

**Request for Proposals
(US DOT FY 2016)**

**Mid-America Transportation Center
United States Department of Transportation
Region VII University Transportation Center**

Fiscal Year 2016 Research Grants

June 2017

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INTRODUCTION AND TIMELINES

BACKGROUND

The Mid-America Transportation Center (MATC) was designated by the United States Department of Transportation as the Region VII University Transportation Center (UTC) in 2006. MATC is a consortium comprised of the University of Nebraska Lincoln, the University of Nebraska Omaha, the University of Nebraska Medical Center, the University of Kansas, the University of Kansas Medical Center, Missouri University of Science and Technology, the University of Iowa, Lincoln University, and Nebraska Indian Community College. MATC's partners include the Iowa Department of Transportation (IaDOT), the Kansas Department of Transportation (KDOT), the Missouri Department of Transportation (MoDOT), the Nebraska Department of Roads (NDOR), the United States Department of Transportation (US DOT), and various private and public sector transportation organizations. The MATC research program is designed to address the United States Department of Transportation's strategic objectives of safety, mobility, global connectivity, and environmental stewardship.

PROGRAM GOAL

To achieve maximum value as the US DOT Region VII UTC designee, MATC's vision is to become a nationally-recognized center of transportation excellence, focused on developing new knowledge, innovative solutions, and the next generation of transportation professionals necessary to sustain the U.S. transportation system in a manner that is safer, more effective, more efficient, environmentally friendly, and sustainable.

MATC's research goal is to make fundamental advancements in basic and theoretical research related to improving the safety of and minimizing risk to the U.S. surface transportation system. Transportation agencies will then use these findings to enhance accessibility and mobility for all components of the multi-modal surface transportation system. The proposals that are selected as part of this RFP process will form the major component of the MATC research program.

SCHEDULE

Submitted proposals will be sent to external reviewers (consisting of US DOT personnel, state DOT personnel, and private and public sector national experts) within two weeks of their receipt, with reviews due to the Mid-America Transportation Center approximately four weeks later. MATC staff will review the budgets of proposals that are recommended for funding to determine their compliance with federal guidelines and US DOT OST-R rules, and will request budget adjustments if necessary. The external reviews will be evaluated by the MATC Executive Committee, and it is anticipated that final funding decisions will be made by August 18, 2017. The MATC Program Coordinator will then inform all PIs of the status of their proposals via the email address submitted with the proposal.

The Mid-America Transportation Center operates on an annual funding cycle with a start date of July 1 and an end date of June 30, with projects ordinarily funded for the same time period.

All funds will be housed at the University of Nebraska Lincoln, the lead institution of the Mid-America Transportation Center, with an account assigned for every project. Any expenditures, such as payroll, purchase orders, and/or reimbursements, will be processed through the PI's home university following established university policies and procedures.

PROJECT TIME TABLE

Proposal	Date Due
New Research Proposals	July 1, 2017

PROPOSAL

ELIGIBILITY INFORMATION

Research project awards will be made to individuals or teams of researchers. The Principal Investigator must be a current faculty member or full-time research staff member at one of the MATC consortium universities. Up to four (4) other researchers may be included in the proposal. Other researchers, including visiting scholars, are normally not eligible for funding through the Mid-America Transportation Center, although exceptions may be approved if special circumstances warranting the exception are fully explained in the proposal.

No more than **two** (2) proposals should be submitted by the same PI (or Co-PI) unless with written approval from your campus Associate Director, the name and contact information of whom can be found at: <http://matc.unl.edu/people/associate-director.php>.

FOCUS AREAS

Over the past decade, the states in Region VII have experienced a significant increase in the movement of hazardous goods on the surface transportation network. These hazardous goods include highly-flammable crude oil, nuclear materials, and toxic inhalation hazards (TIHs), including chlorine and anhydrous ammonia. Simultaneously, the region is experiencing major stressors that affect safety performance, including aging infrastructure, lack of maintenance, a growing and aging population, as well as both natural and man-made disasters.

The Mid-America Transportation Center is **seeking research proposals** that address the issues listed above and align with the USDOT's FAST Act research priority: Promoting Safety. Key focus areas include: (1) reducing and eliminating the number of incidents involving hazardous goods, and (2) reducing and/or eliminating the negative effects of crashes. While the transport of hazardous goods serves as the main area of focus, the Mid-America Transportation Center is also interested in research proposals that seek to advance the USDOT's Strategic Goals of:

- 1) *enhancing safety,*
- 2) *improving the state of good repair,*
- 3) *improving economic competitiveness, and*
- 4) *improving environmental sustainability of the U.S. surface transportation system.*

Researchers will be required to include a discussion of pertinent completed research and related research in progress when developing their proposals. The TRB Research Needs Statements, TRIS, and Research in Progress (RiP) database should be queried to find this information if not already familiar to the researcher.

As of Friday, June 2, 2017, these databases may be found at:

- TRB Research Needs Statements Database <https://rns.trb.org/>
- TRB RiP Library <https://rip.trb.org/>
- TRIS Library <https://ntlsearch.bts.gov/tris/index.do>

It is strongly recommended that Principal Investigators coordinate with their state department of transportation representatives or other organizations that will benefit from the research findings before submitting the proposal. Multi-university proposals and project proposals that encompass the aforementioned multiple strategic goals of the US DOT are also encouraged.

PROPOSAL SUBMISSION

Proposals must be submitted on the MATC website <http://matc.unl.edu/pss/>. There are detailed instructions on the website on how to log-in and submit a proposal. The following sections will provide an overview of the content required of all proposals.

PROPOSAL CONTENT

Once the submission process is begun, the following information will be required.

On the MATC RFP website you will need to enter in the following data:

- Project Title
- Start Date & End Date
- Principal Investigator and Co-Principal Investigator(s) Name(s) and Contact Information
- Proposal Abstract – 300 words max.
- Relationship to MATC Research Portfolio
- Project Monitor
- Total Federal Funds Requested (Including F&A) – Amount and Funding Source
- Total Matching Funds (Including F&A) – Amount and Funding Source
- Name & Contact Information of Person Authorizing Matching Funds

Once the above information is inputted, the following electronic files will need to be uploaded to complete the process. These include:

- 1) Attachment A (detailed research proposal description);
- 2) Attachment B (budget);
- 3) CV's (for all PIs and co-PI's); and
- 4) Letter of commitment for matching funds.

Templates for the detailed research proposal description (Attachment A – Word document) and budget (Attachment B – Excel document) can be downloaded from the website. Do not change the formatting of the attachment files. **Please name files using 3-4 words from the project title, the PI's last name, and the letter "A" for Attachment A and "B" for Attachment B.**

The matching funds letter of commitment must include the following information: amount of matching funds, source of matching funds, authorizing party of matching funds, the date funds are available, (beginning and end date), and the name and contact information of the Sponsored Programs official to contact regarding matching funds.

It is required of all PI's to work with their respective Sponsored Programs office on campus to obtain approval on their proposals and budgets. It is requested that the Office of Sponsored Programs Personnel log in and authorize your proposals on the MATC website. Please ask your

sponsored program personnel, who will be authorizing your proposal, to email the MATC Program Coordinator Ms. Shelly Cutsor at mcutsor2@unl.edu for their Sponsored Programs Administrator User Name and Password. Note: UNL PIs DO NOT need to route these proposals through the NUgrant system.

If any issues arise related to submitting a proposal, please email the MATC Program Coordinator Ms. Shelly Cutsor at mcutsor@unl.edu.

PROJECT DURATION

Projects can be proposed with a 12 or 18 month time frame. It is anticipated that the final selected research projects will receive the contract with authorization to proceed no later than September 1, 2013.

MATC RESEARCH POLICIES

All principal investigators who submit MATC research proposals must agree to follow all requirements and guidelines in the document titled “General Provisions of Grants for University Transportation Centers,” last revised November 2016 – which can be accessed online at: <https://www.transportation.gov/sites/dot.gov/files/docs/utc/261086/fast-act-generalprovisions-november-2016-version-12.pdf>. Principal investigators must also agree to provide the MATC Program Coordinator all information necessary to fulfill the requirements listed in document titled “Reporting Requirements for University Transportation Centers” last revised November 2016, which can be accessed online at: <https://www.transportation.gov/sites/dot.gov/files/docs/utc/261051/fast-act-grantdeliverablesandreporting-november-2016-verision-12.pdf>. In addition, Principal Investigators must agree to provide the information required to fulfill MATC’s additional reporting requirements, which can be accessed on the proposal site: <http://matc.unl.edu/pss/>.

Researchers supported by the Mid-America Transportation Center (MATC) are expected to become active members in the Mid-America Transportation Center research community. In accepting an MATC grant, recipients commit themselves to provide copies of all research publications, including journal articles, to the MATC staff. Four times a year, researchers must provide a brief synopsis of progress on their grants for inclusion in required reports to sponsors. We also request that grant recipients submit brief accounts of significant research findings for publication. From time to time we will call upon grant recipients (both faculty and graduate students) to participate in MATC-sponsored conferences and symposia, including the annual conference sponsored by MATC, and to serve as reviewers for graduate student applications and UTC research proposals, as applicable.

Researchers are expected to acknowledge the support provided by MATC in all presentations and publications resulting from the research. It is also expected that the MATC logo will be included on all presentations and publications. Research results may not be provided to other funding agencies or firms without full disclosure of MATC funding. In turn, MATC will not knowingly support research that is being funded or is proposed for funding, in whole or in part, by other agencies or organizations without a specific agreement for joint funding. Failure to disclose other proposed or in-hand research funding for a project substantially similar to a MATC project is grounds for termination of a MATC grant.

Graduate student contributions to research projects must be acknowledged in any publication resulting from research using MATC funds. Acknowledgment is generally expected to take the form of co-authorship of reports and articles, but could be by footnote, depending upon the nature and extent of student contributions. For further information, please contact the MATC Director.

FUNDING

FUNDING SOURCE

Funding is provided by the United States Department of Transportation Office of the Assistant Secretary for Research and Technology.

MATCHING REQUIREMENTS

All MATC research projects are subject to non-federal matching funds, which must be provided in accordance with found in the document titled General Provisions for University Transportation Centers (UTCs) on page 6:

<https://www.transportation.gov/sites/dot.gov/files/docs/utc/261086/fast-act-generalprovisions-november-2016-version-12.pdf>.

Note: Because the education and technology transfer aspects of the MATC mission typically will not have matching funds, it is generally expected that the selected research projects will have greater than 1:1 match. However there is no set requirement on the amount of matching funds required for any project.

FUNDING LIMITATIONS

Total budgets (including direct and indirect costs) should be approximately \$60,000; smaller requests are encouraged, and larger requests are allowed if clearly justified in the proposal, or if multiple institutions are involved in the proposal. The funding for the research program is contingent upon available funding.

To emphasize the Mid-America Transportation Center's commitment to education, all research proposals must include funding for at least one graduate student researcher for at least .49 FTE during the academic year and summer.

Research proposals may include salary for tenured faculty for one month and for assistant professors and researchers for up to two months. Funding support for more than one student is encouraged in the proposal; faculty members who request extra student support will generally be expected to reduce their summer salary to half a month or less (one month or less for assistant professors and researchers).

The primary investigator of the project will be required to submit a presentation of the results and to lead an online webinar upon completion of the final research report. This is required for all projects funded by MATC in support of the technical transfer of our research. MATC will provide the online software and will facilitate the advertising and promotion of the webinar with the primary investigator. Expenses associated with the webinar should not be included in the research budget.

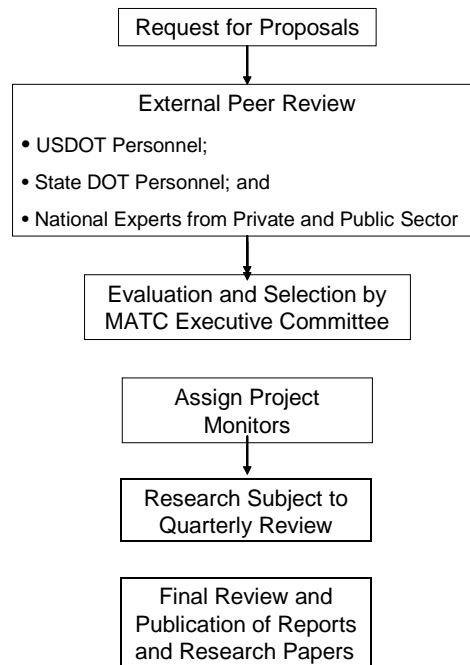
Permanent equipment or foreign travel are not allowable. For additional information, see the document titled "General Provisions of Grants for University Transportation Centers" last revised November 2016 and described in the MATC Research Policies section of this document, which may be accessed at: <https://www.transportation.gov/sites/dot.gov/files/docs/utc/261086/fast-act-generalprovisions-november-2016-version-12.pdf>.

PROPOSAL REVIEW & SELECTION

REVIEW PROCESS

The MATC Review process is illustrated in Figure 1 below. The proposals that are received in response will be evaluated through a peer-review process, where at least one of the reviewers for each proposal will be a US DOT employee. Once the reviews are complete, the MATC Executive Committee will meet to select the research projects.

Figure 1 – MATC Proposal Review Process



Each proposal will be reviewed with respect to the selection criteria described in the following section titled “Selection Criteria.”

Reviewers will be asked to rate each proposal on a score of 1 (being excellent) to 5 (being poor). In light of the diversity of potential topics and the diverse backgrounds of the reviewers, it will be important for the proposal to make its case in terms that can be understood by non-specialists.

Some proposals may be funded at a reduced level, or funding may be contingent on a revision to the proposal. The external review comments will be provided to the applicant at the same time that awards are announced.

MATC will be building a list of reviewers with expertise in a variety of fields related to the center’s theme, and will draw from this list in selecting reviewers. In addition, each applicant is required to submit the names of four (4) potential external reviewers submitted on the website. *Of the four potential external reviewers, the PI must recommend at least one (1) member of the US DOT and one (1) member from the state DOT personnel in Region VII. **Reviewers cannot come from the University system that is affiliated with your academic appointment.** NSF conflict of interest guidelines (found at https://www.nsf.gov/bfa/dias/policy/merit_review/phase2.jsp must be followed when suggesting reviewers.*

SELECTION CRITERIA

The selection criteria will include:

1. Relevance to the US DOT's Strategic goals of enhancing safety, improving the state of good repair, improving economic competitiveness, and improving environmental sustainability of the U.S. surface transportation system;
2. External peer-review recommendations;
3. Balance between
 - a) match requirements;
 - b) thematic thrust areas;
 - c) transportation modes; and
 - d) applied and advanced research.
4. Technical soundness and achievability in proposed time frame;
5. The documented and established expertise of the principal investigator and researchers applicable to the proposed project, the ability of the researchers to devote adequate time to complete the work on schedule, and past performance of researchers on MATC projects including timely submittal of final reports;
6. Adequacy of the proposed technology transfer;
7. A significant commitment to graduate student involvement; and
8. Multi-University and multi-disciplinary collaborative efforts.

The MATC Executive Committee members will review the combined rankings and vote to select those research proposals that will be funded based on the criteria listed above. The committee will also assign funding of each selected project based on the amount requested by the researcher and available funding.

REPORTING REQUIREMENTS

MATC must submit a semi-annual report and an annual report to the US DOT Research and Office of the Assistant Secretary for Research and Technology each year. Each report includes a status report on all research projects. The final annual report must also provide data on all students funded by MATC and all publications stemming from MATC research. Accordingly, in accepting a MATC grant, the PI agrees to the following:

PROGRESS REPORTS

The PI agrees to submit brief progress reports to be uploaded on the MATC website each quarter for the project until the project is completed (dates may change depending on the timing of the funding cycle).

The PI also agrees to submit a final summary report and technical brief no later than 30 days following the completion of the research. *Please see the MATC Final Report Template Guidelines for details.*

Failure to submit quarterly progress reports and/or answer any grant-related questions by the MATC Director or MATC Program Coordinator can result in a hold being placed on the account preventing any financial activity, or sub-awards being withheld.

FINANCIAL REPORTING

With each quarterly report, each PI's office of sponsored programs will be submitting invoices to MATC. On the invoices, faculty may be requested to provide detailed supporting financial information and documentation for the project.

Failure to provide requested information regarding grant-related transactions requested by the MATC Director or MATC Program Coordinator can result in payment of sub-awards being withheld.

REPORTING REQUIREMENTS

Papers and Reports Produced with MATC Support: The PI agrees to provide MATC with copies of all papers and reports produced with MATC funding, including items based on the work that are completed after the grant has ended.

Student Information: The PI agrees to provide information on all students engaged in MATC-sponsored projects, whether funded or unfunded.

MATC will provide information on the required format for progress reports and final summary reports on its web page, and will send reminders to PIs prior to report deadlines. All reports and publications must be submitted before subsequent MATC grants will be awarded to the PI.

REPORTING DEADLINES

Report	Deadline (Date)
Signed Statement of Agreement (Need from both PI & CoPI Universities)	August 31, 2017
Quarterly Progress & Financial Report 1	October 30, 2017
Quarterly Progress & Financial Report 2	January 30, 2018
Quarterly Progress & Financial Report 3	April 30, 2018
Quarterly Progress & Financial Report 4	July 30, 2018
Research Assistant Student Information	Required Updated Quarterly
Request for No-Cost Extension	60 Days Prior to End Date of Project
Draft Final Report	10 Days After End Date of Project
Revised Final Report*	30 Days After End Date of Project

* OST-R requires that all final research reports are due printed, mailed, and posted on the MATC website within 60 days after project completion.

CONTACT INFORMATION

If you have any questions or concerns regarding the RFP or website, please contact Ms. Shelly Cutsor, MATC Program Coordinator, at mcutsor@unl.edu or 402-472-1870.