

# Request for Proposals General Research Grant

http://nitc.trec.pdx.edu/

#### 1 Overview

The National Institute for Transportation and Communities (NITC) is a program of the <u>Transportation Research and Education Center</u> (TREC) at Portland State University. NITC is the U.S. Department of Transportation's national center for livable communities and one of the U.S. DOT's national university transportation centers.

NITC is a Portland State-led partnership with the Oregon Institute of Technology, University of Arizona, University of Oregon, University of Texas at Arlington, and University of Utah.

Improving the mobility of people and goods to build strong communities

We will award at least \$1 million to research projects that support NITC's theme. Individual project requests should range from \$30,000 to\$150,000. Projects must focus on research. All projects submitted for this RFP will undergo peer review by two researchers and one practitioner as outlined in section 5.1. The proposals will also be scored by NITC staff based on programmatic criteria outlined in section 5.2. The NITC Executive Committee will review the ranked projects and approve awards. All awards require a 1:1.2 non-federal match in the form of cash or in-kind services from project partners—to include universities, transportation and other public agencies, industry, and nonprofit organizations. Projects awarded under this RFP may start as soon as August 1, 2018, must be completed within 15 months, and no later than December 31, 2019, including the final report.

Successful research proposals will fit the NITC theme, linking to articulated U.S. DOT priorities, specifically mobility and safety.

### I.I Key dates

April 2, 2018	Abstracts due
May 1, 2018	Proposals due
May 2018	Peer Reviews
June - Aug 2018	Project selection, Awards and Task Orders
August/September 2018	Projects begin

#### 2 Theme

The NITC theme connects directly with the U.S. DOT goal of **improving the mobility of people and goods to build strong communities**. All proposals must be consistent with this theme, as defined below:

- Increasing access to opportunities. Well-connected regions and communities can improve social
  equity by providing access to jobs, services, recreation, and social opportunities. Research should
  examine barriers to access, including the connections between transportation, land use, and
  housing. It should look at how to overcome these barriers and improve accessibility, affordability,
  and equity in our communities.
- Improving multi-modal planning and shared use of infrastructure. Improved mobility requires a
  range of options for moving people and goods. As concepts of mobility evolve, research is needed
  to understand how people and firms make mode choices so that we can design better multi-modal
  systems. Research should examine how different modes can share our infrastructure safely. It
  should look at how cities and regions can better plan for and prioritize multi-modal transportation,
  integrated with land use.
- Advancing innovation and smart cities. The growth of urban areas of all sizes requires the
  innovative use of technology and new mobility options. Smart cities research should examine the
  feasibility of integrating connected and automated technologies in our cities and overcoming the
  social, political and economic barriers to implementation. This includes ensuring that smart cities
  improve access for all people and modes.
- Developing data, models, and tools. Our complex transportation system demands better data
  and tools for decision-making. Research is needed to develop tools to collect and analyze multimodal data from a variety of sources, aimed at optimizing the use of the system. These new
  models and tools should examine the implications of changes to the system on a range of outcomes
  including mobility, economic equity, the environment, and health.

### 3 Priorities

All proposals must contribute to the NITC theme of improving mobility of people and goods to build strong communities as detailed in Section 2. Research projects must focus on transportation. Additional consideration will be given to projects that emphasize equity and diversity in their research and partnerships. If you have any questions about whether your proposal topic is appropriate, please contact your university's Executive Committee member or NITC staff in advance.

NITC is looking for research proposals that show strong potential to move transportation research into practice, inform other researchers, shape national and international conversations on transportation research, and respond to the needs of practitioners and policymakers. Research grants typically range between \$30,000 to \$150,000 per project. Priority is given to projects that are collaborative, multi-disciplinary, multi-campus, and support the development of untenured-tenure-track transportation faculty.

## 4 Eligibility

Faculty members and research faculty must be from Portland State University, Oregon Institute of Technology, University of Arizona, University of Oregon, University of Texas at Arlington, or University of Utah to be eligible to serve as Pls and submit proposals.

Proposals may include multiple investigators, and collaborative projects across disciplinary and campus boundaries are encouraged. Proposals including multiple investigators must identify one lead PI contact responsible for reporting and associated administrative tasks. PIs may submit more than one proposal. NITC Executive Committee members are allowed to submit proposals, but are not allowed to be involved during deliberations and decisions related to their proposals and will not be privy to the information discussed.

#### 5 Criteria for Evaluation

All proposals will be reviewed externally by at least three peer reviewers, including at least one practitioner from the public or private sector. Proposals are also scored by NITC staff using the programmatic criteria (Section 5.2). The external peer review and programmatic numerical scores are then used in the proposal selection process. The Executive Committee selects the final slate of proposals via consensus. Executive Committee members with conflicts of interest around specific projects will excuse themselves from discussions that could influence funding outcomes from which they would benefit.

#### 5.1 Peer Review Criteria

Peer reviews are single-blind and reviewers will remain anonymous. Reviewers are selected from universities, local, regional and national agencies, private sector practitioners, and other university transportation centers. An established procedure for reviewer conflict of interest is followed. Peer reviewers assess the proposals based on intellectual merit, broader impacts, relevance to NITC's theme and the national transportation research agenda. The specific peer review criteria include:

- Intellectual merit. What is the intellectual merit of the proposed activity? How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?
- Broad Impacts. Does the proposed activity have broad impacts? How well does the activity advance discovery and understanding while promoting teaching, training, and learning? To what extent will it enhance the infrastructure for research, education and technology transfer, such as partnerships or activities beyond the funded project that will live on past the life of the specific project and further NITC's objectives? Will the results be disseminated broadly to enhance scientific and technological understanding?
- **Budget.** Is the project budget reasonable given the tasks proposed?
- Overall Rating.
  - o Excellent: Outstanding proposal in all respects; deserves highest priority for support
  - Very Good: High quality in nearly all respects; should be supported if at all possible
  - Good: A quality proposal worthy of support
  - o Fair: Proposal lacking in one or more critical aspects; key issues need to be addressed
  - o Poor: Proposal has serious deficiencies

#### 5.2 Programmatic Criteria

Each proposal is also scored by NITC staff using programmatic criteria. These criteria are:

Does the proposal fit the NITC theme? See Section 2 for a description of the theme.

- To what extent is transportation the focus? Priority is given to projects where the primary focus is on transportation.
- To what extent does the proposal support and mentor students? Priority will be given to projects that demonstrate meaningful student involvement in the project. Examples include students being research assistants, co-authoring publications, and making presentations.
- Does the proposal support untenured tenure track (junior) faculty? Additional priority will be given to core transportation junior faculty. Core faculty refers to faculty members who teach transportation classes and/or whose research agenda focuses on transportation.
- To what extent does the proposal leverage matching funds? Priority will be given to external cash match and active in-kind match (e.g., active participation of partners in the research project).
- To what extent does this project support substantive and meaningful collaboration?
   Collaboration may include partners from more than one discipline; external agencies, nonprofits, private industry, or other state/country agencies, etc. Priority will be given to proposals that engage in collaboration. Collaborative proposals should clearly describe the structure of the collaboration, the management and decision-making process, and justify the need for collaboration on the proposed research.
- To what extent does the project support multi-disciplinary and/or multi-campus collaboration?
   Priority is given to projects that demonstrate collaboration such as Co-Pls from other campuses and disciplines.
- Is the research relevant nationally? Priority is given to projects that involve national data sets or multiple sites. Pls need to demonstrate relevance of research at a national level.
- Does the proposal support equity and diversity? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, modal, etc.) through research as well as participation of underrepresented groups (e.g., students, stakeholders) in research activities? Priority will be given to projects that demonstrate the potential to increase access to resources and opportunities for historically underserved populations.
- What is the PIs past performance on other UTC projects (on time reporting, etc.), likelihood of successful completion, potential for technology transfer? NITC will not accept proposals from PIs or Co-PIs with incomplete projects and outstanding final reports.

# 6 Project Requirements

Pls will be asked to provide bi-annual progress reports and performance metrics related to their funded research needed by NITC to meet federal reporting requirements. Adequate progress and performance on previously funded research is an overriding consideration for the funding of future grants, including this RFP. Those that have not submitted progress reports or final reports will not be considered for funding and risk having funds withheld from current grants. Similar restrictions will apply to any future NITC funding opportunities.

### 6.1 Progress Reports

Bi-annual progress reports are required as long as the project is active. These reports will support NITC's federal reporting responsibilities. Reports will be submitted online and include: accomplishments, dissemination activities, products (e.g. submitted publications, conference presentations, etc.), impact of the project, and changes/problems. As part of each progress report, we will also require information regarding undergraduate and graduate students participating in the research, as well as information

relating to publications and presentations presented at academic/professional meetings resulting from the funded research.

#### 6.2 Publications and Presentations

Pls and students who are funded by NITC will be expected to prepare articles based on research findings for publication in refereed journals and make presentations at national conferences. Through these venues, researchers and students will receive additional peer-review feedback on their work and should incorporate this into their projects. Electronic copies of all papers submitted to journals or conferences that are based on the project research should be provided to NITC. NITC support should be acknowledged in all work that results from NITC funding. Student contributions to research should be acknowledged in publications via acknowledgement, footnote, or co-authorship. Travel funds in the amount of \$3000 per proposal will be provided by NITC for sharing and presenting results at conferences or similar opportunities. Pls are also expected to present their work in a NITC webinar, or at the Transportation and Communities Summit to ensure that results are shared with a broader audience.

#### 6.3 Final Reports/Products

Research projects will produce a final report. The report will either be sent for external review by NITC staff. Alternatively, a published article based on the work in an academic journal will be accepted in lieu of the peer-review. For projects funded by this RFP, Pls should plan to submit a draft report conforming to style guidelines (template is available on the NITC website) no later than one month prior to the project end date. Final invoices will only be paid once the draft report is submitted. The report should document the research project in total, including a complete description of the problem, objectives, approach, methodology, findings, conclusions, and recommendations. The report should document all data gathered, analyses performed, and results achieved.

Unless the work is already published in a peer-reviewed journal, the draft report will undergo the peer-review process and, as applicable, will also be reviewed by at least one representative of the matching/partner entity. Pls are responsible for incorporating peer-review comments into the final report. In addition, an editor will review the report to ensure standard formatting requirements are met.

When a report or other product (handbook, etc.) is produced as part of a joint effort, NITC will work with the matching/sponsoring entity to ensure that one report will meet the requirements of all partners. All final reports will be produced as part of a numbered report series, and will include the OST-R disclaimer and NITC funding attribution. All final reports will be posted online. More details about project requirements can be found in the "Principal Investigators' Handbook" posted online.

# 7 Budget

Applicants must use the NITC Budget Form to outline detailed budget items. Proposal budgets should be conservative and cost-effective, and should primarily direct new and original work. Funds should be spent in a manner that provides publishable and/or implementable results. In general, faculty salary (summer or academic year), student support, and tuition/fee reimbursement are allowable expenses. An appropriate amount of funding for travel for data collection purposes and materials and supplies may be included, provided that they are a direct expense related to completing the work. Please provide a narrative in the budget of how these research travel funds are planned to be used.

The project budget should NOT include travel funds to present project results at conferences. Instead, each funded proposal will be awarded a separate travel budget of \$3000. This travel budget will be administered separately by the Pl's home institution and will be available to Pls and Co-Pls to present project results.

Funding for students is expected in all projects, such as research assistant tuition and salary. Federal indirect costs (overhead) specific to each NITC university and OPE (fringe benefits) should also be included in the budget. *Tuition charges are not subject to indirect costs*.

Equipment purchases (equipment is generally defined as items over \$5,000) and international travel are not permitted unless specific justification is provided and *prior* approval is obtained from NITC and the U.S. DOT. Budget for expenses normally considered part of university F&A (phones, facilities, regular office supplies, computers, etc.) should not be included.

Non-NITC partners including universities and private consultants may be only included in the proposal if role is less than 20% of project budget. If PIs anticipate the **sub-consultant role will be 20% or more** of the budget, justification and budget details must be submitted to Eva-Maria Muecke (<a href="mailto:emuecke@pdx.edu">emuecke@pdx.edu</a>) at least two weeks before the proposal deadline for approval by the Executive Committee. Approval is granted when it is determined that success of the project requires significant involvement (i.e. 20% or more of the budget) from the sub-consultant and that the expertise and effort required of the sub-consultant is not available from within the NITC partner campuses.

Funding for salary that goes beyond normal academic or summer compensation will not be allowed. In the case of joint projects with faculty from other NITC universities, the second university activity should be budgeted as a separate budget for that university. In addition:

- Projects should be budgeted to begin between August 1, 2018 and September 1, 2018 and completed no later than December 31<sup>st</sup>, 2019, for a duration of no longer than 15 months. Please plan to submit the draft final report no later than one month prior to the project end date.
- New awards to prior investigators will depend on successful completion of previously-funded projects and timeliness of research progress and reporting.
- NITC reserves the right to request reductions or other changes to budgets of submitted proposals.
   Budgets should be justified and cost-effective, and should follow all budget guidelines for indirect cost rates, allowable expenditures, etc.
- Awards are cost-reimbursable.

### 7.1 Matching Funds

All awards require 120% match. In addition, match funding is a good indication of local partner commitment to the project and will be considered in the programmatic review. Some federal funds qualify as match: specifically funds under U.S.C. Title 23, Sections 503, 504(b), or 505, which refer to technology deployment, local technical assistance, state planning and research (SPR) programs and national cooperative highway research program (NCHRP) managed by the Transportation Research Board. Pls should use the Budget Form to indicate match commitment. Letters of intent or other documentation of match commitment, signed by an institutional official authorized to obligate cost share, must be included with the Proposal Form; awards will not be finalized without confirmation of the match commitment. Sample match commitment letters can be found on the NITC website. NITC follows the rules set forth in 2 C.F.R. 200.306,

http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200 main 02.tpl, for the use of in-kind and cash contributions as matching funds. The start date of matching funds is November 30, 2016.

## 8 How to Apply

#### 8.1 Project Abstracts

All proposers must first submit a proposal abstract online (<a href="http://ppms.trec.pdx.edu/">http://ppms.trec.pdx.edu/</a>). The abstract should consist of 1-2 paragraphs describing the project objectives and proposed methods. The abstract should also briefly explain how it fits the NITC theme. NITC will only accept proposals for projects for which the PI has submitted an abstract online. The abstract is used for two purposes: to make sure that the project fits the NITC theme, and to aid staff in identifying potential peer reviewers. A PI may decide for other reasons not to submit a proposal after submitting an abstract. However, a PI may not submit a proposal for which an abstract was not submitted. Abstracts are due April 2, 2018 at 5:00 PM PDT.

### 8.2 Project Proposals, Data Management Plan (DMP), and Budgets

Forms for the proposal and budget as well as a DMP guide that includes a DMP template can be found on the NITC website (<a href="http://nitc.trec.pdx.edu/for-researchers">http://nitc.trec.pdx.edu/for-researchers</a>). Do not use prior year forms.

Complete the proposal form and DMP as a PDF and the budget form as an Excel spreadsheet and submit online (<a href="http://ppms.trec.pdx.edu">http://ppms.trec.pdx.edu</a>). Select the 'NITC 16 Round 2' grant cycle. Proposals are typically 10 to 12 pages long. The DMP is limited to 2 pages. Please adhere closely to the template when creating your DMP. Proposals, budgets and DMP are due May 1, 2018 at 5:00 PM PDT. Incomplete or late application packages will not be considered.

Proposals, DMPs, and budgets must be approved by the Pl's home university research office prior to submission and will not be considered without their approval. Pls must follow their university's requirements for approval of proposals, including match commitment and use of human subjects (if applicable). Further questions regarding university approval should be directed to the home university research administration office or the Executive Committee member:

- Oregon Tech: Office of Strategic Partnerships: <a href="http://www.oit.edu/faculty-staff/sponsored-projects-grants-administration">http://www.oit.edu/faculty-staff/sponsored-projects-grants-administration</a>
   Preliminary approval form: <a href="http://www.oit.edu/docs/default-source/spa/proposal-approval-form.pdf?sfvrsn=4">http://www.oit.edu/docs/default-source/spa/proposal-approval-form.pdf?sfvrsn=4</a>
- PSU: Proposal Internal Approval Form (PIAF):
   https://sites.google.com/a/pdx.edu/research/lifecycle/proposal/psu-proposal-approval
   Note that an additional NITC-specific form will also be required and sent to PIs after they submit their projects abstracts.
- UO: Apply through Electronic Proposal Clearance System (E-PCS) and Office of Research Services and Administration: <a href="http://orsa.uoregon.edu/">http://orsa.uoregon.edu/</a>
- **UA:** Research, Discovery & Innovation: <a href="http://research.arizona.edu/">http://research.arizona.edu/</a>
- **UTA:** Research Administration: <a href="http://www.uta.edu/uta/research.php">http://www.uta.edu/uta/research.php</a>
- UU: UU Office of Sponsored Project: <a href="http://www.osp.utah.edu/">http://www.osp.utah.edu/</a>

#### 9 Contact Information

For questions about research proposals, please contact Eva-Maria Muecke, Research Program Administrator, 503-725-2897, <a href="mailto:emuecke@pdx.edu">emuecke@pdx.edu</a>. Each campus has a representative on NITC's Executive Committee who can discuss the process:

- Marc Schlossberg, University of Oregon, 541-346-2046, <u>schlossb@uoregon.edu</u>
- Keith Bartholomew, University of Utah, 801-585-8944, bartholomew@arch.utah.edu
- Roger Lindgren, Oregon Institute of Technology, 541-885-1947, roger.lindgren@oit.edu
- Avinash Unnikrishnan, Portland State University, 503-725-2872, <u>uavinash@pdx.edu</u>
- Arlie Adkins, University of Arizona, 503-880-3110, arlieadkins@email.arizona.edu
- Stephen Mattingly, University of Texas, Arlington, 817-272-2859, mattingly@uta.edu

For other questions, please contact Hau Hagedorn, TREC Interim Director, 503-725-2833, hagedorn@pdx.edu.











