Mountain-Plains Consortium
Region 8 University Transportation Center
North Dakota State University
Research Proposal Guidelines
12/20/2017

MPC project proposals will be submitted via an online form. Before completing the online form, you will need to download and fill out the project proposal template. The online form will ask for the completed template along with some additional information like the abstract, peer reviewer information, etc.

Once the information below is submitted through the template and online form, your proposal will be routed to your university director for an initial approval and then MPC will verify the proposal meets the grant deliverables and reporting requirements before it is sent to the identified peer reviewers. Peer reviewer responses will be emailed to you, your university director, and MPC as they are completed. Once enough peer reviewers are completed, your university directory will decide whether to fund the project or not. You and MPC will be notified of the final decision and, if funded, it will be assigned a project number.

Title	Provide a title (limited to 20 words) that is descriptive of the project and includes key terms.
Universities	Select the university or universities involved in the proposed project.
Principal Investigators	For each principal investigator, include name, ORCID number, university affiliation, title, email address, phone number, short bio paragraph (limited to 50 words), link to university bio, and photo.
Abstract	A brief and objective summary (limited to 250 words) of the project including objectives, scope and method.
Marketing Photo	Upload a photo that can be used for marketing purposes. Photos should be high-resolution and we must have permission to publish them. Note: photos copied from websites are typically not high-resolution photos and cannot be used without the website owner's permission.
Research Needs	Provide a statement of the important issues and problems that give rise to the need for the project, including a brief literature

review (if appropriate) that summarizes the state of knowledge in the subject area and identify the knowledge gaps the project seeks to fill. It must be clear from the description that there are compelling needs for the study and that it will address issues of national and regional importance.

Research Objectives Concisely and clearly list each research objective to be addressed in your project. Note that each list item (aka objective) is limited to 30 words. Next, provide an overall summary of those objectives in paragraph form, including any hypotheses to be tested. Remember that at least some of the objectives must be measurable—i.e., at the conclusion of the project, it must be possible to ascertain whether the stated objectives have been achieved.

Research Methods Describe the research methods to be used sufficiently so that reviewers can assess the appropriateness of the research approach and methods and the quality and reliability of data to be obtained. Include descriptions of any mathematical, statistical, operations research, and simulation techniques to be used, as well as surveys, lab tests, and field data.

Expected Outcomes Provide a description of the expected outcomes in terms of potential findings and impacts, including advances in modeling, practices, and procedures; implications for future research; and how the results of the project can be used by practitioners. Describe any tangible products beyond the research report, including prototype software, equipment, guidebooks, or instructional manuals that may result from the project.

Relevance to Strategic Goals Select no more than 2 USDOT strategic goals (State of Good Repair, Safety, Economic Competiveness, Environmental Sustainability, and Livable Communities) addressed by the proposed project. Describe how the project and expected outcomes relate to those goals.

Educational Benefits Describe how students will be involved in the project and any expected classroom or instructional uses of procedures, examples, or discoveries derived from the project.

Technology Transfer Describe the process you will use for transferring your findings to other researchers, professionals and practitioners. The goal should be further development, commercialization and practical applications from the results of your research.

Ultimately, technology transfer should sustain economic growth and improve efficiency, safety, and/or cost effectiveness through the development and commercialization of new technologies and practices. Technology transfer may occur through (but is not limited to) conferences, workshops, web pages, social media, and seminars. Please list how you intend to fulfill this requirement and remember to report your technology transfer activities in the PPPR (Program Progress Performance Reports) for this project.

Work Plan

Concisely list each of the major tasks or steps in the project. Note that each list item (aka task/step) is limited to 30 words. In paragraph form describe the major tasks and provide an expected timeline. Include an expected completion date for each task expressed in months from the starting date, not calendar dates. Typically, a work plan includes steps such as the completion (and testing) of questionnaires, lab tests, field tests or data collection efforts, input or focus group meetings, and critical steps such as the initial runs and calibrations of models.

Data Management Plan

The data management plan for the Mountain-Plains Consortium is posted online (view data management plan). The plan describes our strategies for developing, describing, and archiving digital data sets resulting from DOT-funded research to facilitate public access and sharing of data resources.

If your project requires an additional or a different data management plan (including those from other funders), include it here.

Project Cost

List the amount of MPC funds requested, the amount of the expected matching contributions, and the sources of the matching resources, including all agencies expected to contribute funds or in-kind resources to the project. MPC research projects require a dollar for dollar match. However, other federal funds (e.g., federal funds other than UTC funds) cannot be used as match, except for state planning and research funds and LTAP funds, which are eligible under exclusionary provisions of the authorizing legislation. The definition of "non-federal funds" is based on the original source of funds.

You will be asked to provide the following:
Total Project Costs: $
MPC Funds Requested: $

| | Matching Funds: $ |
| | Source of Matching Funds: |

Potential Peer Reviewers

Provide the complete contact information of at least three persons who are qualified to review and critically assess the proposal, including the **person's name, position title, organization, and email address.** Peer reviewers cannot have conflicts of interests, such as to the possibility of personally or professionally benefiting from the proposed project. Peer reviewers may include professionals at federal, state, metropolitan, or local agencies, as well as university and private-sector researchers. Given that at least three completed reviews are required for a proposal to move forward in the assessment process, the submission of more than three names may expedite the time frame for approval, in the event of one or more nonresponsive reviewers.

Make sure peer reviewers are aware that they will receive a request to review the proposal. The request will come from ndsu-qualtrics@qualtrics-survey.com and indicate the proposal title and your (lead PI) name.

For select projects *(e.g. those conducted for your state's DOT),* that have already been peer reviewed *(by DOT personnel),* indicate the organization/committee that peer reviewed the proposal. Include organization name, committee name, and point of contact (name, title, and email).

Subject Areas

Select 1 to 5 categories *(listed in the online proposal form)* that best describe the research project.

References

Enter all references to your project statement.

LONG-TERM OUTCOMES

Two documents posted on the MPC website provide detailed descriptions of the five long-term outcomes or strategic goals of the U.S. Department of Transportation:

- Department of Transportation, United States of America, Transportation for a New Generation FY 2014-2018 August 9, 2013.

- Office of the Secretary of Transportation. Notice of Funding Availability (NOFA) for the Department of Transportation's Nationally Significant Freight and Highway Projects (FASTLANE Grants) for Fiscal Year 2017 Docket No. DOT-OST-2016-0016

- Fixing America's Surface Transportation Act or "FAST Act"
  https://www.fhwa.dot.gov/fastact/

As a global leader in transportation, the U.S. Department of Transportation (USDOT) plays an important role in providing safe, secure, and reliable transportation to all Americans. The USDOT mission is to, "Serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future."

The strategic goals as identified by the FAST Act are as follows:

- **Safety** – Improve public health and safety by reducing transportation-related fatalities and injuries.

- **State of Good Repair** – Ensure the U.S. proactively maintains critical transportation infrastructure in a state of good repair.

- **Economic Competitiveness** – Promote transportation policies and investments that bring lasting and equitable economic benefits to the Nation and its citizens.

- **Livable Communities** – Foster livable communities by integrating transportation policies, plans, and investments with coordinated housing and economic development policies to increase transportation choices and access to transportation services for all.

- **Environmental Sustainability** – Advance environmentally sustainable policies and investments that reduce carbon and other harmful emissions from transportation sources.

In reaffirming the strategic goals, we continue to reimagine what the transportation system can be in this decade while continuing to fulfill the Department's long-standing mission, providing support for critical federal interagency goals including preparedness and defense readiness, and setting priorities for our most important management objectives.

INSTITUTIONAL REVIEW REQUIREMENTS

If the proposed project involves surveys or observations of human or animal subjects that would trigger institutional reviews, it is the proposer's responsibility to ensure that these university review requirements are met. An assurance may be requested if the project is selected for funding.