics, and analyses needed from innovative mobility providers (especially TNCs) to make public policy and planning decisions in the public interest

  Other possible topics include:

  - Improve project management by transportation agencies
  - Evaluate the transportation regulatory roles of Caltrans, the Public Utilities Commission, and other state agencies
  - Guidance on increasing collaboration among state, regional, and local governments in big transportation data analytics and incorporating continuous data collection and analysis into planning processes

- Transportation *project/program* performance measurement, evaluation, and optimization

  2018-19 Priority Projects:

- Evaluate ways to improve project delivery, especially for active transportation projects
- Guidance on ways to integrate multi-hazard resilience features into transportation assets
- Evaluate the potential for automated enforcement to improve HOV and bus-only facility compliance rates, including exploration of technology options and behavioral responses

Other possible topics include:

- Incorporate big data analytics into transportation decision-making by:
  - Developing comprehensive metrics to guide project evaluation across project types and modes
  - Incorporating performance metrics into system maintenance programs
- Evaluate the effects of the shift from CEQA to LOS evaluation requirements
- Evaluate the effects of the increased diesel fuel tax on truck axle weights and road damage
- Evaluate the effects of SB 1 funding programs on transportation systems and the state

2. **Shared, connected, and autonomous vehicles (SCaV)** - Proposals should center primarily on the public sector role in developing, supporting, and regulating fast-moving, technology-enabled changes in mobility.

   2018-19 Priority Projects:

   - Examine possible congestion impacts and policy/planning responses
   - Forecast AV introduction timeline and adoption rates through the use of systematic expert forecasting techniques (e.g. Delphi method)
   - Evaluate workforce implications of vehicle automation, especially in trucking and transit
   - Guidance to the California Department of Motor Vehicles regarding regulation of commercial automated vehicles
   - Develop methods for and guidance on the development, deployment, and use of infrastructure-to-vehicle communications for autonomous vehicle systems
   - Guidance on more frequent and robust consumer and travel behavior surveys to identify and respond to SCaV vehicle trends

   Other possible topics include:

- Identify appropriate public sector roles (state, regional, and local) for guiding the rise of SCaVs in the public interest, including:
    - Evaluate opportunities for public-private collaboration in the development and deployment of SCaVs
    - Identify potential changes to transportation planning and policy-making processes
- Evaluate the scope and scale of possible travel behavior changes associated with the rise of SCaVs, such as:
    - Examine how people may use new transportation services vis-a-vis traditional vehicle ownership and use
    - How transportation planning and policy-making respond to and influence SCaV use
- Evaluate the implications of fleet versus individual ownership of autonomous vehicles
- Adapting, managing, and maintaining transportation infrastructure to support intelligent transportation systems

3. **Environment, energy, health, and transportation** - Research should be on the public sector role in regulating environmental improvements in the transportation sector, and well as efforts to improve transportation and public health linkages.

   2018-19 Priority Projects:

   - Analyze future energy demand and supply (including transmission constraints) under various EV adoption scenarios in California
   - An equity-focused evaluation of the public electric vehicle investment program funded by the ARB-Volkswagen settlement
   - Increase transportation system resilience in response to a changing climate
   - Evaluate the use of sensors and broadband wireless data networks to assess congestion, emissions, and health impacts at a fine spatial and temporal resolution
   - Evaluate opportunities for and obstacles to public sector adoption of advanced technologies, material recycling techniques, material choices, and construction methods that reduce life-cycle costs and GHG emissions for maintaining streets and highways
   - Evaluate opportunities for and obstacles to public sector development, deployment, and use of advanced infrastructure technologies and communications systems that facilitate charging or fueling opportunities for zero-emission vehicles
   - Identify options for and providing guidance on integrating multi-hazard resilience

features into transportation assets

Other possible topics include:

- Infrastructure planning to support alternative fuel vehicles
- Reducing the health impacts of diesel emissions
- Evaluate how environmental regulations for freight can be structured to promote innovation and economic competitiveness
- Evaluate the cost-effectiveness of incentives to promote the purchase and use of zero-emission vehicles (such as with Clean Air Vehicle decals)
- Analyze zero emission vehicle policies for cars and trucks
- Analyze policy strategies to reduce GHG emissions from passenger transport (SB 375) and freight transport (Governor's Sustainable Freight Action Plan)

4. **Logistics and goods movement** - Research should emphasize the public sector role in a sector dominated by private firms and investments.

   2018-19 Priority Projects:

   - Analyze how global maritime goods movement trends (including the Panama Canal expansion and larger ships) are likely to affect port operations and goods movement in California
   - Design new policies and strategies to improve system efficiency (Governor's Sustainable Freight Action Plan), including improvements to the highway system that improve freight movement

   Other possible topics include:

   - How is the rise of e-commerce changing commercial and, especially, personal travel behavior?
   - What are the effects of free-shipping on consumer behavior and travel?
   - Evaluate public sector roles in supporting and regulating goods movement in the years ahead
   - Evaluate how environmental regulations for freight can be structured to promote innovation and economic competitiveness
   - Evaluate the effect of truck fees on the transportation system and goods movement industries
   - What are the likely effects of increasingly large container vessels on land-side transportation systems in California?

5. **Transportation equity** - Research should consider ways to address the needs of the mobility disadvantaged, as well as the labor and work effects of a rapidly changing

transportation systems.

2018-19 Priority Projects:

- Evaluate the links between transportation access, poverty, and employment
- Evaluate the impact of automobile financing trends on vehicle acquisition in California

Other possible topics include:

- Evaluate the links between transportation access, poverty, and employment
- Assess the evolving mobility needs of an aging population
- Evaluate mobility needs in rural California communities
- Examine ways to increase transportation planning participation in disadvantaged communities
- Evaluate the effects of increasing transportation taxes and fees on low-income Californians
- Examine how the transition to shared, connected, and automated vehicles might affect low-income travelers
- Examine the labor and employment implications of a transition to increasingly automated vehicles
- Develop ways to more systematically evaluate the social justice impacts of proposed transportation projects and programs

6. **Integrated, low-carbon transportation and land use** - Research should be on the linkages between urban form, land use, and travel in the California (SB 375) context, with a focus on travel by means other than private vehicles, and the effects on communities.

   2018-19 Priority Projects:

   - Examination of bus-only lane projects, including an evaluation of effectiveness, planning, and construction timelines, operational effects, and transit ridership impacts
   - Develop a methodology to systematically evaluate bus-only lanes and feasibility
   - Evaluate opportunities to increase the efficiency of active transportation project delivery
   - Evaluate the potential for automated enforcement to improve HOV and bus-only facility compliance rates, including exploration of technology options and behavioral responses

Other possible topics include:

- Evaluate ways to better integrate transportation and land use planning
- Examine how transportation investments can support increased housing production
- Evaluate the effects of transit-oriented developments on gentrification and travel behavior
- Evaluate the effects of programs to promote walking and other forms of active transportation
- Evaluate ways to increase return on public transit investments and promote transit use

7. **Safety for all road users** - Research should be on the linkages between regulation, design, behavior, and safety outcomes for multimodal road users.

   2018-19 Priority Projects:

   - Identify effective policy and strategy options, including increased enforcement of existing regulations, to safely integrate active transportation modes with vehicles on roadways.
   - Develop guidance, methods, and metrics for complete street elements into transportation project evaluation
   - Evaluate safety impacts of shared bikeshare, scooter share, and similar services, especially motorized variants
   - Evaluate safety impacts of approaches to establish and enforce vehicular speed limits on roads (especially the extant "85th percentile rule")
   - Evaluate options for automated speed enforcement on local streets, with a focus on implications for roadway user safety and general public safety

   Other possible topics include:

   - Examine national and international best practices to implement vision zero goals

Appendix B: Caltrans Strategic Goals

CALTRANS GENERAL STRATEGIC GOALS & LETTERS OF SUPPORT

Caltrans funds research to provide solutions and knowledge that improve California's transportation system. Caltrans Division of Research, Innovation and System Information (DRISI) manages a comprehensive program to research, develop, test, and evaluate transportation innovations sought by its customers. These innovations in methods, materials, and technologies enable Caltrans to promote safety, enhance mobility and sustainability, improve the management of public facilities and services, and protect public investment in transportation infrastructure.

Caltrans articulates a long-term vision for California's transportation system and implements statewide transportation policy through partnerships with State, regional, and local agencies. The division of transportation planning provides quality planning products, services, and Information to support and guide transportation investment decisions.
Planning is conducted at the community, region, and statewide level, and includes:

- Economic Analysis
- Freight Planning
- Rail Planning
- System Planning
- Air Quality Planning

Letters of Support

All letters of support or position statements from Caltrans for support of proposed research must come from Mr. Jim Appleton, headquarters Chief, Division of Research, Innovation and System Information (DRISI). Position statements from any other individual will not be considered an official Caltrans position. Caltrans states that this is not meant to limit researcher engagement with Caltrans functional experts when identifying research needs or scoping proposals. To obtain a Caltrans letter of support, the PI should use the following procedure:

1. Researcher contacts program area to garner support for their project
2. Program area staff draft the letter of support for their Division Chief's recommendation to approve
3. DRISI Division Chief reviews and approves/rejects the letter of support in consultation with the program area

Jim Appleton, Chief
Division of Research, Innovation and Systems Information
Caltrans
1227 O Street, 5th Floor, MS 83
Sacramento, CA 95814
916-654-8877
916-204-4877 (cell)
Assistant: Wendy Hughey 916-654-9322

Appendix C: Budget Information and Forms

UCI Budget Form (Sample)

Category	Monthly Salary		% of Time on Program		Number of Months		Budget ($)
Faculty Salary	_____	x	_____	x	_____	=	_____
Faculty Salary1	_____	x	_____	x	_____	=	_____
Student Support	_____	x	_____	x	_____	=	_____
Type of Student	_____						
Student Support*	_____	x	_____	x	_____	=	_____
Type of Student	_____						
Fringe Benefits	Rate _____				Total		_____
Tuition	Units _____		Rate_____		Total		_____
Conference Travel Conference Name/Date _____							_____
Other Travel							_____
Materials and Supplies							_____
Equipment (list) _____ _____							_____
Other Direct Expenses (itemize) _____							_____
Tuition cost share	Units_____		Rate_____		Total		_____
Overhead (0%)							_____
TOTAL FUNDS REQUESTED							_____

*Use additional faculty and student lines only if more than one professor or student.

ITS-Irvine MRP Cover Page (Sample)

Title _____

Theme _____

Topic Area_____

Principal Investigator _____

Mailing Address _____

_____

_____

E-mail _____

Phone _____

Fax _____

Co-Principal Investigator_____

Are you submitting this proposal elsewhere, or are you currently receiving funding in the same area of research? Yes _____ No _____

If yes, please describe circumstances and funding source

ITS-Irvine MRP Proposal Evaluation Form

(Provided for information only; form will be used by evaluators)

Proposal Title:

Area:

Principal Investigator:

Referee Number:

Evaluation Criteria:

Please rate proposals in each of the categories below, using the following rating scale:
1 = Well below expectations
2 = Below expectations
3 = Meets expectations
4 = Exceeds expectations
5 = Well above expectations

CATEGORY	RATING
Demonstrated relevance to themes of RFP (a requirement)	
Quality and research significance	
Student involvement	
Reasonableness of budget and cost-effectiveness	
Qualifications to perform work/likelihood of completion	
Match funding and potential for attracting grant funding	
Prior performance on PTA or MRP grants (if applicable)	

Referee's Funding Recommendation (Place an X on the line by your choice)

Highly recommended _____

Recommended _____

Not recommended _____

Referee Comments (add additional pages as needed):

Appendix D: FY 2017-19 UC ITS MRP Board of Advisors

- Ken Alex, Director, Office of Planning and Research, State of California
- Jim Beall, Chair, Senate Committee on Transportation and Housing, California State Legislature
- Richard Bloom, Chair, Assembly Budget Subcommittee on Resources and Transportation, California State
- Legislature
- Tilly Chang, Executive Director, San Francisco Transportation Authority
- Malcolm Dougherty, Director, California Department of Transportation
- Arthur Ellis, Vice President for Research and Graduate Studies, UC Office of the President
- Jim Frazier, Chair, Assembly Transportation Committee, California State Legislature
- Steve Heminger, Executive Director, Metropolitan Transportation Commission (San Francisco Bay Area)
- Roland Hwang, Director, Energy & Transportation Program, Natural Resources Defense Council
- Hasan Ikhrata, Executive Director, Southern California Association of Governments
- Fran Inman, Chair, California Transportation Commission
- Randell H. Iwasaki, Executive Director, Contra Costa Transportation Authority
- Brian Annis, Secretary, California State Transportation Agency
- Mary D. Nichols, Chair, California Air Resources Board
- Janea A. Scott, Commissioner, California Energy Commission
- Joshua W. Shaw, Executive Director, California Transit Association
- Phillip A. Washington, Chief Executive Officer, Los Angeles Metropolitan Transportation Authority
- Bob Wieckowski, Chair, Senate Budget Subcommittee on Resources, Environmental Protection, Energy, and
- Transportation, California State Legislature
- Randall Winston, Executive Director, California Strategic Growth Council