UNIVERSITY TRANSPORTATION CENTERS (UTC) GRANT DELIVERABLES AND REPORTING REQUIREMENTS

For Grants Funded by the Infrastructure Investment and Jobs Act (IIJA)

June 2025 Version 1.2

Document Status

Item	Description
Document Title	UTC Grants Deliverables and Reporting
	Requirements for Infrastructure Investment and
	Jobs Act
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Document Revision History

Version	Date	Description
1.1	August	Edited to eliminate duplicate/contradictory guidance for Research
	2023	Project Requirements as stated in section 9 and Exhibit D.
1.2	June 2025	Revised to:
		 reflect 2025 Executive Orders and Secretarial Memoranda
		regarding Administration priorities
		o Notice
		• increase Progress Meetings to semi-annual (item 1)
		reduce UTC Directors Meetings to one per year with in-person
		attendance not compulsory (item 2)
		item 3 UTC Symposiums revised
		new item 8 noting requirement for prior review of projects, see
		also item 11
		new item 8 Project Review and Approval Process
		new item 9 Advisory Board Participation
		item 12g changes to distribution of Final Research Reports
		new item 18 Media Coverage
		• change "environmental" to "economic" in Exhibit a, Part 5 and
		Exhibit B Part II additional Performance Indicators.

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NOTICE

DOT invests in the future of transportation through its University Transportation Centers (UTC) Program, which awards and administers grants to consortia of colleges and universities across the United States. The UTC Program advances the state-of-the-art in transportation research and technology, and develops the next generation of transportation professionals. The Congressionally mandated program has been in place since 1987 to help address our Nation's ever-growing need for the safe, efficient, and economically sound movement of people and goods.

The Infrastructure Investment and Jobs Act (IIJA) (Pub. L. No. 117-58) made funds available to the United States Department of Transportation (the "DOT") for fiscal year 2022 through 2026¹ to carry out 49 U.S.C. § 5505(b)(4)(B), as amended by the IIJA, to establish and operate University Transportation Centers (UTCs or Centers) to support surface transportation through DOT statutory research priorities outlined in the NOFO. The Office of the Assistant Secretary for Research and Technology (OST-R) of the DOT will manage the UTC Program.

Grants awarded under the UTC Program are selected to support DOT's priorities. From road safety to emerging technologies and road construction, DOT believes in creating the safest, most efficiency and modern transportation system in the world. The *University Transportation Centers (UTC) General Provisions of Grants* document, that is another part of the grant agreement along with this *Deliverables*... document, lists Executive and Secretarial Orders and Memorandum that apply to UTC Program grants and that elaborate on priorities.

Grant deliverables and reporting requirements are mandatory under the University Transportation Centers (UTCs) Program. Failure to comply with timely submission of these deliverables and requirements may delay reimbursement of invoices and/or funding for modifications of multiple-year grants. In extreme cases of non-compliance, a recipient may be found to be in material failure to comply with the award terms and conditions. Such a determination may result in termination of the grant for failure to comply and a determination that the recipient is not qualified to receive and manage Federal grants. Section 200.340(c) "Termination" of the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* requires Federal agencies to report to the Federal Awardee Performance and Integrity Information System when it terminates an award prior to the end of the period of performance due to a recipient's material failure to comply with Federal award terms and conditions. DOT will report to the Federal Awardee Performance and Integrity Information System after the recipient has exhausted its appeal rights.

1. Semi-Annual Progress Meetings

To foster stewardship of Federal funds and ensure our Centers are in alignment with the Department's strategic framework for research and development activities, each Center Director shall hold a semi-annual research review meeting either in-person or virtually to brief the Research, Development and Technology Director, the University Transportation Centers Director, and the assigned Grant Manager. These meetings should provide insight into the planning and conduct of your grant, including how your consortium is advancing transportation through its activity, proposed future projects and activities, working to achieve success, and helping to make sure your activities are on track, in alignment with departmental priorities, and maximize the benefits of science and technology.

2. UTC Director's Meetings

The OST-R UTC Program Director will convene one meeting per year of all UTC Recipients for information exchange, identifying best practices in UTC Grant management, and administrative streamlining. The meeting will be held in January in Washington, D.C., at the start of the Transportation

¹ Incremental funding in fiscal years beyond FY 2022 is subject to the availability of funds.

Research Board Annual Meeting in conjunction with the Council of University Transportation Centers (CUTC) Winter Meetings. The Center Directors in-person attendance at this meeting is not compulsory, and participation in CUTC events is left to their discretion.

3. UTC Symposiums

To foster cross-Center collaboration and align with national priorities and EOs, UTCs focusing on common statutory research priority areas shall convene one mandatory annual symposium in Washington, D.C. This symposium will bring together UTCs, OST-R/DOT leadership, transportation stakeholders, and subject matter experts from other Federal agencies to enhance research coordination, showcase impactful current and upcoming projects, and identify shared challenges and opportunities in intermodal and multimodal research. In addition to the annual symposium, these UTCs may optionally organize an additional meeting at a location of their choice to further support collaboration and coordination on their research activities.

4. Website

The Recipient must establish and maintain an up-to-date, informational website listing at a minimum the following items plus any other information the Recipient wishes to include to make interested parties aware of its work under the UTC grant:

- Directory of key personnel
- Current research and technology transfer projects
- Final research reports
- Semi-Annual Progress Reports

(See items 5, 10, 11, and 12 for additional detail)

A basic framework of this website must be available for public viewing by within 30 days of receiving the Grant Agreement. Each Center Director must provide the Office of the Assistant Secretary for Research and Technology (OST-R) Grant Manager with the link to their UTC's website, which will be included in the UTC program's website at https://www.transportation.gov/content/university-transportation-centers. Center Directors can reference the General Services Administration's website to obtain technical assistance with making web content accessible to individuals with disabilities. For additional information, click https://www.section508.gov/.

5. Directory of Key Center Personnel

The Recipient must prepare a "Directory of Key Center Personnel" that includes the names, titles, phone/fax numbers, mailing addresses, and e-mail addresses of key Center personnel, including the Director's primary administrative staff person and at least one contact person at each university in a consortium, if any. This information must be placed on the Center's website within 30 days of receiving the Grant Agreement. The Center Director must ensure that the information remains posted and is current throughout the life of the grant.

6. Federal Financial Reports

Federal Financial Report, or Standard Form (SF) 425, is due at the end of each calendar quarter and must cover the three-month reporting periods ending on March 31, June 30, September 30, and December 31. The Center Director or designated university official must prepare and submit via e-mail to your Grant Manager the Federal Financial Report (SF) 425 no later than 30 days after the reporting period end date. The SF 425 does not need to be posted on the UTC's website. After the grant's termination date, a final SF 425 should be submitted along with the final invoice.

7. Data Management Plan

OST-R-funded researchers must comply with the DOT Public Access Plan. The Recipient must create a "Data Management Plan" that describes its strategy for collecting, processing and archiving Digital Data Sets resulting from DOT-funded scientific research in a repository that enables and allows for public access and sharing. Within 90 days of receiving the Grant Agreement, the Data Management Plan must be submitted to your Grant Manager for review and approval. Data Management Plans that do not meet the minimum requirements, provided below, will be returned for revision.

- A high-level description of the types of data that the Center anticipates gathering in the course of conducting research activities, including whether the data should be preserved for long-term access.
- A proposed outline of the standards and machine-readable formats that will be used for the entire scope of research activities.
- A description of any data access policies that govern (and prevent) the disclosure of identities, confidential business information, national security information, etc., and whether public use files may be generated from the data.
- A general discussion of policies for re-use and re-distribution of research data.
- A high-level description of how, when, and where the Center plans to archive, preserve, and deposit the research data.

Immediately notify your Grant Manager if changes are made to the Data Management Plan after it is approved. For more information about creating data management plans, click-on https://ntl.bts.gov/ntl/public-access/creating-data-management-plans.

8. Project and Activity Review and Approval Process

All new projects and activities proposed by the Center shall be submitted to your UTC grant manager by email for review, using the Exhibit D format discussed later in this document for research projects and an explanatory e-mail for other activities. The UTC Program Office will review each project/activity within 30 business days of submittal and reserves the right to reject or require rescoping of any that do not advance the priorities of the Department, are duplicative, or are unnecessary. Projects and activities may not proceed until approval is provided by the UTC Program Office.

9. Advisory Board Participation

U.S. DOT personnel may serve on a UTC's advisory board only with the prior approval of the OST-R UTC Program Director. This policy ensures clarity of roles and maintains the independence of each Center's research and operational decisions. Advisory boards provide strategic input, help align research with national priorities, and foster cross-sector collaboration. UTCs are encouraged to convene advisory board meetings at least once per year, with clear agendas, action-oriented discussions, and documentation of key recommendations.

10. Database Repositories

To ensure the transportation research community has access to all federally funded transportation-related research, reports, and data, each Recipient must submit their research project requirements to the following libraries. A description of these databases is provided below:

Transportation Research Board's Research in Progress (RiP) Database (https://rip.trb.org/)
 This database contains information on more than 14,000 current or recently completed transportation research projects. RiP records include projects funded by USDOT, State DOTs, and University transportation research.

- Transportation Research International Documentation (https://trid.trb.org/) This database contains more than 1.3 million references to books, technical reports, conference proceedings, and journal articles in the field of transportation research.
- National Transportation Library Digital Repository (also known as the Repository & Open Science Access Portal (ROSA P)) (https://ntl.bts.gov/ntl). This publicly accessible, no-cost repository is dedicated to transportation research, information, and statistics produced or funded by DOT, and other transportation organizations and researchers, as appropriate. The content includes:
 - Born-digital and digitized print publications (technical reports, scientific papers, manuscripts, journal articles, etc.);
 - Machine-readable datasets;
 - Videos and still images;
 - Maps and GIS files;
 - Presentations; and,
 - Others as appropriate.
- **DOT Research Hub** (https://researchhub.bts.gov/search) This web-based, searchable database of DOT-sponsored research, development, and technology project records acts as a central repository for information on active and recently completed projects from DOT's Operating Administrations, providing a comprehensive account of the Department's research portfolio at the project level.

Each Center Director must ensure that each partially or fully funded research project managed by researchers at the lead institution and sub-awardees is in compliance with the DOT Public Access Plan (https://doi.org/10.21949/1520559) and the data management practices detailed in each Center's Data Management Plan before starting a research project.

Research projects shall consider, plan, budget for, and implement appropriate data management to promote Public Access (https://doi.org/10.21949/1520559) to research data acquired or generated during the course of the project. Such considerations will include, but are not limited to, a project:

- providing at a minimum the research data to: (1) reproduce significant results (whether positive or negative); (2) measure the outcomes or objectives of the project, as well as the NOFO; and (3) add potential value to future research and support evidence-based policy or actions;
- developing a data management plan (https://doi.org/10.21949/1520571) and providing relevant metadata (in a DCAT-US https://resources.data.gov/resources/dcat-us/ file, and, optionally, a discipline appropriate metadata standard file) and data documentation (README.txt files, data dictionaries, code books, supporting files, imputation tables, etc.);
- defaulting to open access when appropriate (exceptions include protecting personally identifiable information, Indigenous data sovereignty (https://www.gida-global.org/care), or confidential business information (CBI));
- utilizing, when possible, open licenses and protecting DOT's non-exclusive copyright to research outputs (https://doi.org/10.21949/1520564); and
- providing software or tools necessary to analyze or transform the data.

Projects should implement data management best practices including, but not limited to implementation of published data specifications and standards (formal and informal); increasing data discoverability and data sharing; protecting human subjects and business information; and enabling interaction of systems, interoperability, and integration of data systems.

Research Data Definition: Consistent with Federal laws, and DOT policy, "Research data" means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, as may be textually represented in a publication, and be stored in a digital machine-readable format for further computational analysis. This does not mean summary statistics or tables; rather, it means the data on which summary statistics and tables are based.

Within one month after project selection, the Center Director must do the following:

- a. Submit to the Transportation Research Board's RiP database a project description for each project. The project information must be entered into the RiP database at https://rip.trb.org. The Recipient must complete all of the following required fields:
 - Title: Title of research project.
 - **Record URL**: External web link to project information.
 - Source Agency: Agency entering the record. Automatically determined by credentials.
 - **Abstract**: A brief and objective summary of the project including objectives, scope, and method.
 - Supplemental Notes: Any relevant information not readily covered in other fields.
 - **Contract/Grant Numbers**: Contract or grant numbers which uniquely identify the project.
 - **Project Status**: Current status (active, completed, inactive, programmed, proposed, terminated).
 - **Funding Amount**: Amount of funding allocated for this research project. Format: \$12345.
 - Date Start, expected completion, and actual completion date for project. Format: yyyy-mm-dd.
 - Sponsor Organizations: Agency or organization providing funding for the project.
 - **Managing Organizations**: Agency or organization overseeing the management of the project.
 - **Project Managers**: Person responsible for project schedules, progress, and management.
 - **Performing Organizations**: Agency or organization conducting the research.
 - Principal Investigators: Lead researchers for a project.
 - **USDOT Program and Sub-Program**: Research program/subprogram (if any).
 - **Index Terms**: Keywords that describe the project.
 - Subject Areas: Broad categories that describe transportation modes and functions.

- b. Post on the Center's website information for each new research project selected using the Research Project Requirements Template shown in Exhibit D. Each research project partially or fully funded by the Center must have its own form, and the content contained therein should not be longer than two pages. After the initial information fields are completed, the Research Project Requirements Template must be updated every six months; this update may coincide with the Center's semi-annual reports. These forms must be updated not only through the completion of the research project, with a research report URL included in the form, but through implementation and must include a summary of the benefits of that implementation. These forms must be maintained on the Center's website during the life of the grant, with updates as necessary.
- c. Require all researchers to obtain a unique personal ORCID (Open Researcher and Contributor ID) identification if they do not already have one. ORCID.org provides a registry of persistent unique identifiers for researchers and scholars and automating linkages to research objects such as publications, grants, and patents. Registration is free and takes about 5 minutes. If other researchers are added to the project after its initiation, they should also be required to obtain an ORCID ID.

11. Research Project Requirements

The Program Office is accountable for all aspects of the UTC program; nothing precludes the Program Office's access to review and approval or disapproval of a Center's projects or activities at any time.

The Center Director shall submit to the Grant Manager of the UTC Program Office, for review, a list of proposed new research projects using the template shown in Exhibit D. Package the templates into a single document and send it to the designated Grant Manager via e-mail. The UTC Program Office will review the projects within 30 business days of submittal and reserves the right to reject or require rescoping of any projects that do not advance the priorities of the Department, are duplicative, or are unnecessary. Projects may not proceed until approval is provided by the UTC Program Office.

Each Center Director must ensure that each partially or fully funded research project managed by researchers at the lead institution and sub-awardees is in compliance with the DOT Public Access Plan (https://doi.org/10.21949/1520559) and the data management practices detailed in each Center's Data Management Plan before starting a research project.

Research projects shall consider, plan, budget for, and implement appropriate data management to promote Public Access (https://doi.org/10.21949/1520559) to research data acquired or generated during the course of the project. Such considerations will include, but are not limited to, a project:

- providing at a minimum the research data to: (1) reproduce significant results (whether positive or negative); (2) measure the outcomes or objectives of the project, as well as the NOFO; and (3) add potential value to future research and support evidence-based policy or actions;
- developing a data management plan (https://doi.org/10.21949/1520571) and providing relevant metadata (in a DCAT-US https://resources.data.gov/resources/dcat-us/ file, and, optionally, a discipline appropriate metadata standard file) and data documentation (README.txt files, data dictionaries, code books, supporting files, imputation tables, etc.);
- defaulting to open access when appropriate (exceptions include protecting personally identifiable information, Indigenous data sovereignty (https://www.gida-global.org/care), or confidential business information (CBI));
- utilizing, when possible, open licenses and protecting DOT's non-exclusive copyright license to research outputs (https://doi.org/10.21949/1520564); and

• providing software or tools necessary to analyze or transform the data.

Projects should implement data management best practices including, but not limited to implementation of published data specifications and standards (formal and informal); increasing data discoverability and data sharing; protecting human subjects and business information; and enabling interaction of systems, interoperability, and integration of data systems.

12. Submission of Final Research Reports

The Center Director must submit a final report for each research project conducted with UTC Program funding, including matching funds. Final research reports must give a complete description of the problem, approach, methodology, findings, conclusions, and recommendations developed as a result of the project and must completely document all data gathered, analyses performed, and results achieved. The source of all matching funds shall be clearly stated in the report. The inside of the front cover must show a disclaimer including the following:

DISCLAIMER

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated in the interest of information exchange. The report is funded, partially or entirely, under [grant number] from the U.S. Department of Transportation's University Transportation Centers Program. The U.S. Government assumes no liability for the contents or use thereof.

Within two months after the completion of each project, the Center Director must:

- a. Publish on the Center's website the full final report. Visit https://www.section508.gov/ to ensure the final report (including graphics) complies with Section 508 of the Rehabilitation Act of 1973.
- b. Change the status of the project in RiP from "Active" to "Completed" and retrieve the Research Hub Display Identification (RH Display ID) number for the project (this number will be displayed within each project record).
- c. Package and archive data as outlined in your Data Management Plan.
- d. Include ORCIDs and funding agreement number(s) on the Technical Report Documentation Page, see Exhibit C, and in any peer-reviewed publication submissions. Please use the Technical Report Documentation Form (DOT F 1700.7) and include ORCID identifier, as an URL, without punctuation after the author's name in box 7 (e.g., Jane Doe https://orcid.org/0000-0002-2345-6789) and the UTC Grant number in box 11.
- e. Ensure that all rights under copyright are non-exclusively retained by DOT and that the terms and conditions of publication to peer-reviewed journals and other outlets do not impair the obligation of the authors to comply with the plan.
- f. Send one e=mail that includes the following information to <u>research.hub@dot.gov</u>, <u>NTLDigitalSubmissions@dot.gov</u>, and <u>TRIS-TRB@nas.edu</u>:
 - 1. Final Report URL(s) or PDFs for any resulting publications;
 - 2. URL(s) to, and associated descriptive metadata for, any final datasets from the research project;
 - 3. The funding agreement number of the project;

- 4. The RH Display ID for the project;
- 5. ORCIDs (unique researcher IDs) for all project investigators, contributors, and publication author(s); and
- 6. Any documented project outputs or outcomes resulting from the research project (see Exhibit D for more information).

Final reports and dataset URLs will be appended to your project records in the DOT Research Hub, thus providing a single location from which the public can access your research products.

- g. Additionally, distribute each final report to the following addresses listed below:
 - 1. The Designated UTC Grant Manager via e-mail
 - 2. Federal Highway Administration Research Library Turner-Fairbank Highway Research Center (Send URL to FHWAlibrary@dot.gov)
 - National Technical Information Service
 U.S. Department of Commerce
 (Send URL or PDF via e-mail to input@ntis.gov)

13. UTC Semi-Annual Progress Report

UTC Semi-Annual Progress Report (SAPR) covers six months of the UTC's activities between April 1 and September 30 and October 1 and March 31 and is due semi-annually, on or before the 30th day of the month following the end of the reporting period for the duration of the grant. The Center Director must prepare and submit to the Grant Manager the UTC Semi-Annual Progress Report using the outline in Exhibit A. This report follows a modified format that is based, to a limited extent, on the format developed by the National Science Foundation for use in progress reporting on Federal research grants. The UTC Semi-Annual Progress Report must be posted on the Center's website and submitted electronically to the designated Grant Manager.

14. Annual Performance Indicators Reports

Annually, covering the period October 1 to September 30, Center Directors must report by October 30 performance indicators using the formatted Excel template in Exhibit B electronically to the designated Grant Manager. These indicators include:

- a. Part I Program-Wide Indicators; and
- b. Part II UTC Specific Performance Indicators identified in your grant application.

Note that there are additional Priority Metrics indicators beginning with the June 2025 version of this document, as shown in Exhibit B.

15. Outstanding Student of the Year

To recognize and honor the students supported by the UTC Program, OST-R collaborates with the Council of University Transportation Centers on an annual awards event in January in Washington, D.C. The UTC Program Office will send an announcement including eligibility criteria and submission guidelines to each participating Center. Each Center must choose or decline to choose one eligible outstanding student of the year by the deadline established by the UTC Program Office. The Center must provide the student's information and headshot photo for inclusion in the Student of the Year Awards Program Booklet. The Center must award its Student of the Year \$2,000 and the costs for the student to attend the award ceremony and the Transportation Research Board Annual Meeting in Washington, D.C. The Center is required to split the student award amount equally between Federal and non-Federal matching funds. For restrictions

pertaining to student of the year eligibility, see *General Provisions of Grants for University Transportation Centers*, Section III.5, Citizenship of Students.

16. Reporting Inventions and Patents Using iEdison

iEdison (which stands for Interagency Edison) is a database that helps government Recipients and contractors comply with a Federal law, the Bayh-Dole Act. This act requires that government-funded inventions be reported electronically through a single user interface. Please refer to Exhibit E for further information on reporting inventions and patents developed with UTC program funds.

17. Federal Financial Accountability and Transparency Act Reporting Requirement

As required by the Federal Funding Accountability and Transparency Act of 2006, recipients of Federal awards, i.e., grants, cooperative agreements, and other forms of Federal financial assistance, must report information on sub-awards they make and executives' total compensation. This guidance applies to all entities that apply for or receive Federal grant awards, or receive subawards under those awards, with certain exemptions and exceptions. Please refer to Exhibit F.

18. Advance Notice of Media Coverage of Activities Funded by the UTC Program

Any media/press coverage of activities, publications, outputs, outcomes, or impacts funded (partially or fully) by the UTC program should be reported to the UTC grant manager at least 3 days PRIOR to the coverage entering the public domain. This includes draft press releases, announcements, or any local/regional event information in which the Center is participating.

Exhibit A

Semi-Annual Progress Report for University Transportation Centers

COVER PAGE DATA ELEMENTS:

- Federal Agency and Organization Element to Which Report is Submitted;
- Federal Grant or Other Identifying Number Assigned by Agency;
- Project Title;
- Center Director Name, Title, and Contact Information (e-mail address and phone number);
- Name of Submitting Official, Title, and Contact Information (e-mail address and phone number), if other than Center Director;
- Submission Date;
- UEI and EIN Numbers;
- Recipient Organization (Name and Address);
- Recipient Identifying Number or Account Number, if any;
- Project/Grant Period (Start Date, End Date);
- Reporting Period End Date;
- Report Term or Frequency (annual, semi-annual, quarterly, other); and
- Signature of Submitting Official (signature must be submitted in accordance with agency-specific instructions).

REPORT LENGTH: The UTC Semi-Annual Progress Report must not exceed 20 pages in length including cover page. Shorter lengths are encouraged as long as the content reported is commensurate with the level of effort and expenditures.

SUBMITTAL AND WEB POSTING: The UTC Semi-Annual Progress Report must be submitted by email to the designated Grant Manager as a Word document or PDF, and it must be posted on the Center's website.

FREQUENCY OF REPORTING: The first report must cover the period from receipt of the Grant Agreement, and including any activities conducted with approved pre-incurred costs, through September 30, 2023, and must be submitted no later than 30 days after the end of that period. Subsequent reports for all Recipients must cover activities for periods ending March 31 and September 30 of each year and must be submitted no later than 30 days after the end of the reporting period until all grant funds have been fully expended. (See Exhibits D)

REPORTING CATEGORIES

1. ACCOMPLISHMENTS: What was done? What was learned?

The information provided in this section allows the OST-R grants official to assess whether satisfactory progress has been made during the reporting period.

INSTRUCTIONS - Accomplishments

The Center Director must obtain prior written approval from the Grant Manager whenever there are significant changes in the program or its direction.

- What are the major goals and objectives of the program?
- What was accomplished under these goals?
- What opportunities for training and professional development has the program provided?
- How have the results been disseminated? If so, in what way/s?
- What do you plan to do during the next reporting period to accomplish the goals and objectives?

What are the major goals of the program?

List the major goals of the program as stated in the approved application or as approved by OST-R. If the application lists milestones/target dates for important activities or phases of the program, identify these dates and show actual completion dates or the percentage of completion.

Generally, the goals will not change from one reporting period to the next. However, if OST-R approved changes to the goals during the reporting period, list the revised goals and objectives. Also explain any significant changes in approach or methods from the OST-R approved application or plan.

What was accomplished under these goals?

For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results, including major findings, developments, or conclusions (both positive and negative); and 4) key outcomes or other achievements. Include a discussion of stated goals not met. As the program progresses, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.

Generally, the activities and expected outputs, outcomes and impacts should not change from one reporting period to the next. However, if there are changes, please list the revisions and explain the reason(s) for the changes.

How have the results been disseminated?

If there is nothing significant to report during this reporting period, state "Nothing to Report." Describe how the results have been disseminated. Include any outreach activities or press coverage that have been undertaken to reach members of communities who are not usually aware of these program activities, for the purpose of enhancing public understanding and increasing interest and transportation careers.

What do you plan to do during the next reporting period to accomplish the goals?

If there are no changes to the agency-approved application or plan for this effort, state "No Change."

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

2. PARTICIPANTS & COLLABORATING ORGANIZATIONS: Who has been involved?

OST-R needs to know who has worked on the project to gauge and report performance in promoting partnerships and collaborations.

INSTRUCTIONS - Participants & Collaborating Organizations

Provide the following information on participants:

- What organizations have been involved as partners?
- Have other collaborators or contacts been involved?

What organizations have been involved as partners?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, State or local governments, schools or school systems, or other organizations (foreign or domestic) – that have been involved with the program. Partner organizations may provide financial or in-kind support, supply facilities or equipment, collaborate in the research, exchange personnel, or otherwise contribute.

Provide the following information for each partnership:

- Organization Name;
- Location of Organization (if foreign location list country); and
- Partner's contribution to the project (identify one or more):
 - Financial support,
 - o In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff),
 - o Facilities (e.g., project staff use the partner's facilities for project activities),
 - o Collaborative research (e.g., partner's staff work with project staff on the project), and
 - O Personnel exchanges (e.g., project staff and/or partner's staff use each other's facilities, work at each other's site).

Have other collaborators or contacts been involved?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

Some significant collaborators or contacts within the lead or partner universities may not be covered by "What people have worked on the project?" Likewise, some significant collaborators or contacts outside the UTC may not be covered under "What other organizations have been involved as partners?" For example, describe any significant:

- Collaborations with others within the lead or partner universities especially interdepartmental or interdisciplinary collaborations,
- Collaborations or contact with others outside the UTC, and/or
- Collaborations with other countries and contacts outside the United States or with an international organization.

3. OUTPUTS: What new research, technology or process has the program produced?

Research outputs are any new or improved process, practice, technology, software, training aid, or other tangible product resulting from research and development activities. They are used to improve the efficiency, effectiveness, and safety of transportation systems.

Many Centers develop significant outputs other than publications. OST-R assesses and reports both publications and other products to Congress, communities of interest, and the public.

INSTRUCTIONS - Outputs

List any outputs resulting from the program during the reporting period. Examples of outputs include:

- Publications, conference papers, and presentations;
- Policy papers;
- Website(s) or other Internet site(s);
- New methodologies, technologies, or techniques;
- Inventions, patents, and/or licenses; or
- Other products, such as data or databases, physical collections, audio or video products, application software, analytical models, educational aids, courses or curricula, instruments, equipment, or research material.

If there is nothing to report under a particular item, state "Nothing to Report."

Publications, conference papers, and presentations

Report only the major publication(s) resulting from the work under this award. There is no restriction on the number. However, OST-R is interested in only those publications that most reflect the work under this award in the following categories:

Journal publications: List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Include any peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under "Books or other non-periodical, one-time publications."

Identify for each publication: Author(s); title; journal; volume; year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgment of Federal support (yes/no).

Books or other non-periodical, one-time publications: Report any book, monograph, dissertation, abstract, press coverage (both electronic or traditional media) or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Identify for each one-time publication: Author(s); title; editor; title of collection, if applicable; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgment of Federal support (yes/no).

Other publications, conference papers and presentations: Identify any other publications, conference papers, and/or presentations not reported above. Specify the status of the publication as noted above.

NOTE: Please do not send or attach any publications, papers, or presentations.

Website(s) or other Internet site(s)

List the URL for any Internet site(s) that disseminates the results of the research and/or program activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

Technologies or techniques

Identify technologies or techniques that have resulted from the research activities. Describe the technologies or techniques and how they are being shared.

Inventions, patent applications, and/or licenses

Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award. For additional requirements pertaining to Patents and Copyrights, refer to *General Provisions of Grants for University Transportation Centers*, Section III, 12.

NOTE: Any significant outputs (other than publications, conference papers, and presentations) should also be reported to research.hub@dot.gov. Please enter "Project Outputs" in the e-mail header along with the RH Display ID of the project, and then enter a short text description of the research product.

4. OUTCOMES: What outcomes has the program produced? How are the research outputs described in section (3) above being used to create outcomes?

Outcomes are the application of outputs; any changes made to the transportation system, or its regulatory, legislative, or policy framework, resulting from research and development outputs.

INSTRUCTIONS - Outcomes

This component should describe ways in which the application of outputs has produced outcomes during the reporting period. Describe how research outputs are being used to create expected or actual outcomes with the understanding that outcomes can sometimes take a significant amount of time to realize.

List any outcomes resulting from the program during the reporting period. Examples of outcomes include:

- Increased understanding and awareness of transportation issues;
- Passage of new policies, regulation, rulemaking, or legislation;
- Increases in the body of knowledge;
- Improved processes, technologies, techniques, and skills in addressing transportation issues;
- Enlargement of the pool of trained transportation professionals; or
- Adoption of new technologies, techniques, or practices.
 - **5. IMPACTS**: What is the impact of the program? How has it contributed to improve the transportation system: enhance safety, reliability, durability; improve transportation education; strengthen the workforce, etc.?

Impacts are the effects of outcome on the transportation system, or society in general, such as reduced fatalities, decreased capital or operating costs, community impacts, or economic benefits. The taxpaying public and its representatives deserve a periodic assessment to show them how the investments they make benefit the nation. Through this reporting format, and especially this section, UTCs provide that assessment and make the case for Federal funding of research and education by demonstrating the impacts that UTC funding has had on technology and education.

DOT uses this information to assess how the research and education programs:

- Improve the operation and safety of the transportation system;
- Increase the body of knowledge and technologies;
- Enlarge the pool of people trained to develop knowledge and utilize new technologies; and

Improves the physical, institutional, and information resources that enable people to have access to training and new technologies.

INSTRUCTIONS - Impacts

This component should describe ways in which the work, findings, and specific outputs/outcomes of the program have had an impact during this reporting period. Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the program relative to:

- The effectiveness of the transportation system;
- Technology transfer (include transfer results to entities in government or industry, adoption of new practices, or instances where research outcomes have led to the initiation of a start-up company);
- The increase in the body of scientific knowledge; and
- Transportation workforce development.

If there is nothing to report under a particular item, state "Nothing to Report."

What is the impact on the effectiveness of the transportation system?

Describe how the outcomes of research have been implemented and impacted (either positively or negatively) the operations and effectiveness of the transportation system. These impacts should be based on data collected in the assessment of the implemented outcome.

What is the impact of technology transfer on industry and government entities, on the adoption of new practices, or on research outcomes which have led to initiating a start-up company?

Describe ways in which research outcomes made an impact, or are likely to make an impact, on commercial technology or public use, including:

- Transfer of results to entities in government or industry;
- Instances where the research has led to commercialization of a technology or process; or
- Adoption of new practices.

What is the impact on the body of scientific knowledge?

Describe how findings, results, techniques that were developed or extended or other products from the program made an impact or are likely to make an impact of the base of knowledge, theory, and research and/or pedagogical methods in the principal disciplinary field(s) of the program. Summarize using language that an intelligent lay audience can understand.

How the field or discipline is defined in not as important as covering the impact the work has had on knowledge and technique. Make the best distinction possible, for example, by using a "field" or "discipline", if appropriate, that corresponds broadly with a field of knowledge and not with departmental specializations (i.e., physics rather than nuclear physics).

What is the impact on transportation workforce development?

Describe how the program made an impact or is likely to make an impact on transportation workforce development. For example, how has the program:

- Provided opportunities for research and teaching in transportation and related disciplines;
- Improved the performance, skills, or aptitudes of members of underrepresented groups that will improve their access to or retention in transportation research, teaching, or other related professions; or
- Developed and disseminated new educational materials or provided scholarships; or provided exposure to transportation, science and technology for practitioners, teachers, young people, or other members of the public?

NOTE: Any significant outcomes/impacts should also be reported to research.hub@dot.gov. Please enter "Project Outcomes" in the e-mail header along with the RH Display ID of the project, and then enter a short text description of the research product and its impact.

6. CHANGES/PROBLEMS

The Recipient is required to obtain prior written approval from the OST-R grants official whenever there are significant changes in the project or its direction. See agency specific instructions for submission of these requests. If not previously reported in writing, provide the following additional information, if applicable:

- Changes in approach and reasons for change;
- Actual or anticipated problems or delays and actions or plans to resolve them;
- Changes that have a significant impact on expenditures; or
- Significant changes in use or care of animals, human subjects, and/or biohazards.

INSTRUCTIONS - Changes/Problems

If not previously reported in writing to OST-R through other mechanisms, provide the following additional information or state, "Nothing to Report, if applicable:

Changes in approach and reasons for change

Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope require prior approval of the Grant Manager.

Actual or anticipated problems or delays and actions or plans to resolve them

Describe problems or delays encountered during the reporting period and actions or plans to resolve them.

Changes that have a significant impact on expenditures

Describe changes during the reporting period that may have a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards

Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, and/or biohazards during the reporting period. If required, were these changes approved by the applicable institution committee and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

Change of primary performance site location from that originally proposed

Identify any change to the primary performance site location identified in the proposal, as originally submitted.

7. SPECIAL REPORTING REQUIREMENTS

Respond to any special reporting requirements specified in the award terms and conditions, as well as any award specific reporting requirements.

Exhibit B

Part I – Program-Wide Performance Indicators

Each Recipient must report program-wide indicator metrics each year and include the metrics for each consortium member using the Excel spreadsheet format on the next page. The Excel spreadsheet template, available on https://www.transportation.gov/utc/tools-grantees, is mandatory for reporting UTC performance indicators. The first-year Indicator report should cover from the beginning of the grant to September 30, 2024, then from October 1 to September 30 of each year of the grant. Indicator reports are due each year on October 30.

Instructions:

Report the program-wide indicator metrics for the completed grant year. Include the metrics for each consortium member. Add as many columns as necessary to include all consortium members. In the event that a consortium member participates in more than one UTC, include only the metrics corresponding with your grant and reporting period. E-mail the completed program-wide indicator report as a spreadsheet along with the UTC-specific indicator report to your Grant Manager within 30 days of the end of the grant year. Please do not send a PDF, add a cover page, or attach to another report.

Part I – Program-Wide Performance Indicator Form

UTC Name:	
University:	
Grant #:	
Reporting Period:	

	1	ı	T	1
Performance Indicators		Consortium	Consortium	Consortium
(Priority Metrics)	Consortium	Member 1	Member 2	Member 3
	Total	Acronym	Acronym	Acronym
1. Number of innovations/technologies created that are demonstrably beneficial to U.S. DOT priorities				
2. Number of innovations/technologies that were advanced to practice/commercialization				
3. Number of students/professionals educated on these innovations/technologies				
4. Number of Start-Up companies created				
5. Number of patents filed				
Performance Indicators (Other Informative Metrics)				
1. Number of transportation-related courses offered during the reporting period that were taught by faculty and/or teaching assistants who are associated with the UTC				
Undergraduate courses	0	0	0	0
Graduate courses	0	0	0	0
2. Number of students participating in transportation research projects during the reporting period funded by this grant				
Undergraduate students in research	0	0	0	0
Graduate students in research	0	0	0	0
3. Number of transportation-related advanced degree programs that utilize grant funds during the reporting period to support graduate students				
Masters level programs	0	0	0	0
Doctoral level programs	0	0	0	0
4. Number of students supported by this grant during the reporting period				
Undergraduate students	0	0	0	0

UTC Grant Deliverables and Reporting Requirements for IIJA Grants, June 2025 Version 1.2

1				
Masters students	0	0	0	0
Doctoral students	0	0	0	0
5. Number of degrees awarded during the reporting period to students supported by this grant				
Undergraduate degrees	0	0	0	0
Masters degrees	0	0	0	0
Doctoral degrees	0	0	0	0
6. Number and total dollar value of research projects selected for funding during the reporting period using UTC grant funds (Federal and/or Recipient Share) that you consider to be applied research and advanced research				
Number of applied research projects	0	0	0	0
Dollar value of applied research projects	\$-	\$-	\$-	\$-
Number of advanced research projects	0	0	0	0
Dollar value of advanced research projects	\$-	\$-	\$-	\$-

Part I – Program-Wide Performance Indicator Definitions for Other Informative Metrics

Performance Indicator	Definition
Indicator #1	Report the number of undergraduate and graduate
Number of transportation-related courses offered	transportation-related courses. "Associated" means a
during the reporting period that were taught by	faculty member or teaching assistant who receives
faculty and/or teaching assistants who were	Federal and/or matching funds through the Center to
associated with the UTC:	conduct research, and/or a faculty member or teaching
Undergraduate courses, or	assistant who participates actively in education and
Graduate courses.	outreach activities funded by the UTC grant.
Indicator #2	Report the number of undergraduate and graduate
Number of students participating in	students involved in research projects funded by the
transportation research projects during the	grant, whether the student receives compensation or not.
reporting period funded by this grant:	One example of non-compensated involvement: As part
• Undergraduate students in research, or	of a course requirement, the student collects or analyzes
 Graduate students in research. 	data for a transportation research project, but is not
	compensated.
Indicator #3	Report the number of all advanced degree (masters and
Number of transportation-related advanced	doctoral) programs that involved students supported
degree programs that utilize grant funds during	through UTC Federal funds and/or match.
the reporting period to support graduate students:	
Masters level programs, or	
Doctoral level programs.	
Indicator #4	Report the number of undergraduate, masters, and
Number of students supported by this grant	doctoral students who received financial support from the
during the reporting period:	UTC Federal funds and/or match in the form of tuition
 Undergraduate students, 	relief, wages, or stipend.
 Masters level students, or 	
Doctoral level students.	
Indicator #5	Report the number of undergraduate, masters, and
Number of students supported by this grant who	doctoral students who received financial support from the
received degrees during the reporting period:	UTC Federal funds and/or match during all or any part of
 Undergraduate degrees, 	their studies AND received their degrees during the
Masters' level degrees, orDoctoral level degrees.	reporting period.

Performance Indicator

Indicator #6

Number and total dollar value of research projects selected for funding during the reporting period using UTC grant funds (Federal and/or recipient) that you consider to be applied research and advanced research:

- Number of applied research projects,
- Dollar value of applied research projects,
- Number of advanced research projects, and
- Dollar value of advanced research projects.

Definition

Report the number of applied and advanced research projects selected during the reporting period and their estimated budget (Federal and match funds). If an ongoing project was selected to receive additional funding, it should be counted as a phase 2, a continuation or a modification.

Definitions of applied and advanced research:

<u>Applied Research</u> - the systematic study to gain knowledge or understanding necessary for determining the means by which a recognized and specific need may be met. (Office of Management & Budget Circular A-11)

Advanced Research - An intermediate research effort between basic research (study to understand fundamental aspects of phenomena without specific applications in mind) and applied research. Study that bridges basic research and applied research, and includes transformational change rather than incremental advances. The investigation into the use of basic research results to an area of application without a specific problem to resolve.

Part II – UTC-Specific Indicators

Each Recipient must report UTC-specific performance metrics identified in your grant application annually for each category below. Include the description of the indicator(s) and report the corresponding metrics for the grant year. In the event a sub-Recipient university participates in more than one UTC, include only the metrics corresponding with your grant. If that is not possible, add a footnote to the metric(s) reported through another consortium. E-mail the completed UTC-specific performance metric report along with your program-wide indictor metrics within 30 days of the end of the grant year. Again, please do not send a PDF, add a cover page, or attach to another report except the UTC program-wide indicator metrics.

Part II – UTC-Specific Perfo	rmance Indicators	
UTC Name		
University		
Grant #		
Reporting Period		
•		
Category	Description of indicator	Metric
1. Research Activities and		
Capability		
2. Leadership		
3. Education and Workforce		
Development		
4. Technology Transfer and		
Collaboration		

Exhibit C

Technical Report Documentation Form, DOT F 1700.7

Technical Report Documentation Page

General instructions: To add text, click inside the form field below (will appear as a blue highlighted or outlined box) and begin typing. The instructions will be replaced by the new text. If no text needs to be added, remove the form field and its instructions by clicking inside the field, then pressing the Delete key twice.

Please remove this field before completing form.

4. Title and Subtitle Enter title and subtitle (use mixed case with initial caps for first word in title and subtitle) with volume and part numbers, if applicable. 5. Report Date Enter same date as is on the report cover. Enter full publication date, including month and date, if available, and full year. Example: June 5, 2014 or June 2014 or 2014 6. Performing Organization Code Enter any/all unique numbers assigned to the performing organization, if applicable. 7. Author(s) Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. After each author name, enter ORCID (https://orcid.org/) URL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/) URL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/0000-0002-1825-0097 9. Performing Organization Name and Address Enter the name and address of the organization(s) performing the research. 10. Work Unit No. 11. Contract or Grant No. Enter the number of the contract, grant, and project number under which the report was prepared. Specify whether the number is a contract, grant, or project number. Example: Contract # 8218 12. Sponsoring Agency Name and Address Enter name and address of the organization(s) financially responsible for the work. After each agency name, enter funding type (e.g. SPR). Example: Missouri Department of Transportation (SPR) 12. Sponsoring Agency Name and Address Enter ham and address of the organization(s) financially responsible for the work. After each agency name, enter funding type (e.g. SPR). Example: 13. Type of Report and Period Coverd Enter the type of report (e.g. final, draft final, interim, quarterly, special, etc.) followed by the dates during which the work was performed. Example: Final Report (June 2012-June 2014)	1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
5. Report Date Enter title and subtitle Enter title and subtitle (use mixed case with initial caps for first word in title and subtitle) with volume and part numbers, if applicable. Enter same date as is on the report cover. Enter full publication date, including month and date, if available, and full year. Example: June 5, 2014 or June 2014 or 2014 6. Performing Organization Code Enter any/all unique numbers assigned to the performing organization, if applicable. 7. Author(s) Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. After each author name, enter ORCID (https://orcid.org/) URL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/) ORL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/) ORL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/) ORL, when available. Example: Josiah Carberry, Ph.D. https://orcid.org/) ORL organization Name and Address Enter the name and address of the organization(s) performing the research. 10. Work Unit No. 11. Contract or Grant No. Enter the number of the contract, grant, and/or project number under which the report was prepared. Specify whether the number is a contract, grant, or project number. Example: Contract # 8218 12. Sponsoring Agency Name and Address Enter name and address of the organization(s) financially responsible for the work. After each agency name, enter funding type (e.g. SPR). Example: Missouri Department of Transportation (SPR) 13. Type of Report and Period Covered Enter the type of report (e.g. final, draft final, interim, quarterly, special, etc.) followed by the dates during which the work was performed. Example: Final Report (June 2012-			
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14. Sponsoring Agency Code
If available, enter the office code or
acronym if a sponsoring agency (such
as FHWA or NHTSA) is named in
field #12. For FHWA office codes, see
https://fhwaapps.fhwa.dot.gov/foisp/h
qphone.do]

15. Supplementary Notes

Conducted in cooperation with the U.S. Department of Transportation, Federal Highway Administration. Enter information not included elsewhere, such as translation of (or by), report supersedes, old edition number, alternate title (e.g. project name), hypertext links to documents or related information in the form of URLs, PURLs (preferred over URLs - https://archive.org/services/purl/help), DOIs (https://www.doi.org/), insertion of QR codes, copyright or disclaimer statements, etc. Edit boilerplate FHWA statement above if needed.

16. Abstract

Enter a brief factual summary of the most significant information, including the purpose, methods, results, and conclusions of the work. When appropriate, the abstract should include advice on how the results of the research can be used. For guidance, please see ANSI/NISO Z39.14-1997 (R2015) Guidelines for Abstracts (https://www.niso.org/publications/ansiniso-z3914-1997-r2015-guidelines-abstracts).

17. Key Words

Enter words, terms, or phrases that identify important topics in the report. When possible, terms should be selected from the Transportation Research Thesaurus (TRT) (http://trt.trb.org) in addition to terms not found in the TRT.

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Exhibit D

Research Project Submission Template

Recipient/Grant (Contract) Number: (Provide center lead name/grant number only. If a consortium partner is leading this research effort, then add their name after the center lead, e.g., University of Transit;

(Research project name)

University of Highway.)

Center Name:

Research Priority: (Select one of the seven research priorities that your Center focuses on - Improving Mobility of People and Goods; Reducing Congestion; Promoting Safety; Improving the Durability and Extending the Life of Transportation Infrastructure; Preserving the Environment; Preserving the Existing Transportation System; or Reducing Transportation Cybersecurity Risks.)

Principal Investigator(s):

Project Partners:

Research Project Funding: (Federal Funding and non-Federal funding amounts need to be provided separately.)

Project Start and End Date: (Format month/day/year to month/day/year.)

Project Description: (May use Abstract developed for TRB/RiP submission.)

US DOT Priorities: (Describe how the project supports DOT priorities and the RD&T strategic goals. Also describe how the project engages in breakthrough, advanced, or transformative research.)

Outputs: (The results of the work performed. Describe what new research, technology, or process this research project is expected to produce or has produced. The outputs could include processes and methods; data, hardware, software and databases; invention disclosures, patent filings, inventions, etc. Also describe any new partnerships outside of the UTC consortium that may be established or have been established through the project.)

Outcomes/Impacts: (Describe the application of the output and any changes this output has or will make to the transportation system, or its regulatory, legislative, or policy framework, including a description of products or patents, or a change in practice, or instances of research results informing policy decisions. Discuss how this research output will positively impact the transportation system in terms of safety, reliability, durability, costs, etc.)

Final Research Report: (Upon completion of the project, provide URL link to final report.)

Additional guidelines:

- Research Project Templates should not exceed two pages in length.
- Try to reduce acronym usage in your Template.
- If a photo is useful to illustrate outcomes, you may include one with a brief caption.

Exhibit E

Reporting Inventions and Patents Using iEdison

To comply with the Bayh-Dole Act of 1980, all UTC Recipients must report inventions and patents developed with UTC funding (in whole or in part) to DOT through the web-based Interagency Edison (iEdison) electronic system. Through the iEdison system, the Recipient must also provide additional information relating to each invention, include, but not limited to, a confirmatory license acknowledging any Government rights to the invention, the Recipient's use of the invention (e.g., commercialization efforts), and the locations(s) of manufacture of goods or the provision of services attributable to the invention.

Most universities are already registered with iEdison through their office of technology transfer or technology licensing.

For the purposes of reporting UTC-related intellectual property in iEdison on a timely basis, you must first verify that your institution is registered.

• If your institution is NOT registered, click on the link below to request registration:

https://www.nist.gov/iedison/registering-iedison

• If your institution IS registered, no further action is needed at this time.

The Code of Federal Regulations governing iEdison may be found at: https://grants.nih.gov/grants/bayh-dole.htm#se37.1.401 112.

Exhibit F

Federal Financial Accountability and Transparency Act Reporting Requirement

Effective October 1, 2010, all lead Recipients awarded through the UTC Program must report subaward activity and executive compensation at www.fsrs.gov if the initial award is equal to or over \$25,000. Subrecipients have an obligation to provide the lead Recipient all information required for such reporting.

1. Reporting First-Tier Subawards

- a. The lead Recipient must report each action that obligates \$25,000 or more in Federal funds for a subaward. This does not include Recovery funds.
- b. The lead Recipient must report each obligating action. For subaward information, report no later than the end of the month following the month in which the obligation was made.

2. Reporting Total Compensation of Lead Recipient Executives

- a. The lead Recipient must report total compensation for each of the five most highly compensated executives for the preceding completed fiscal year.
- b. The lead Recipient must report executive total compensation by the end of the month following the month in which this award is made, and annually thereafter.

3. Reporting of Total Compensation of Subrecipient Executives

- a. The lead Recipient must report the names and total compensation of each subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year.
- b. The lead Recipient must report subrecipient executive total compensation by the end of the month following the month during which the lead Recipient makes the subaward. The lead Recipient must report subrecipient executive compensation information.
- **4.** Exemption. If, in the previous tax year, your institution had gross income from all sources under \$300,000 the lead Recipient is exempt from the requirements to report subawards, and the total compensation of the five most highly compensated executives of any subrecipient. OST-R reserves the right to request authoritative documentation that would support a request to exercise this exemption.
- **5.** Exception: Federal regulations provide an exception from the executive compensation reporting requirements by a lead Recipient, or a subrecipient's organization (in case of reporting executive compensation for subrecipient executives). See 2 CFR 170.110 for additional information.
- 6. All lead Recipients awarded through the UTC Program who do not have an exemption under 2 CFR 170.110 are required to have the necessary processes and systems in place to comply with the Federal Funding Accountability and Transparency Act of 2006 reporting requirements. OST-R encourages you to visit www.fsrs.gov, which is the reporting portal for subrecipient and executive compensation information. In addition, USASpending at www.usaspending.gov has many resources available on the subrecipient and executive compensation reporting requirements.

Exhibit G

List of Acronyms

ANSI/NISO American National Standards Institute/National Information Standards Organization

CBI Confidential Business Information
CFR Code of Federal Regulations

CUTC Council of University Transportation Centers

DCAT-US Data Catalog Vocabulary

U.S. Department of Transportation

DOT F U.S. Department of Transportation Documentation Form

GIS Geographic Information System

IIJA Infrastructure Investment and Jobs Act

NTIS National Information Service

ORCID Open Researcher and Contributor ID

OST-R Office of the Assistant Secretary for Research and Technology

RD&T Research, Development and Technology RH Display ID Research Hub Display Identification

RiP Research in Progress

ROSA P Repository & Open Science Access Portal

SF Standard Form T2 Technology Transfer

TRID Transportation Research International Documentation

TRT Transportation Research Thesaurus

URL Uniform Resource Locator

UTC University Transportation Center