



IDOT-ICT RESEARCH PROGRAM OPERATIONAL GUIDELINES

September 2025

TABLE OF CONTENTS

INTRODUCTION.....	4
RESEARCH PROJECT SELECTION.....	5
1. APPOINTMENTS TO THE TECHNICAL ADVISORY GROUPS (TAGS).....	5
2. TAG RESEARCH NEEDS.....	5
3. SOLICITING RESEARCH IDEAS.....	5
4. TAG EVALUATIONS OF RESEARCH IDEAS.....	6
5. EXECUTIVE COMMITTEE SELECTION OF RESEARCH IDEAS FOR FUNDING AS RESEARCH PROJECTS.....	6
6. ESTABLISHMENT OF SPECIAL PROJECTS.....	7
RESEARCH PROJECT ADMINISTRATION	8
1. SELECTION OF THE TECHNICAL REVIEW PANEL FOR APPROVED PROJECTS.....	8
2. SELECTION OF THE PI FOR APPROVED RESEARCH PROJECTS.....	8
3. PREPARATION, ADVERTISING, AND ADMINISTERING REQUESTS FOR PROPOSAL	8
4. SELECTION OF PRINCIPAL INVESTIGATOR(S) & RESEARCH PROPOSAL/WORK PLAN FOR RESEARCH PROJECTS.....	9
5. REVIEW & APPROVAL OF THE PROPOSAL/WORK PLAN & BUDGET FOR NEW PROJECT	9
6. ONGOING OVERSIGHT OF RESEARCH PROJECTS	10
RESEARCH REPORTING	10
1. RESEARCH QUARTERLY PROGRESS REPORT SUBMISSION.....	10
2. DRAFTING, REVIEWING AND APPROVING RESEARCH REPORTS	11
3. REPORT POSTING, PRINTING AND DISTRIBUTION.....	11
4. PRESENTATIONS AND PUBLICATIONS	11
5. DATA MANAGEMENT.....	12
6. SOFTWARE	12

ICT ADMINISTRATION.....	13
1. IDOT- ICT ADMINISTRATIVE MEETINGS.....	13
2. PURCHASING PROCEDURES.....	13
3. TRAVEL REQUESTS AND APPROVALS.....	13
4. EQUIPMENT INVENTORY; EQUIPMENT CALIBRATION & MAINTENANCE	13

INTRODUCTION

Illinois Center for Transportation (ICT) is a premier transportation research center at the University of Illinois (UI) Urbana-Champaign. ICT serves the needs of IDOT, the State of Illinois, and the nation through research, education, and outreach. ICT collaborates and administers the IDOT research program through an Intergovernmental Agreement (IGA).

The initial IDOT-ICT IGA was executed in 2005, and the partnership has remained consistent over the past 20 years. The current IDOT-ICT IGA was executed in 2024, for the term of July 1, 2024, through June 30, 2030. The current IGA can be viewed at <https://ws.engr.illinois.edu/sitemanager/getfile.asp?id=578> IGA DOH-ICT06.pdf.

ICT's operation follows the terms and provisions of the current IDOT-ICT IGA. ICT has developed additional operational guidelines to supplement this IGA. These operational guidelines are intended to provide guidance for the public, ICT researchers, IDOT staff, university staff, etc., on the administration of the IGA and the IDOT-ICT research program. If there is any conflict between these operational guidelines and the current IGA, the IGA supersedes these operational guidelines.

RESEARCH PROJECT SELECTION

1. APPOINTMENTS TO THE TECHNICAL ADVISORY GROUPS (TAGS)

The IDOT-ICT IGA requires IDOT to establish Technical Advisory Groups (TAGs), comprised of IDOT personnel, an ICT representative, industry representatives (as appropriate), and a representative from the Federal Highway Administration (FHWA), Illinois Division. TAGs are charged with reviewing and prioritizing research proposals to be presented to the IDOT-ICT Executive Committee.

IDOT appoints the chair and at least one other IDOT employee to each TAG.

ICT appoints an ICT representative to each TAG. ICT appoints representatives with expertise in the subject area of the TAG and/or experience in transportation research. No person may serve as the ICT TAG representative on more than one TAG concurrently. Starting July 1, 2020, the ICT representative appointment is for a two-year or three-year term.

The FHWA, Illinois Division, appoints the FHWA representative to each TAG.

If industry representatives are appropriate for a TAG, IDOT appoints these members.

There are currently eight TAGs:

- Bridges and Foundations
- Environmental Impacts
- Mobility and Freight Modes
- Mobility Safety
- Operations and Maintenance
- Pavements and Materials
- Planning, Policy, and Asset Management
- Sustainable Construction

2. TAG RESEARCH NEEDS

Annually, the TAGs are asked to identify specific IDOT transportation research topics. These TAG research needs are posted to the ICT website and advertised to potential researchers to encourage the submission of research ideas that will meet IDOT's and the State of Illinois' current needs.

3. SOLICITING RESEARCH IDEAS

The Research Idea Statement form is posted on the ICT website (on the [ICT Research Needs page](#)). Potential investigators and others who wish to suggest a specific research topic can download and fill out the form. They are encouraged to identify an IDOT sponsor willing to champion the research. All proposed Research Idea Statement forms are submitted to ICT Project Management.

ICT encourages the submission of specific research ideas by:

- Sending a notice to people who have signed up for our Research Notification listserv (including alerting current and former ICT Principal Investigators, as they will be added to the listserv).
- Including an announcement in our newsletter (released in February, May, August, and November), if the timing aligns with the submission periods.

Although ICT encourages research ideas based on the priorities the TAGs have identified, research ideas on any transportation-related topic are considered. Submitting a research idea does not guarantee that the idea submitter will be the Principal Investigator (PI) of the topic if selected by the IDOT-ICT Executive Committee.

4. TAG EVALUATIONS OF RESEARCH IDEAS

IDOT receives all proposed research idea statements and determines which TAG(s) should receive them for review and consideration. The proposed research idea statements submitted by the annual deadlines are copied and sent to one or more TAG Chairs, depending upon the subject of the proposed research.

During the Fall TAG Meetings, the TAGs review and discuss all proposed research ideas submitted. These TAG meetings are open to members only; non-members can attend only by invitation of the TAG Chair. At these TAG meetings, the proposed research ideas are discussed and prioritized, by voting members only, according to the perceived benefits of the research. The TAG develops specific recommendations on which proposed research ideas should be funded and ranks their recommendations. The TAG Chair communicates these recommendations to ICT Project Management for coordination and presentation to the IDOT-ICT Executive Committee at its annual meeting.

5. EXECUTIVE COMMITTEE SELECTION OF RESEARCH IDEAS FOR FUNDING AS RESEARCH PROJECTS

Per the IDOT-ICT IGA, IDOT has established an IDOT-ICT Executive Committee to review and select projects for the research program. Chaired by the Bureau Chief of Research, the committee is comprised of the directors of the offices and divisions of IDOT (or their designees), a representative from FHWA, and the Director of ICT (non-voting).

The IDOT-ICT Executive Committee meets annually to discuss the overall activities of ICT and the TAGs' recommendations for funding various proposed research ideas. During these meetings, the committee reviews each research idea recommended by the TAGs and votes on whether it should be funded. The committee makes the final decision on which proposed research ideas are funded as research projects.

Approved research ideas are referred to ICT to administer the research project. The project can be directly awarded to a PI or through a request for proposals, as described in the Research Project Administration section of this document.

6. ESTABLISHMENT OF SPECIAL PROJECTS

When an immediate need for a study of narrow scope and urgency arises, the Bureau Chief of Research will notify ICT that a Special Project is needed.

The ICT Project Management staff will work with IDOT personnel to gather the scope, timeline, and deliverables for the Special Project.

When the details of the Special Project are finalized, ICT will follow the standard administration procedures.

RESEARCH PROJECT ADMINISTRATION

If the IDOT-ICT Executive Committee approves a proposed research idea for funding, it is referred to ICT to administer the research project.

1. SELECTION OF THE TECHNICAL REVIEW PANEL FOR APPROVED PROJECTS

For each new research project, IDOT appoints a Technical Review Panel (TRP) to oversee and guide the research. Members can be IDOT employees, FHWA representatives, local government representatives, private contractors, private citizens, etc., but the TRP Chair is generally an IDOT employee. Projects may have co-chairs, of which one shall be an IDOT employee. All projects must have a FHWA representative.

2. SELECTION OF THE PI FOR APPROVED RESEARCH PROJECTS

It is primarily ICT's responsibility to determine who serves as the PI(s) on a funded research project; however, ICT frequently consults with IDOT personnel, such as the TAG Chair and the Bureau Chief of Research, about this selection.

Under the terms of the IGA, ICT can select the proposing PI if they are from one of the UI campuses: Urbana-Champaign, Chicago, or Springfield, except for research ideas that have more than one submittal. If ICT identifies a UI researcher(s) to perform a new research project, the PI will be invited to submit a research proposal/work plan and budget for review and approval by ICT, the TRP Chair, and the Bureau of Research. ICT may also solicit a request for proposals from all eligible researchers to select the research team most qualified to perform the research. In addition, ICT must consider meeting the outsourcing requirements as stated in the IGA.

3. PREPARATION, ADVERTISING, AND ADMINISTERING REQUESTS FOR PROPOSAL

Annually, ICT follows these steps to prepare and advertise via Request for Proposals (RFPs):

- ICT works with IDOT to select which Executive Committee-approved research projects will be advertised.
- ICT drafts an RFP based upon the specific research needs identified within the proposed Research Idea forms submitted to and approved by the Executive Committee. If there are multiple submissions for a Research Idea, the project TRP Chairs will consolidate them into one Research Idea submission. All RFPs include identical instructions about the content and format for research proposals and a list of the responsibilities of PIs. A typical RFP that is made available to all interested researchers is included in Attachment A. Each RFP outlines the project scope and budget and includes guidelines for preparing and submitting the completed proposal to ICT.
- The draft RFP is sent to the TRP Chair for revisions, if needed. The TRP will generally be given two weeks to review and edit/approve the draft RFP.

- ICT finalizes the RFPs and posts them on the ICT website, typically April 1st. When this occurs, ICT highlights the posting on its homepage, sends an email to the RFP notification listserv, and advertises on their social media platforms.
- Research proposals (in response to RFPs) are due to ICT no more than one month after they are posted to the ICT website.
- Research proposals are not accepted after the deadline (advertised in the RFP) for submitting proposals.

4. SELECTION OF PRINCIPAL INVESTIGATOR(S) & RESEARCH PROPOSAL/WORK PLAN FOR RESEARCH PROJECTS

ICT forwards the proposals received in response to the RFPs to the appropriate TRP Chair, who sets up a meeting with their panel to review and discuss the proposals.

ICT usually asks the TRP to complete its review of the research proposals and make a recommendation for action within 30 days. If the TRP has questions about one or more proposals, it is allowed to write follow-up questions for the researcher(s) through ICT.

The TRP can recommend only one research team and proposal from among the proposals received or it can recommend that none of the proposals received be funded. If none of the proposals are recommended, the RFP may be revised and/or reissued later.

5. REVIEW AND APPROVAL OF THE PROPOSAL/WORK PLAN & BUDGET FOR NEW PROJECTS

For each newly approved research project, the PI must prepare a work plan that includes a timeline and budget in the format approved by ICT. The PI works with the TRP to develop an acceptable work plan, including timeline (must have three months for report editing), scope, deliverables, implementable outcomes, reporting requirements, and budget. The use of interim deliverables (literature review, software, technical memos, testing plan etc.) is encouraged to facilitate timely completion of projects.

ICT works with the PI to ensure that the budget complies with the IGA. To ensure inclusion of as many researchers as possible, no research project for full-time faculty shall include more than one month of PI time per year, nor more than two months in total per PI per year for all projects. Any exceptions must be approved by the ICT Director.

The budget must align with the total amount approved by the Executive Committee for the research project. It must include a 25% cost share of the total project cost, with the remaining 75% requested from IDOT-ICT. The indirect cost rate (also known as facilities and administration, or F&A) cannot exceed 42.97% of the modified total direct costs. Detailed budget requirements are provided in the proposal preparation guidelines.

Before any project can begin, the work plan and budget must be reviewed and approved by ICT, the IDOT Bureau Chief of Research, and the project TRP Chair.

6. ONGOING OVERSIGHT OF RESEARCH PROJECTS

The TRP Chair will maintain in contact with the PI to discuss technical matters throughout the entire project. Semi-annual TRP meetings are required for the PI to provide a research progress update and to discuss administrative items. These meetings are typically held via Zoom; however, face-to-face meetings can be requested. The ICT Project Management team will assist with scheduling TRP meetings, and a Research Project Coordinator will be assigned to each project to facilitate communication between the research team and TRP, track project progress, update changes in scope and/or budget, manage the Implementation Planning Worksheet, and take meeting minutes, including tracking of action items.

Quarterly, the PI must submit a Quarterly Progress Report through the ICT website to note the research progress completed the prior quarter and expectations for the next quarter. (See Research Reporting Section 1 below for more instructions/information on quarterly progress reports.)

Throughout the project, the PI and TRP Chair will maintain regular communication regarding progress and any challenges that arise. If a change in scope or research effort becomes necessary, the TRP Chair may recommend adjustments to the project budget. Additional funding of up to 20% of the initial total budget may be considered with approval from IDOT's Bureau Chief of Research. Requests exceeding this threshold require approval from the IDOT-ICT Executive Committee.

RESEARCH REPORTING

1. RESEARCH QUARTERLY PROGRESS REPORT SUBMISSION

Quarterly, the PI must submit a Quarterly Progress Report through the ICT website to note the research progress completed the prior quarter and expectations for the next quarter.

Ten days prior to the end of the quarter, ICT will send an email to each PI reminding them to update the progress of their project on the ICT website. When the PI completes the QPR, an automatic email notifies the TRP Chair that the project has been updated and asks them to review the project status.

The TRP Chair reviews the quarterly progress, provides comments on the project implementation status, and can approve the QPR or return it to the PI for revisions.

ICT must submit all approved QPRs by downloading the approved PDF to IDOT by the 20th of month (January, April, July, October) following the required QPR. If all active project quarterly reports are not approved by this date, ICT will submit the approved ones and provide the others once approved.

The following specific instructions are available on the ICT website:

- [Instructions](#) for PIs.
- [Instructions](#) for TRP Chairs.

2. DRAFTING, REVIEWING AND APPROVING RESEARCH REPORTS

All research reports should follow ICT's [report guidelines](#). The PI should submit the report to ICT Project Management for editing in ICT's [report template](#), complying with Section 508 standards. The editing process, outlined in the project's work plan, will take three months, beginning with report submission and ending with report publication.

- **PRELIMINARY EDIT PHASE (Month One – 30 days):** The PI submits the completed report to ICT Project Management. ICT will perform a technical edit of the report and then return it to the PI for review and revision.
- **PI/TRP EDIT PHASE (Month Two – 30 days):** The PI reviews the edits, accepts/rejects changes, addresses all comments, and forwards the edited report to the project's TRP Chair for review. The TRP reviews and provides comments to the PI within 21 days of receipt. The PI incorporates the feedback and returns the report to the TRP Chair for approval before sending the final version to ICT Project Management for final editing. All discussion and updating of the report between the PI and TRP Chair should be complete at this time.
- **FINAL EDIT PHASE (Month Three – 30 days):** When the PI sends the final version of the report to ICT Project Management, ICT will obtain the final approval form from the TRP Chair. Upon receipt of the approval form, ICT Project Management performs a final editorial review and publishes the report. The TRP Chair must sign the approval form prior to report publication.

3. REPORT POSTING, PRINTING AND DISTRIBUTION

After the TRP Chair and ICT Project Management have approved a report, ICT will take the following steps to finalize and publish the report:

- Perform a final editorial review.
- Assign an ICT report number, FHWA report number, and DOI.
- Complete the Technical Documentation Page (report date, DOI, number of pages)
- Convert file to PDF and perform a final accessibility check.
- Add front and back covers.
- Post the report to the ICT Publications page.
- Notify the PI, TRP Chairs, and IDOT Bureau of Research personnel of its publication.
- Order and mail any print copies of the final report to the IDOT Research Library and PI
- Deposit the publication in the TRID database, ROSA P database (via TRID submission), and University of Illinois library (IDEALS)
- Delete the project from the RIP database after it appears in TRID.

4. PRESENTATIONS AND PUBLICATIONS

Regarding presenting and publishing ICT research, each PI shall understand and follow the specific details outlined in the IGA for ICT. General guidelines are provided here.

All parties, ICT, IDOT, and the PI, retain the right to publish or present non-confidential project

findings following a 21-business day review by IDOT. If the scheduled time for presenting project information previously reviewed by IDOT does not permit formal review of a complete publication or presentation, notify IDOT of the scheduled presentation on the study and provide an abstract, presentation title, or agenda for the presentation. All presentations and publications regarding research sponsored partially or fully by the IDOT-ICT IGA shall include the IDOT-ICT acknowledgement and disclaimer statements (available on the ICT website). Items not reviewed by IDOT must state IDOT has not reviewed the paper or presentation.

5. DATA MANAGEMENT

All documents, data and records produced by a PI in carrying out his or her obligations and services shall become and remain the property of IDOT as described in the IGA. The PI must deliver copies of all documents, data and records used in performing the research prior to the publication of the project's final report. ICT shall retain the data for three years from the project's end date.

6. SOFTWARE

ICT has the authority to copyright reports, computer software and its documentation or databases, forms, and other material that are part of the project work, providing specific rights to IDOT and the Federal Government as specified in the IGA.

ICT ADMINISTRATION

1. IDOT- ICT ADMINISTRATIVE MEETINGS

Monthly, management personnel from the IDOT Bureau of Research and ICT meet to discuss the research program. Meeting notes are taken, and all action items are tracked until implemented or resolved and therefore removed from the list of action items. Minutes are uploaded to the document section of the R60-ADMIN project QPR.

2. PURCHASING PROCEDURES

PIs are expected to follow the purchasing procedures of their institution when spending research project funds. ICT administrative offices follow the procedures set forth by the UI Urbana-Champaign campus' Sponsored Programs Administration (SPA). A copy of the SPA policy and procedures documentation can be found at <https://sponsoredprograms.illinois.edu/guidance/policy>.

In addition, PIs must request approval prior to the purchase of any equipment item costing more than \$500 using research project funds. PIs should work with the ICT Research Project Coordinator to submit an equipment justification form including cost estimate, description of the item, and its proposed use to the TRP Chair(s) and Bureau of Research.

3. TRAVEL REQUESTS AND APPROVALS

Travel costs should be itemized in the original project budget. PIs requesting to travel must receive written approval from the TRP Chair(s) and complete a Travel Request Form prior to travel. ICT will provide the form via DocuSign.

A Travel Request Form is required for:

- Out-of-state travel
- All Conferences

4. EQUIPMENT INVENTORY; EQUIPMENT CALIBRATION & MAINTENANCE

ICT maintains a database of the equipment inventory and submits an equipment report to IDOT quarterly. The database is updated with the following information when new equipment is acquired and/or during the annual inventory review:

- Equipment request number
- Acquisition date
- Project purchased for
- Project account charged
- Equipment description
- Actual Cost
- Current Net Book Value

- Accumulated Depreciation
- Serial Number
- Primary TAG number
- Equipment location
- Equipment custodian
- Equipment performance status.

5. ILLINOIS- ACCELERATED PAVEMENT TESTER USAGE - RECORDKEEPING

The Illinois Accelerated Pavement Tester (I-APT) is a state-of-the-art, full-scale accelerated pavement testing machine located at the ICT facility in Rantoul, Illinois. Monthly, ICT fills out a logbook during I-APT run times that indicates specific project responsibility, personnel identification, and all I-APT activities. The I-APT logbook also includes:

- The date and time of each usage event. This usage event will include project identification. Events include system tests, starting a test, stopping a test, and sometimes errors. It is not always possible to be specific about the error title, but the number of occurrences is recorded. This information helps troubleshoot error sources.
- The preventative maintenance performed.
- The corrective maintenance performed by all parties, including the names and companies performing corrective maintenance.
- A record of when the system is physically moved and when it is moved from one project to another.
- A record when the system is idle.

The I-APT logbook is used to determine I-APT usage costs for billing purposes and is submitted to IDOT and FHWA monthly.