# UNITED STATES OF AMERICA 

DEPARTMENT OF TRANSPORTATION
RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

## UNIVERSITY TRANSPORTATION CENTER GRANT AGREEMENT

## Grant No. DTRT13-G-UTC47

Upon execution by the Grantee named in the Notification of Award below, the U.S. Department of Transportation, Research and Innovative Technology Administration (RITA) and that Grantee have entered into a Grant. The Grant is for the purpose described in the Notification of Award below. In addition to this Grant Agreement, the following documents are attached or are incorporated by reference and made part of the Grant: (1) Grant Deliverables and Requirements for University Transportation Centers, dated September 2013 and (2) General Provisions of Grants for University Transportation Centers, dated September 2013.

Any change to the Grant documents that alters the total amount of Federal funds awarded requires a formal Modification of Grant Agreement signed by the RITA Administrator or his or her delegate. No-cost modifications to the Grant and any written approvals required under the Grant shall be signed by the designated RITA Grant Manager.

## NOTIFICATION OF AWARD

THE U.S. DEPARTMENT OF TRANSPORTATION, RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION (RITA) HEREBY AWARDS FUNDS TOWARD A FEDERAL GRANT AS FOLLOWS:

Grantee: Ohio State University
City and State: Columbus, Ohio
Citation of Statute Authorizing Award: 49 U.S.C. 5505
Purpose of Grant: To conduct a multidisciplinary program of transportation research, education. and technology transfer through a Tier 1 University Transportation Center (UTC) headquartered at Ohio State University.

Purpose of This Grant Agreement: To provide funding from the Grantor for the University Transportation Center and to document the terms of the Grant and to document the Grantee’s acceptance of the funding and agreement to the terms of the Grant.

Maximum Federal Funds Approved by This Grant Agreement: $\$ 1,414,100$

Matching-Fund Requirement: A non-Federal match of not less than $50 \%$ of the Federal funds paid by the Grantor to the Grantee under this Grant is required as a condition of the Grant. Please see page 3 of the General Provisions of Grants for University Transportation Centers, dated September 2013, for information regarding certain Federal funds that are authorized by statute to be used as match on UTC Grants.

Revised Budget Required: The full, authorized amount of funding as stated in the UTC Program FY2013 Grant Solicitation was not available from FY2013 funds for the UTC Program, so the amount of Federal funds for this Grant is less than in the budget submitted by the Grantee in its application. For this reason, RITA requires the Grantee to submit a revised budget reflecting the actual grant amount to the RITA Grant Manager for her review and approval no later than Wednesday, October 30, 2013. No requests for reimbursement of grant expenses will be processed until the RITA Grant Manager has approved a revised budget.

Statement of Work: The Prospectus that the Grantee submitted in its application for this Grant under the UTC Program FY2013 Grant Solicitation serves as a general description of work to be done under the Grant. The Grantee shall notify the RITA Grant Manager immediately at any time during the Grant if circumstances arise that will significantly affect the Grantee's ability to fulfill the intent of its Prospectus.

Initial Meeting with RITA UTC Program Staff: The RITA Grant Manager on this Grant will contact the Grantee during October 2013 to schedule an initial informational meeting, held either at the Grantee's campus or at another University Transportation Center located in the same geographic region, or conducted by video- or tele-conference as RITA deems appropriate, during the first six months of the Grant. This meeting will be for the purpose of establishing working relationships between RITA staff and Grantee staff, ensuring that, at the outset of the Grant, the Grantee understands the reporting and other requirements, and conveying to the Grantee the best practices for operating a University Transportation Center Grant.

Termination Date: September 30, 2017. This is the last date on which the Grantee may incur costs under this Grant Agreement and any Modifications to it. At the time of award, subject to availability of funding from the Federal FY14 budget, RITA expects to award a second increment of funds under this Grant in an amount similar to that of this initial award.


September 30, 2013
EFFECTIVE DATE

## EXECUTION OF GRANT AGREEMENT

This Grant Agreement shall be simultaneously executed in two counterparts, each of which shall be deemed to be an original having identical legal effect. After the Grant Agreement has been signed by RITA, the person officially authorized by the Grantee to accept RITA's award of financial assistance should execute the Grant Agreement and return one executed counterpart to:

Denise E. Dunn, Grant Manager<br>Office of Research, Development and Technology (RDT-30)<br>Research and Innovative Technology Administration<br>U.S. Department of Transportation<br>1200 New Jersey Avenue, SE, Work Station E33-436<br>Washington, DC 20590-0001<br>phone 202/366-4985<br>e-mail denise.e.dunnadot.gov

RITA may withdraw its obligation to provide this financial assistance if the Grant Agreement is not executed within ninety (90) days after the Government's signature date. RITA will not honor requests for payment under this Grant Agreement until it receives the fully executed counterpart.

By executing this Grant Agreement, the Grantee does hereby ratify and adopt, under penalties of perjury, all statements, representations, warranties, covenants, and materials submitted by it, and does hereby accept RITA’s award of Federal financial assistance and agrees that all applicable terms and conditions of this Grant shall apply to the purpose for which the Grant is awarded.

Executed this $\qquad$ day of $\qquad$ . 2013.

BY:
(Signature)

NAME

TITLE

ORGANIZATION
DTRTIS-G-UTC47

OMB Number. 4040-0004
Expiratıon Date: 03/31/2012


## Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

H: Public/State controlled Institution of Higher Education
Type of Applicant 2: Select Applicant Type.
$\square$
Type of Applicant 3: Select Applicant Type:
$\square$

* 10. Name of Federal Agency:

Research and Innovative Technology Administration
11. Catalog of Federal Domestic Assistance Number:
20.701

CFDA Title.
University Transportation Centers Program

* 12. Funding Opportunity Number:
UTCOPENCOMP2013
* Title

University Transportation Centers Open Competition 2013

13. Competition Identification Number:
$\square$
Title

14. Areas Affected by Project (Cities, Counties, States, etc.):

|  | Add Attachment | Delete Attachment | View Attachment |
| :--- | :--- | :--- | :--- |
| * 15. Descriptive Title of Applicant's Project: |  |  |  |
| Human Factors for Crash Imminent Safety in IntelIigent Vehicles |  |  |  |
|  |  |  |  |

Attach supporting documents as specified in agency instructions
Add Attachments Delete Attachments View Attachments


# GRANT DELIVERABLES AND REQUIREMENTS FOR 2013 UNIVERSITY TRANSPORTATION CENTERS (UTCs) 

September 2013

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## 1. Website

The Grantee shall establish and maintain an up-to-date, informational website containing at least items 2,5 and 6 noted below plus any other information the Grantee wishes to include in order to make interested stakeholders aware of its work under the UTC grant. At least a basic framework for this website must be available for public viewing no later than three months after DOT awards the grant. The grantee shall provide the RITA Grant Administrator the link to the UTC's website which will be included in the UTC program's website at utc.dot.gov.

## 2. Directory of Key Center Personnel

The Grantee shall prepare a "Directory of Key Center Personnel" that includes the names, 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 no later than three months after DOT awards the grant and the Center Director shall ensure that the information remains posted and is current throughout the life of the grant.

## 3. Financial and Annual Recipient Share Reports

## a. Federal Financial Report

The Center Director or designated university official shall prepare and submit to the RITA Grant Administrator the standard Federal Financial Report SF425 on a quarterly basis. Submission via email is preferred. The SF425 does not need to be posted on the UTC's website. SF425s shall cover three-month reporting periods ending on March 31, June 30, September 30, and December 31 , and the reports are due 30 days after each of these reporting-period end dates. A final SF425 is due 90 days after the grant's termination date.

## b. Annual Recipient Share Report

The Center Director or designated university official shall submit to the RITA Grant Administrator a report on the required recipient share of the grant indicating the percentage of non-federal share (match) by source categories - state department of transportation, Local/Tribal Technical Assistance Program, university, local government, public transportation agencies, nongovernmental organizations (NGO), private, other. The report shall be submitted via e-mail within 30 days of the end of each year throughout the life of the grant.

## 4. Federal Financial Accountability and Transparency Act (FFATA) Subaward and Executive Compensation 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. Pleaṣe refer to Exhibit A.

## 5. Research Project Descriptions

Within one month after project selection, the Center Director shall do the following:
a. Submit to the Transportation Research Board's Research in Progress (RiP) database a project description for each project. The project information can be entered into the RiP database directly at rip.trb.org. Grantees are required to provide full submissions to RiP including, in particular, the fields stating start and completion dates and current and total planned costs for each project. For help with submissions or to request login credentials, please contact Lisa Loyo, TRB's Manager of Information Services, llovo@nas.edu. The Center Director is responsible for updating and maintaining project information in RiP.
b. Post on the Center's website information similar to that in RiP for each new research project selected. The form shown in Exhibit $F$ is to be used for this posting; there shall be one of these forms started for each research project being funded by the Center. After the initial information fields are completed these forms are to be updated every six months; this update may coincide with the Center's semi-annual reports. These forms will be updated not only through the completion of the research project, with a research report URL included in the form, but through implementation and are to include a summary of the benefits of that implementation. If the research is not implemented the reasons for not implementing the research are to be listed. These forms are to be maintained permanently on the Center's website, with updates as called for.

## 6. Final Research Reports

The Center Director shall submit a final report for each research project conducted with UTC Program funding including matching funds. Final research reports shall give a complete description of the problem, approach, methodology, findings, conclusions, and recommendations developed as a result of the project and shall completely document all data gathered, analyses
performed, and results achieved. The inside of the front cover shall 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 under the sponsorship of the U.S. Department of Transportation's University Transportation Centers Program, in the interest of information exchange. The U.S. Government assumes no liability for the contents or us.e thereof.

Within two months after the completion of each project, the Center Director shall:
a. Publish on the Center's website the full text of each report.
b. Notify the Transportation Research Board (TRB) of the URL of the full text report so that the report may be indexed and abstracted in TRB's Transportation Research International Documentation Database (TRID). Notification should be made by e-mail to TRISTRB@nas.edu. For help with TRID, contact Lisa Loyo, TRB's Manager of Information Services, lloyo@nas.edu.
c. Transmit each report electronically to the National Transportation Library at NTLDigitalSubmissions@dot.gov. E-mails to this address may include URLs or attached PDF documents.
d. Provide to the USDOT Research Hub the exact title of the project and the URL for the final report via the Research.Hub@dot.gov e-mail.
e. Also distribute each report in the format noted to the following addresses:
i. Transportation Library Northwestern University 1970 Campus Drive Evanston, IL 60208-2300 (Submit on CD)
ii. Susan.Dresley@dot.gov

Volpe National Transportation Systems Center
U.S. Department of Transportation
(Send URL via e-mail)
iii. FHWAlibrary@dot.gov

FHWA Research Library
Turner-Fairbank Highway Research Center

## (Send URL)

iv. input@ntis.gov
U.S. Department of Commerce

National Technical Information Service
(Send URL or PDF via e-mail)

## 7. Program Progress Performance Report

The Center Director shall prepare and submit to the RITA Grant Administrator the Program Progress Performance Report (PPPR) using the outline and instructions in Exhibit B. The PPPR shall be posted on the Center's website. The PPPR follows the new, uniform format developed by the National Science Foundation for use in progress reporting on Federal research grants. Exhibit A shows RITA's customized version for UTC Program grants showing which elements must be reported (please note that RITA will use the SF425 for reporting financial information). The PPPR shall be submitted electronically to the designated Grant Administrator.

## 8. Annual Performance Indicators Report

On an annual basis the Center Director shall report program performance indicators using the format specified in Exhibit C. The Annual Performance Indicators Report shall be submitted electronically to the designated Grant Administrator.

## 9. UTC Grantees' Meetings

RITA will convene two meetings per year of all UTC Grantees for the purposes of information exchange, identification of best practices in UTC Grant management, and administrative streamlining. Meetings are typically held in January in Washington, DC (in conjunction with the Transportation Research Board Annual Meeting) and in approximately June or July at a university that volunteers to host the event. RITA expects the Center Director to attend both of these meetings.

## 10. UTC Program Outstanding Students of the Year

To recognize and honor the students supported by the UTC Program, RITA sponsors an annual awards banquet in collaboration with the Council of University Transportation Centers in January in Washington, DC. Each Center shall choose or decline to choose one outstanding student of the year by the deadline established by the UTC Program Office. The Center shall provide the student's information and headshot photo for inclusion in the Student of the Year Awards Program. Each participating Center shall award its Student of the Year \$1,000 and the costs for the student to attend the award ceremony and the TRB Annual Meeting in Washington, DC. For
restrictions pertaining to SOY eligibility see General Provisions of Grants for University Transportation Centers, section III. 5 .

## EXHIBIT A

## Federal Financial Accountability and Transparency Act (FFATA) Subaward and Executive Compensation 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.

1. This requirement is for both mandatory and discretionary grants awarded on or after October 1, 2010.
2. All sub-award information must be reported by the prime awardee.
3. For those new Federal grants as of October 1, 2010, if the initial award is equal to or over $\$ 25,000$, reporting of sub-award and executive compensation data is required.
4. If the initial award is below $\$ 25,000$ but subsequent grant modifications result in a total award equal to or over $\$ 25,000$, the award will be subject to the reporting requirements, as of the date the award exceeds $\$ 25,000$.
5. If the initial award equals or exceeds $\$ 25,000$ but funding is subsequently deobligated such that the total award amount falls below $\$ 25,000$, the award continues to be subject to the reporting requirements.
6. Prime awardees of Federal grants must register with the Central Contractor Registration (CCR) system, http://www.ccr.gov.
7. Reporting of first-tier subawards
a. What to report. You must report each action that obligates $\$ 25,000$ or more in Federal funds for a subaward to an entity. The \$25,000 threshold does not include Recovery funds.
b. Where and when to report. You must report each obligating action to http://www.fsrs.gov. For subaward information, report no later than the end of the month following the month in which the obligation was made.
8. Reporting Total Compensation of Recipient Executives
a. What to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year.
b. Where and when to report. You must report executive total compensation as part of your registration profile at http://www.ccr.gov. Report this information by the end of the month following the month in which this award is made, and annually thereafter.
9. Reporting of Total Compensation of Subrecipient Executives
a. What to report. You must report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year.
b. Where and when to report. You must report subrecipient executive total compensation by the end of the month following the month during which you make the subaward. You will report subaward recipient executive compensation information at http://www.fsrs.gov.
10. None of the requirements regarding reporting names and total compensation of an entity's five most highly compensated executives apply unless in the entity's preceding fiscal year, it received:
a. 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
b. $\$ 25,000,000$ or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
c. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 ( 15 U.S.C. $78 \mathrm{~m}(\mathrm{a}), 780$ (d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)
11. Exemptions. If, in the previous tax year, your institution had gross income from all sources under $\$ 300,000$ you are exempt from the requirements to report subawards, and the total compensation of the five most highly compensated executives of any subrecipient. RITA reserves the right to request authoritative documentation that would support a request to exercise this exemption.
12. Exception: 2 CFR 170.110 provides an exception from the executive compensation reporting requirements by a primary award recipient, or a subrecipient's organization (in case of reporting executive compensation for sub-recipient executives).
13. All prime 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 reporting requirements. RITA encourages you to visit www.fsrs.gov, which is the reporting portal for subrecipient and executive compensation information. In addition, www.usaspending.gov, has many resources available on the subrecipient and executive compensation reporting requirements.

## EXHIBIT B

## Program Progress Performance 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
- Program Director (PD) 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 PD
- Submission Date
- DUNS 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)
- Signature of Submitting Official (signature shall be submitted in accordance with agency- specific instructions)

REPORT LENGTH: The PPPR should 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 WEBPOSTING: The PPPR shall be submitted by email to the designated Grant Administrator as a Word document or PDF, and shall be posted on the Center's website.

FREQUENCY OF REPORTING: The first report shall cover the first six months of activities and shall be submitted no later than 15 days after the end of the first six months. Subsequent reports shall cover activities for periods ending June 30 and December 31 of each year and shall be submitted no later than 30 days after the end of the reporting period until all grant funds have been fully expended.

## REPORTING CATEGORIES

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

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

## INSTRUCTIONS - Accomplishments

The Program Director is reminded that the grantee is required to obtain prior written approval from the RITA grants official whenever there are significant changes in the project 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 RITA. 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 RITA 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 RITA 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 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 in learning 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. PRODUCTS: What has the program produced?

Publications are the characteristic product of research projects funded by the UTC Program. RITA may evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not the number of publications. Many research projects (though not all) develop significant products other than publications. RITA may assess and report both publications and other products to Congress, communities of interest, and the public.

## INSTRUCTIONS - Products

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

- Publications, conference papers, and presentations;
- Website(s) or other Internet site(s);
- Technologies or techniques;
- Inventions, patent applications, and/or licenses; and
- Other products, such as data or databases, physical collections, audio or video products,
software or NetWare, models, educational aids or curricula, instruments, or equipment.

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, RITA 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 nonperiodical, 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); acknowledgement of federal support (yes/no).

Books or other non-periodical, one-time publications: Report any book, monograph, dissertation, abstract, 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; bibliographic information; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement 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; as of the date of this document, UTC Program inventions may not be submitted to the Federal government's Interagency Edison (iEdison) invention-reporting system, but RITA is working to make that available and will notify UTCs. For additional requirements pertaining to Patents and Copyrights, refer to General Provisions of Grants for University Transportation Centers, Section III, 14.

Other products
Identify any other significant products that were developed under this program. Describe the product and how it is being shared. Examples of other products are:

- Databases
- Physical collections
- Audio or video products
- Software or NetWare
- Models
- Educational aids or curricula
- Instruments or equipment
- Data \& Research Material
- Other


## 3. PARTICIPANTS \& COLLABORATING ORGANIZATIONS: Who has been involved?

RITA 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)
Partner's contribution to the project (identify one or more)

- Financial support;
- In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);
- Facilities (e.g., project staff use the partner's facilities for project activities);
- Collaborative research (e.g., partner's staff work with project staff on the project); and
- 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
- Collaborations or contacts with others outside the United States or with an international organization.
- Country(ies) of collaborations or contacts.

4. IMPACT: What is the impact of the program? How has it contributed to transportation education, research and technology transfer?

Over the years, this base of knowledge, techniques, people, and infrastructure is drawn upon again and again for application to commercial technology and the economy, to health and safety, to cost-efficient environmental protection, to the solution of social problems, to numerous other aspects of the public welfare, and to other fields of endeavor.
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.
DOT uses this information to assess how the research and education programs:

- increase the body of knowledge and techniques;
- enlarge the pool of people trained to develop that knowledge and techniques or put it to use; and,
- improve the physical, institutional, and information resources that enable those people to get their training and perform their functions.


## INSTRUCTIONS - Impact

This component should describe ways in which the work, findings, and specific products 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 development of the principal discipline(s) of the project;
- Other disciplines;
- The development of human resources;
- Physical, institutional, and information resources at the university and/or other partner institution;
- Technology transfer (include transfer of results to entities in government or industry, adoption of new practices, or instances where research has led to the initiation of a startup company); or
- Society beyond science and technology.

What is the impact on the development of the principal discipline(s) of the program?
If there is nothing significant to report during this reporting period, state "Nothing to Report."
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 on 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 (Scientific American style).

How the field or discipline is defined is 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 with a single academic department (i.e., physics rather than nuclear physics).

What is the impact on other disciplines?
If there is nothing significant to report during this reporting period, state "Nothing to Report."
Describe how the findings, results, or techniques developed or improved, or other products from the program made an impact or are likely to make an impact on other disciplines.

What is the impact on the development of transportation workforce development?

If there is nothing significant to report during this reporting period, state "Nothing to Report." 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 attitudes of members of underrepresented groups that will improve their access to or retention in transportation research, teaching, or other related professions;
- 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?

What is the impact on physical, institutional, and information resources at the university or other partner institutions?

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

Describe ways, if any, in which the program made an impact, or is likely to make an impact, on physical, institutional, and information resources that form infrastructure, including:

- Physical resources such as facilities, laboratories, or instruments;
- Institutional resources (such as establishment or sustenance of societies or organizations); or
- Information resources, electronic means for accessing such resources or for scientific communication, or the like.

What is the impact on technology transfer?
If there is nothing significant to report during this reporting period, state "Nothing to Report."

Describe ways in which the program made an impact, or is 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 the initiation of a start-up company; or
- Adoption of new practices.


## What is the impact on society beyond science and technology?

If there is nothing significant to report during this reporting period, state "Nothing to Report." Describe how results from the program made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:

- Improving public knowledge, attitudes, skills, and abilities;
- Changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or
- Improving social, economic, civic, or environmental conditions.


## 5. CHANGES/PROBLEMS

The grantee is required to obtain prior written approval from the RITA 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.
- Significant changes in use or care of animals, human subjects, and/or biohazards


## INSTRUCTIONS - Changes/Problems

If not previously reported in writing to RITA 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 RITA grant administrator.

## 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.

Additional information regarding Products and Impacts
UTCs are encouraged to consider identifying program results by outputs, outcomes or impacts as suggested by the examples below. Impacts should be linked to National goals expressed in the Secretary's Strategic Goals.

Outputs are the direct, tangible products of your research, education/workforce development, and technology transfer activities, such as:

- Research projects awarded;
- Publications, conference papers, and presentations;
- Websites;
- Technologies or technology assessments; databases, software or models;
- Outreach activities;
- Courses and workshops; patents filed and/or issued, licenses.

Outcomes are broader changes that are expected to result from the products, such as:

- Increased understanding and awareness of transportation issues;
- Improved body of knowledge;
- Improved processes, techniques and skills in addressing transportation issues;
- Enlarged pool of trained transportation professionals;
- Greater adoption of new technology;
- Other impacts.

Impacts are the longer-term, fundamental changes intended as a result of your activities, such as:

- Safer driver behavior;
- Increased travel time reliability;
- Increased intermodal transportation operations;
- Reduction in carbon and other harmful emissions from transportation sources;
- Other impacts.


## 6. 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 C

## Performance Indicators for University Transportation Centers (UTCs)

Report the UTC metrics for the completed grant year and for the institution(s) comprising your UTC, unless the indicators are included in Part II below.

In the event that a sub-grantee university participates in more than one UTC, include only the metrics corresponding with your grant.

## UTC Performance Indicators

Copy of 2013 Grant Performance Indicators-Individual Template-FINAL.xIsx


| graduate students supported by this grant |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Masters' level programs |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
|  | Doctoral level programs |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
| 5. Number of students supported by this grant who received degrees |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Masters' level programs |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
|  | Doctoral level programs |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
| 6. Number and total dollar value of research projects selected for funding 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 |  | 0 |  | 0 |  | 0 |
| Dollar value of applied research projects | \$ |  |  | \$ |  | \$ | . | \$ |  | \$ |  | \$ |  |
| Number of advanced research projects | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
| Dollar value of advanced research projects | \$ | \$ |  | \$ |  | \$ | - | \$ |  | \$ |  | \$ |  |

## EXHIBIT D

## Schedule of Grant Deliverables and Requirements

| Deliverable/Requirement | Due Date | Duration Covered |
| :---: | :---: | :---: |
| Website | By third month | update as needed |
| Directory of Key Personnel | By third month | update as needed |
| Research Project Descriptions | One month after project selection - send to RiP \& post on website | update as needed |
| SF 425 | April 30, 2013 | Months 1-3 |
| PPPR \#1 | 15 calendar days after completion of first 6 months of award | Months 1-6 |
| SF 425 | July 30, 2013 | Months 4-6 |
| SF 425 | October 30, 2013 | July-September $2013$ |
| PPPR \#2 | January 30, 2014 | July-December $2013$ |
| Performance Indicators | January 30, 2014 | JanuaryDecember 2013 |
| Recipient Share Report | January 30, 2014 | JanuaryDecember 2013 |
| SF 425 | January 30, 2014 | October- <br> December 2013 |
| SF 425 | April 30, 2014 | January-March $2014$ |
| PPPR \#3 | July 30, 2014 | January-June 2014 |
| SF 425 | July 30, 2014 | April-June 2014 |
| SF 425 | October 30, 2014 | July-September 2014 |
| PPPR \#4 | January 30, 2015 | July-December $2014$ |
| Performance Indicators | January 30, 2015 | JanuaryDecember 2014 |
| Recipient Share Report | January 30, 2015 | JanuaryDecember 2014 |
| Final Research Reports | Two months after project completion reports are posted on website and distributed to designated repositories | NA |
| SF 425 | January 30, 2015 <br> After this point, SF 425 s shall be submitted quarterly as long as the grant is open. A final SF 425 is due 90 days after the termination of the grant. | October- <br> December 2014 |
| FFATA Reporting | As required (See Exhibit A) |  |
| PPPR \#5 and beyond | Every July 30 and January 30 as long as the grant is open | January-June and July-December of |

Grant Deliverables and Requirements for UTC Grants (September 2013)

|  |  | each year, <br> respectively |
| :--- | :--- | :--- |
| Performance Indicators | every January 30 as long as the grant is open | January- <br> December of each <br> year |
| Recipient Share Report | Every January 30 as long as the grant is open | January- <br> December of each <br> year |

## Exhibit E

List of Acronyms

| CCR | Central Contractor Registration system |
| :--- | :--- |
| DOT | U.S. Department of Transportation |
| FFATA | Federal Financial Accountability and Transparency Act of 2006 |
| FHWA | Federal Highway Administration |
| PPPR | Program Progress Performance Report |
| RiP | Research in Progress |
| RITA | Research and Innovative Technology Administration |
| SF | Standard Form |
| TRB | Transportation Research Board |
| TRID | Transportation Research International Documentation Database |
| UTC | University Transportation Center |

## EXHIBIT F

To comply with the Bayh-Dole Act of 1980, all UTC grantees must report inventions and patents developed with UTC funding (in whole or in part) to USDOT through the web-based Interagency Edison (iEdison) electronic system (https://s-edison.info.nih.gov/iEdison/). Most universities are already registered with iEdison through their office of technology transfer or office of 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, go to https://sedison.info.nih.gov/iEdison/RegistrationRequestForm.jsp to request registration.
- If your institution IS registered, no further action is needed at this time.
iEdison reporting compliance responsibilities may be accessed through https://sedison.info.nih.gov/iEdison/ (click on "Invention Reporting Tips"). The Code of Federal Regulations (CFR) governing iEdison may be found at: https://sedison.info.nih.gov/iEdison/37CFR401.jsp.

| UTC Project Information |  |
| :--- | :--- |
| Project Title |  |
| University |  |
| Principal Investigator |  |
| PI Contact Information |  |
| Funding Source(s) and <br> Amounts Provided (by each <br> agency or organization) |  |
| Total Project Cost |  |
| Agency ID or Contract <br> Number |  |
| Start and End Dates |  |


|  |  |
| :--- | :--- |
| Brief Description of |  |
| Research Project |  |
|  |  |
|  |  |
| Describe Implementation of |  |
| Research Outcomes (or why |  |
| not implemented) |  |


|  |  |
| :--- | :--- |
|  |  |  |
|  |  |
|  |  |
|  |  |

# GENERAL PROVISIONS OF GRANTS FOR 2013 UNIVERSITY TRANSPORTATION CENTERS (UTCs) 

September 2013

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# GENERAL PROVISIONS OF GRANTS FOR UNIVERSITY TRANSPORTATION CENTERS 

## I. GENERAL REQUIREMENTS

1. The Grantee shall commence, carry out, and complete its work with all practicable dispatch, in a sound, economical, and efficient manner, and in accordance with the provisions hereof, the Grant Agreement, the Reporting Requirements for University Transportation Centers (UTCs), the activities outlined in the Grantee's application for funding including a revised, updated budget to be approved by the RITA grants administrator, and all applicable laws, regulations, Department of Transportation (DOT) directives, and published Federal policies.
2. The Grantee shall immediately notify the Research and Innovative Technology Administration (RITA) of any change in local law, conditions, or any other event, including any litigation challenging the validity of or seeking interpretation of any Federal law or regulation applicable to the UTC Program, which may significantly affect the Grantee's ability to perform in accordance with the terms of this Grant. In addition, the Grantee shall immediately notify RITA of any decision pertaining to the Grantee's conduct of litigation that may affect DOT interests or DOT administration or enforcement of applicable Federal laws or regulations. Before the Grantee may join DOT, or any of its Operating Administrations, as a named party to litigation, for any reason, the Grantee agrees first to inform RITA; this proviso applies to any type of litigation whatsoever, in any form.
3. The terms of DOT regulations, http://www.gpo.gov/fdsys/pkg/CFR-2010-title49-vol1, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" (OMB Circular No. A-110), apply to this Grant. These regulations set forth standards for financial and program management, matching funds, property standards, procurement standards, reports and records, and termination and enforcement.
4. The Grantee shall comply with the government-wide principles contained in OMB Circular A21, "Cost Principles for Educational Institutions," for determining costs applicable to research and development and to training and other educational services performed by colleges and universities under Federal government grants.
5. The Grantee shall comply with the uniform audit requirements for non-Federal entities contained in OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit

Institutions." The Grantee shall also permit authorized Federal representatives to inspect all of its own or a subgrantee's work, materials, payrolls, and other data related to the UTC Program.
6. The Grantee shall apply all applicable sections of these Provisions to any subgrant(s) executed under this Grant.
7. DOT cannot assume any liability for accidents, illnesses, or claims arising out of any work supported by an award or for unauthorized use of patented or copyrighted materials. The Grantee is advised to take such steps as may be deemed necessary to insure or protect itself, its employees, and its property.
8. As a recipient of DOT assistance, the Grantee must review the list of parties excluded from Federal procurement or non-procurement programs located on the Excluded Parties List System (EPLS) website: https://www.sam.gov/portal/public/SAM/ before entering into a subagreement or contract. The Grantee must also inform RITA when it takes action to suspend or debar a contractor, person, or entity. DOT Order 4200.5E has further information about this requirement which can be found at:
http://www.dot.gov/sites/dot.dev/files/docs/Suspension_Debarment_Order 2010.pdf.
9. As a recipient of Federal assistance, the Grantee shall comply with the Federal Funding Accountability and Transparency Act of 2006 (FFATA). The FFATA legislation requires information on Federal awards (Federal financial assistance and expenditures) be made available to the public. The FFATA Subaward Reporting System (FSRS, http://www.fsrs.gov/) is the reporting tool Federal prime awardees (i.e., prime contractors and prime grant recipients) use to capture and report subaward and executive compensation data regarding their first-tier subawards in order to meet the FFATA reporting requirements.
10. Executive Order 13513 (October 1, 2009) requires each Federal agency, in grants and cooperative agreements, to encourage recipients and sub-recipients to adopt and enforce policies that ban text messaging while driving company-owned or -rented vehicles or while driving privately owned vehicles when on official business or when performing any work for or on behalf of the Government. RITA encourages all of its grant recipients and sub-recipients to undertake initiatives to consider new rules and programs, and reevaluate existing programs, to prohibit text messaging while driving, and to conduct education, awareness, and other outreach for employees about the safety risks associated with texting while driving. These initiatives should encourage voluntary compliance with the organization's text messaging policy while off duty.

# II. SPECIFIC STATUTORY REQUIREMENTS 

[49 U.S.C. 5505]

## - Non-Federal Match

## a) Amount and Sources

The funds awarded under this Grant as stated in the UTC Grant Agreement and any Modifications as authorized by 49 U.S.C. 5505 are subject to a non-Federal match. A National or Regional UTC is required to provide non-Federal matching funds at $100 \%$ of the amount of Federal funds awarded; a Tier 1 UTC (unless approved for a waiver as part of the selection process for this Grant and as stated in the Grant Agreement) are required to provide non-Federal matching funds at $50 \%$ of the amount of Federal funds awarded.

The non-Federal share of UTC costs may include funds provided to a recipient under sections 504(b) or 505 of Title 23, United States Code. Those sections refer, respectively, to the local technical assistance (http://www.Itap.org/) and state planning and research (http://www.fhwa.dot.gov/research/partnership/spr/) programs managed by the Federal Highway Administration.

As established in Federal grant regulations issued by the Office of Management and Budget (OMB), matching funds may be cash or in-kind and must, among other stated OMB requirements, be used to accomplish program objectives and the purpose of this grant, and be fully documented and fully accounted for in the Grantee's records as required in 49 CFR 19.51.
b) Timing

RITA does not require UTCs to obtain matching funds on a project-by-project basis. However, RITA does expect to see evidence, in the Center's financial status reports and requests for reimbursement of expenses, of reasonable progress over time toward meeting the non-Federal match requirement. Because the possible sources of match that UTCs may obtain are so numerous and the ways in which that match may be documented are so varied, no specific level of match funding is required to be documented during the grant other than at the grant's termination when the full requirement must be met; however, situations that would be considered lack of evidence of reasonable progress toward meeting the match requirement may include reporting no match on the first few invoices (as this suggests the possibility of the match requirement being misunderstood), not increasing the amount of match reported on two or more consecutive financial reports, and toward the end of the grant not narrowing any gap between the Federal funds spent and matching funds reported. In the absence of such evidence, RITA may choose to require the Grantee to demonstrate its ability to match the funds already awarded
before paying any additional invoices or awarding any additional funds that may be made available under the Grant.

## c) Restriction on Use

Any restriction on the use of Federal funds applies equally to non-Federal matching funds.

## - Program Coordination

Under 49 U.S.C. 5505, RITA is responsible for coordinating UTC Program activities and for reviewing and evaluating the UTCs on an annual basis. The Grantee shall provide the information required by RITA in its Grant Deliverables and Requirements for University Transportation Centers and such other information as RITA may occasionally request in order to fulfill this responsibility.

## III. SPECIFIC PROGRAMMATIC REQUIREMENTS

Approvals discussed below shall be issued by a Grant Administrator in RITA's University Transportation Centers Program office.

## 1. Change in Center Director

RITA's decision to award a UTC Grant to a Grantee is based to a considerable extent upon its evaluation of the proposed Center Director's knowledge of the field of study and his/her capabilities to lead a University Transportation Center. Should the Grantee become aware that the Center Director will: 1) devote substantially more or less effort to the Center than had previously been communicated to RITA; 2) sever his or her connection with the Grantee; or 3) otherwise relinquish active direction of the UTC, the Grantee shall promptly notify RITA. Prior written (e-mail recommended) approval by RITA is required for any temporary or permanent replacement of the Center Director. In the absence of an approved Center Director, RITA may choose to negotiate an appropriate modification to the Grant or to begin termination procedures.

## 2. Equipment

A written (e-mail recommended) request for prior approval from RITA is required to purchase equipment that has a unit cost of $\$ 5,000$ or more. Unless otherwise requested by the Grantee, all legal rights to equipment purchased with UTC funds shall vest in the Grantee upon acquisition; http://www.gpo.gov/fdsys/pkg/CFR-2010-title49-vol1 "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" (OMB Circular No. A-110) lays out requirements for use and disposition of equipment.

## 3. Foreign Travel

A written (e-mail recommended) request for prior approval from RITA is required for travel outside of the United States and its territories that is paid with either Federal or matching funds. In order to be approved, the need for the proposed foreign travel and the value to be gained by the University Transportation Center must be clearly demonstrated. Requests for approval shall include a written justification that states the name and relationship of the traveler to the UTC, describes how the travel will further the goals of the UTC Program, provides a detailed itinerary and breakdown of planned expenses, and carries the endorsement of the Center Director. Requests must be submitted no less than 30 days prior to the start of travel, and no requests submitted after the travel has begun will be approved. Inclusion of an amount for foreign-travel costs in a UTC's approved budget does not satisfy the requirement for prior approval.

## 4. Citizenship of Students

Students who receive financial support other than work-related compensation under the UTC Program (including the UTC Student of the Year Award) must be U.S. citizens or permanent residents of the United States. There will be no exceptions to this policy.

## 5. Citizenship of Students

Grant funds may be used to provide funding to undergraduate and graduate students who participate in activities necessary to the fulfillment of the UTC's research, education, and technology transfer programs. Funding provided to a student, which may be in the form of wages or tuition support, must be compensation for work performed within the UTC Program. Such work shall be used to fulfill a part of the student's degree program. This type of funding to students is considered to be compensation paid as, or in lieu of, wages for work as described in Appendix A to CFR Part 220, (J)(45) "Scholarships and student aid costs".

In addition to the type of student funding described above, scholarships and summer internships utilizing UTC funding may be offered to undergraduate students studying within an academic program that is relevant to the UTC Program's purpose.

## 6. Consultant Services

The Grantee is expected to utilize the services of its own officers or employees to the maximum extent in managing and performing the activities supported by this Grant. Where it is necessary for the Grantee to enter into a subaward for the services of persons who are not its officers or employees, it is expected to do so in accordance with written organizational standards which provide for consideration of the factors outlined in the government cost principles.

## 7. Membership in CUTC

DOT is a frequent collaborator with the Council of University Transportation Centers (CUTC), a private, not-for-profit organization that works to improve and enhance university research and education in transportation and related areas. CUTC's membership includes many of the leading university-based transportation programs in the United States. In recognition of the forum that CUTC provides to its member universities to interact with each other and to promote national interest in transportation research and education, CUTC membership dues and necessary costs for travel to CUTC membership meetings are allowable costs under this Grant.

## 8. Project and Budget Changes

The Grantee shall obtain prior written approval from RITA before making any significant changes in the scope or objectives of the Grantee's application for funding under this Grant. The Grantee shall also obtain prior written approval from RITA for transfers of funds among direct-cost budget categories if the cumulative amount of such transfers exceeds 10 percent of the UTC's approved total budget.

## 9. Meals and Coffee Breaks.

Unless expressly forbidden by the Grantee's internal policies, the costs of modest meals and beverage services at meetings or conferences are allowable under this Grant if the meetings are attended by persons other than the Grantee's officers or employees. Such costs shall be deemed by the Center Director to be an integral and necessary part of conducting business at that meeting and to be reasonably priced. No funds available under this Grant may be spent on alcoholic beverages for entertainment purposes or personal consumption.

## 10. Financial Management

The Grantee's financial management systems shall provide for accurate, current, and complete disclosure of the UTC's finances. Financial records shall identify the source and use of all funds and shall show effective control over and accountability for all funds, property, and other assets.

## 11. Payments

Federal grant and other programs involving advances to various organizations outside the Federal government constitute a significant portion of the Federal budget. Advances of cash from the U.S. Treasury to such organizations for the purpose of financing current operations under Federal programs have a substantial impact on Treasury financing costs and the level of the public debt. For that reason, payments to the Grantee shall reimburse expenses incurred and shall limit advances to the actual, immediate cash requirements of the Grantee in carrying out the purpose of the Grant. The timing of payments shall be as close as is administratively feasible to actual disbursements, and the Grantee shall receive payments through electronic fund transfers by the

Automated Clearing House Payment System or by another electronic system that may replace it during the life of the grant.

As of the date of this document, RITA requires the Grantee to request payment by submitting invoices electronically via the Delphi elnvoicing System http://www.dot.gov/cfo/delphi-einvoicingsystem\#. Information about the system, including Grant Recipient web-based training, the eAuthentication certification process, and additional training materials, can be found at, or on the UTC website http://utc.dot.gov. New grantees should contact Denise E. Dunn at RITA (denise.e.dunn@dot.gov) to set up access to the system; grantees will need Internet access to use it.

RITA recommends that Grantees submit requests for payment on a quarterly basis.

## 12. Site Visits

The Federal government, through its authorized representatives, has the right, at all reasonable times, to make site visits to review UTC Program accomplishments and management control systems and to provide such technical assistance as may be required. If any site visit is made by the Federal government on the premises of the Grantee or any subgrantee, the Grantee shall ensure that all reasonable facilities and assistance are provided for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations shall be performed in such a manner as will not unduly delay the Grantee's work.

## 13. Collaboration with DOT's Priorities

To encourage the transfer of knowledge and a current understanding of national transportation priorities, RITA intends to promote a high level of communication and collaboration between the Grantee and DOT and its operating administrations under this Grant. RITA expects to ask Grantees to participate in occasional meetings of UTC and/or DOT experts on high-priority topics.
Reasonable costs incurred by a Grantee to support these interactions with DOT, unless otherwise restricted by Federal grant regulations, are allowable under this Grant.

## 14. Patents and Copyrights

To comply with the Bayh-Dole Act of 1980, all UTC grantees must report inventions and patents developed with UTC funding (in whole or in part) to USDOT through the web-based Interagency Edison (iEdison) electronic system (https://s-edison.info.nih.gov/iEdison/). Most universities are already registered with iEdison through their office of technology transfer or office of technology licensing.

[^0]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, go to https://s-
edison.info.nih.gov/iEdison/RegistrationRequestForm.jsp to request registration.
- If your institution is registered, no further action is needed at this time.


## a) Patent Rights

(1) Allocation of Principal Rights

The Grantee may retain the entire right, title and interest throughout the world to each innovation, technical solution or unique increase to the general body of knowledge resulting from the work performed under this Grant subject to the provisions of this clause and 35 U.S.C. 203. For the purpose of this clause, these innovations, technical solutions and increases in knowledge shall be deemed Inventions. With respect to any Invention in which Grantee retains title, DOT shall have a nonexclusive, irrevocable, paid-up license to practice or have practiced for or on its behalf of the United States the Invention throughout the world.
(2) Obligation to Report Inventions, Election of Title
2.1 Grantee will disclose each Invention to DOT within two (2) months after the inventor discloses it in writing to Grantee personnel responsible for patent matters. The disclosure to DOT shall be in the form of a written report and shall identify the Grant under which the Invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOT, Grantee will promptly notify DOT of the acceptance of any manuscript describing the Invention for publication or of any on sale or public use planned by Grantee or its employees.
2.2 Grantee will elect in writing whether or not to retain title to any such Invention by notifying DOT within three (3) months of disclosure to the DOT. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOT to a date that is no more than ninety ( 90 ) days prior to the end of the statutory period.
(3) Conditions When DOT May Obtain Title Grantee will convey to DOT, upon written request, all right, title and interest to any Invention -
3.1 If Grantee fails to disclose or elect title to an Invention within the times specified in subsection (2), above, or affirmatively elects in a writing to DOT not to retain title; provided that DOT may only request title within sixty (60)
U.S. Department of Transportation

Research and Innovative Technology Administration
days after learning of the failure of Grantee to disclose or elect within the specified times.
3.2 In those countries in which Grantee either fails to file or affirmatively elects in a writing to DOT not to file a patent application.

## (4) Grantee License

Grantee will retain a nonexclusive, royalty-free license throughout the world in each Invention to which DOT obtains title, except in cases where Grantee fails to disclose the Invention within the times specified in subsection (2), above. The Grantee's license is transferable only with the approval of DOT except where transfer is to the successor-in-interest of Grantee's business to which the invention pertains.

## (5) Grantee Action

For those Inventions in which Grantee has mandatorily transferred title to DOT of an Invention, Grantee hereby agrees to execute all papers necessary to file patent applications on such Inventions and to establish the government's rights in the Inventions. Additionally, Grantee agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering an Invention, the following statement, "This invention was made with government support under (identify the grant) awarded by The United States Department of Transportation. The government has certain rights in the invention."

## (6) Reporting on Utilization of Inventions

Grantee agrees to submit on request periodic reports no more frequently than annually on the utilization of an Invention or on efforts at obtaining such utilization that are being made by Grantee. Such reports shall include information regarding the status of development, date of first commercial sale or use, and such other data and information as DOT may reasonably specify. Grantee also agrees to provide additional reports as may be requested by DOT in connection with any march-in proceeding undertaken by DOT in accordance with paragraph (7) of this clause. As required by 35 U.S.C. 202(c)(5), DOT agrees it will not disclose such information to persons outside the government without permission of Grantee.
(7) March-in Rights

Grantee agrees that with respect to any Invention in which it has acquired title, DOT has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of DOT to require Grantee to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if Grantee refuses such a request DOT has the right to grant such a license itself if it determines that:
(i) Such action is necessary because Grantee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.
(ii) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by Grantee; or
(iii) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by Grantee.

## b) Copyrights

i) The author or the Grantee organization may copyright any books, publications, or other copyrightable materials developed in the course of or under this Grant, but DOT hereby reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use the work for government purposes.
ii) The Grantee shall not incorporate material copyrighted by others into any work product delivered under this Grant unless it has acquired for DOT a royalty-free, nonexclusive and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use the work for government purposes.
iii) The Grantee may arrange for publication of initial reports of original research, supported in whole or in part by DOT funds, in primary scientific journals and copyright by the journal unless the journal's copyright policy would preclude an individual from making or having made by any means available, without regard to the copyright of the journal and without royalty, a single copy of any such article for the individual's own use.
iv) The Grantee shall be responsible for any losses that result from or arise out of the negligent use of or breach of provisions by its employees or agents under this Grant regarding the publication, translation, reproduction, delivery, use, or disposition of any data or protected privacy information furnished under this Grant provided that this provision shall not be deemed a waiver by Grantee of any immunities to which it may be entitled under applicable Federal, State, or Tribal law.

## 15. Collection of Data

The Grantee may use funds awarded under this Grant to collect information incidental to a UTC activity, but such collection of information is not considered DOT-sponsored. Persons collecting such information are prohibited from representing to their respondents that the information is
being collected for, or in association with, the Federal government except with RITA's prior written approval and determination that the information collection complies with the OMB report clearance procedures set forth in 5.C.F.R. Part 1320, "Controlling Paperwork Burdens on the Public."

## 16. Privacy

Should the Grantee, or any subgrantee, contractor, or employee administer any system of records on behalf of DOT, the Privacy Act of 1974, 5 U.S.C. 552a, imposes information restrictions on the party administering the system of records.

## 17. Civil Rights

The Grantee shall not discriminate against any employee or other recipient of DOT funds or applicant for such positions because of race, color, creed, sex, sexual orientation, disability, age, or national heritage. The Grantee shall take affirmative action to ensure that all applicants and employees are treated equally, without regard to their race, color, creed, sex, sexual orientation, disability, age, or national heritage. The Grantee may target minorities and women as beneficiaries of Center programs for the purposes of achieving diversity, but they may not exclude non-minorities and men from those same programs.
a) Subgrants and Contracts

The Grantee shall insert the foregoing provisions, modified as necessary to identify the affected parties, in any subgrant or third-party contract implementing UTC Program activities.

## b) Compliance

In the event of the Grantee's non-compliance with the Civil Rights provisions of this Grant or with the applicable rules, regulations, or orders, this Grant may be canceled, terminated, or suspended, in whole or in part, and the Grantee may be declared ineligible for further Federal funding.
i) The Grantee shall furnish all information and reports required by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by DOT and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
ii) The Grantee shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), with DOT regulations entitled, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation -- Effectuation of Title VI of the Civil Rights Act of 1964", and any other applicable regulations issued pursuant thereto.

## 18. State or Territorial Law

Anything in the Grant to the contrary notwithstanding, nothing in the Grant shall require the

Grantee to observe or enforce compliance with any provision thereof, perform any other act, or do any other thing in contravention of any applicable State or territorial law; provided, that if any of the provisions of the Grant Agreement violate any applicable State or territorial law or if compliance with the provisions of the Grant would require the Grantee to violate any applicable State or territorial law, the Grantee will at once notify RITA to the end that the Grantee may proceed as soon as possible with the program.

## 19. Ethics

The Grantee shall maintain a written code or standards of conduct that shall govern the performance of its officers, employees, board members, or agents engaged in the award and administration of subgrants or contracts supported by Federal assistance. This code shall prohibit the Grantee's officers, employees, board members, or agents from any acts that present a real or apparent conflict of interest for any person or organization participating in the UTC Program.

## a) Lobbying

The Grantee shall comply with the provisions of 31 U.S.C. 1352 as implemented by DOT regulations in "Restrictions on Lobbying." (49 CFR Part 20) http://www.ecfr.gov/cgi-bin/textidx?c=ecfr\&SID=cbbbe2a4999a1985b1d844c2666c29bd\&rgn=div5\&view=text\&node=49:1.0.1.1.1 4\&idno=49)
b) Interest of Certain Federal Officials

No member of, or delegate to, the Congress of the United States of America shall be admitted to any share or part hereof or to any arising benefits.
c) Bonus or Commission.

The Grantee affirms that it has not paid, and agrees not to pay, any bonus or commission for the purpose of obtaining approval of its application for Federal financial assistance for this Project.

## 20. Certifications and Assurances

The Grantee shall comply with all required assurances and certifications. These shall be submitted to RITA when applying for a Grant, and then as part of the process of modifying that Grant if any additional funding is made available through the Congressional authorization and appropriations processes.

Grantees must comply with DOT Order No.: 1050.2A, DOT Standard Title VI Assurances and NonDiscrimination Provisions. The DOT Standard Title VI Assurances and Non-Discrimination Provisions form is included in Appendix A. This form must be completed and signed within 30 days of receiving notification of UTC Grant award.

## 21. Grant Closeout

a. No-Cost Extensions
U.S. Department of Transportation

Research and Innovative Technology Administration

The performance period for the Grant terminates on the date specified in the Grant Agreement. If desired, the Grantee shall submit a request for a one-time no-cost extension to the grant administrator at minimum 90 days prior to the termination date by email with a justification and any other requested documentation. This one-time extension may not be exercised merely for the purpose of using unobligated balances.
b. Closeout Procedures

The following actions and documents will be required for grant closeout no later than 90 days after grant termination.

- All grants deliverables and requirements have been submitted.
- Final Financial Report (SF425)
- Final Request for Reimbursement (SF-270)
- Property Inventory Report (SF429), if applicable
- Final Tangible Property report (SF428 B), if applicable
- Disclosure of Invention Report (DOT 2000.1), if applicable
- Record of Invention (DOT 2000.2), if applicable
- Invention Rights Report (DOT 2000.3), if applicable

Additional closeout information can be found at 49 C.F.R. Sections 19.71-19.73.

# APPENDIX A: The United States Department of transportation (US DOT) Standard Title VI/Nondiscrimination Assurances, DOT Order No.: 1050.2A 

# The United States Department of Transportation (USDOT) 

Standard Title VI/Nondiscrimination Assurances
DOT Order No. 1050.2A

The (Title of Recipient) (herein referred to as the "Recipient"), HEREBY AGREES THAT, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through RITA, is subject to and will comply with the following:

## Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation-Effectuation Of Title VI Of The Civil Rights Act Of 1964);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);


## RITAmay include additional Statutory/Regulatory Authorities here.

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

## General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

> "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in. be denied the benefits of, or be otherwise subjected to discrimination under any program or activity," for which the Recipient receives Federal financial assistance from DOT, including RITA.

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Nondiscrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

RITA may include additional General Assurances in this section, or reference an addendum here.

## Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its federally assisted University Transportation Centers Program:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in $\S \S 21.23$ (b) and 21.23 (e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all University Transportation Centers Program and, in adapted form, in all proposals for negotiated agreements regardless of funding source:
*The (Title of Recipient), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations. hereby notifies all bidders that it will affirmatively insure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an cnvard."
3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

## RITA may include additional Specific Assurances in this section.

By signing this ASSURANCE, [Name of the recipient] also agrees to comply (and require any subrecipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the RITA access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by RITA. You must keep records, reports, and submit the material for review upon request to RITA, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.
[Name of Recipient] gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the University Transportation Centers Program. This ASSURANCE is binding on [Name of Recipient], other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors’, transferees, successors in interest, and any other participants in the University Transportation Centers Program. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

## (Name of Recipient)

by $\qquad$
(Signature of Authorized Official)

## DATED


[^0]:    U.S. Department of Transportation Research and Innovative Technology Administration

