



MDT RESEARCH PROJECT RESEARCHER GUIDANCE

GENERAL

It cannot be emphasized enough that MDT's Research Project Program is a contracted research program, not a grant program. Specific tasks are approved to be carried out to meet the project objectives for a specific maximum amount of funding and within a specific timeframe.

Also, timeliness is expected in all parts of the process. Researchers are expected to meet or beat deadlines.

Finally, do not assume that the content contained herein is everything in its entirety that researchers must be made aware for a successful project.

PROCESS

Research Project Solicitation Stage

The research project process begins with [MDT's annual solicitation for research ideas](#). Critical considerations include the following:

- ★ If you plan on submitting a research idea, it is critical to connect with MDT staff in the areas of your expertise/interest.
- ★ Ask about problems staff is experiencing and determine if the best solution is a research solution.
- ★ Obtain staff concurrence regarding submittal of and champion for a Stage 1: Research Idea form.
- ★ If approved to move forward, work with staff to develop the Stage 2: Research Topic Statement form.

Please note: Stage 2: Research Topic Statement form submitters are not guaranteed to obtain a contract for the research topic they submitted.

Technical Panel Stage

Projects are moved forward to this stage based on the Stage 2: Research Topic Statement, Champion presentation, and funding amount. Projects are ranked and moved forward until available funds are allocated.

You should receive notice (usually end of May) if your research topic was moved forward to this stage. If so, be patient as quite a bit of work needs to occur between approval to move forward to the Technical Panel Stage and a request for a proposal and contracting. The process is as follows:

- ★ The project will be added to the [TRB Research in Progress \(RIP\) database](#).
- ★ Technical panel names (or organizations to be represented) are obtained from the Stage 2: Research Topic Statement form for each project, MDT project champion, MDT Research Review Committee members, FHWA, MDT Research Project Manager (RPM), and MDT Research Program Manager.
- ★ Schedule the first Technical Panel meeting. The Stage 2: Research Topic Statement submitter(s) from public entities may or may not be invited to this meeting. At this meeting, the need (or not) for the project, scope, and methods to obtain proposals (if the submitter is not invited) are discussed.
- ★ If the submitter(s) from a public entity attended the first technical panel meeting, that person may be invited to submit a proposal.
- ★ If submitter(s) from a public entity did not attend the first technical panel meeting or if the submitter is not associated with a public entity, a [scope of work \(SOW\)](#) will be developed by the panel.
- ★ There are three processes through which MDT research proposals are obtained:
 1. Request one or more proposals from researchers associated with a public entity.
 2. Request letters of interest and qualifications from members of the Council of University Transportation Centers (CUTC) who are associated with a public entity.
 3. Issue an RFP. This is the only mechanism, for costs above \$3,000, through which a non-public entity can submit a proposal.
- ★ If Option 1 or 2 is selected, the SOW is sent to potential Researcher(s) for a response. If Option 1 is chosen and it doesn't pan out, Option 2 or 3 may be chosen as the next step. If Option 2 is chosen, but doesn't pan out, Option 3 may be chosen as the next step. Please Note: If a researcher(s) attended the first panel meeting, a SOW is not typically developed, rather, the researcher(s) develop a proposal based on the Stage 2: Research Topic Statement form and the discussion at the first panel meeting.
- ★ If Option 3 is chosen, an RFP is developed, using the developed SOW.
- ★ Critical SOW elements are as follows:
 1. **Maximum Project Cost:** This is the maximum project cost. If a proposal comes in higher than this amount, the project may be delayed until the next year's cycle or cancelled.
 2. **Objectives:** The resulting proposal should be developed such that the research will meet the statement objectives. This is the goal. Specific tasks may be left up to the researcher(s) to propose such that the objectives are met.

3. **Data Requirements:** MDT spells out the details of available data for the conduct of research. Likewise, the proposal must clearly detail the specific data required to conduct the research. Spell out details such as who is responsible for obtaining the data, the format of the data, and the details on how the data will be transmitted to the researcher(s). The project cost can vary widely depending on the options chosen. For example, the project cost will be significantly higher if a researcher needs to travel to Montana and spend two weeks going through hard copy files and making copies or entering data into an electronic repository as compared to MDT staff providing all data needs in electronic format.
4. **MDT and Technical Panel Involvement:** Any needs the researcher(s) has of MDT or the technical panel (e.g., data, approvals, contacts, survey distribution, and, of course, product review) should be spelled out in this section.
5. **Deliverables:** As much as is possible, deliverables that will be needed for implementation of research results should be developed through the research contract. Key deliverables include final report, project summary report, implementation report, performance measures report, project poster, research results webinar, and deliverables required for implementation.
6. **Implementation:** MDT's Research Projects Program is an applied research program and implementable results is the goal.
7. **Performance Measures:** As much as possible the value of the research needs to be documented and quantified.

★ Critical proposal elements are as follows:

1. Use the [MDT research project proposal template](#).
2. See above SOW discussion.
3. The proposal must include statement(s) on how the quality of the research and the products will be ensured.
4. It is critical that realistic timeframes are included in the schedule. Ask your MDT RPM when your project, if approved, may be expected to begin. Use this information in your proposal schedule or use generic time frames, such as Month 1, Month 2, etc. Allow two weeks for review of monthly and quarterly progress reports. Allow one month for initial review of task reports and final deliverables. According to our contract, the researcher(s) has two weeks to submit revised task reports and final deliverables, along with a line item response to each comment. Allow another month for review of revised task reports and final deliverables. According to our contract, the researcher has one week to submit revised documents, along with a line item response for each comment. Allow for at least two review and revision cycles. Some final deliverables (e.g., research project summary report, performance measures report, and project poster) should be drafted after the first review of the draft final report is complete and comments are provided to the researcher. The implementation report must be drafted after the implementation meeting. The research results webinar should be held after all other deliverables are submitted, accepted by MDT, and posted on the project website.

5. Once the final products are being drafted, it is no longer necessary to submit monthly or quarterly progress reports.
 6. Make sure to include all of the tables from the proposal template in your proposal.
 7. Staffing should be appropriate for the task. Make sure the proposal clearly spells out who will be doing what work and how much time it will take to get the work done. There should be just enough staffing (level of expertise and number) to complete each task.
- ★ Once a proposal is approved for funding, the contract stage can begin.

Contract and Conduct of Research Stage

- ★ As the project proceeds through each Stage, the [TRB RIP database](#) will be updated by the RPM. If your organization also enters records into RIP, please do not duplicate MDT efforts.
- ★ No funds can be expended until a fully executed contract is in place and the researcher(s) receive the notice to proceed from the MDT Research Program Manager.
- ★ Know the terms of your contract.
- ★ Obtain an [ORCID](#) and use it for all products.
- ★ Once a project is contracted, the researcher(s) begin taking meeting notes and submitting them to the MDT RPM for review and revision.
- ★ A project kick-off meeting will be held to ensure the panel and the researcher(s) understand the process and are in agreement with the research as proposed. During this meeting, final details are agreed upon.
- ★ Know and follow the [Research Project Report Writing Requirements](#). Reports that don't meet these criteria will be sent back to researchers unreviewed. Final products must meet Section 508 Accessibility requirements. Since task reports feed into final reports, it is wise to ensure task reports also meet these criteria. Reports that do not meet these criteria also will be sent back to researchers unreviewed. Reports must be sent to the MDT RPM, who will then compile the panel comments and send them to the researcher(s). Researchers are expected to meet the deadlines as set by them in the proposal and to submit all reports in final form. Oftentimes, MDT will add more time to the contract to ensure all requirements are complete before the contract expires. However, researcher(s) should still meet the deadlines they indicated in the proposal.
- ★ While a contract is in effect, researchers must request approval to present, or prepare a poster or paper that reveals results. All such publications require prior MDT RPM approval.
- ★ Communication is vital. The MDT RPM is the liaison between the project principal investigator and the technical panel. Technical communications must include a cc to the MDT RPM. Non-technical communications must be directed to the MDT RPM. Decisions are made by the MDT RPM or the technical panel, as determined by the MDT RPM. Changes in scope, time, or budget are not complete until a contract amendment is in place. Time delays that affect specific tasks or deliverables, but do not affect the project end date may proceed with an email from the MDT RPM. If anything will breakdown between MDT and the principal investigator, it is communication. Err on the side of too much communication.

- ★ No funds can be expended after the contract end date.

Post-Contract Stage

- ★ The final products will be made available via the [TRB Transportation Research International Documentation \(TRID\) database](#) and the [National Transportation Library's Rosa P database](#). Once they are available here, the RIP record will be deleted. Again, if your organization also adds research deliverables to these databases, please do not duplicate MDT's efforts.
- ★ A Research Project Exit Survey will be conducted on the panel, with the results being sent to the researcher(s) and the panel. This survey requests information on the performance of the researcher(s) and the MDT RPM, as well as some basic implementation questions.
- ★ Researchers are free to publish and/or present posters, papers, presentations, etc. However, Researchers must acknowledge MDT and other sponsors, if any, of the research. Researchers must also provide a statement as to whether the final report was accepted or not.
- ★ All publications (presentations, papers, posters, etc.) must be sent to the MDT RPM for posting on the project website.