



**New England University Transportation Center  
Massachusetts Institute of Technology**

[New England UTC website](#)

# Principal Investigator's Handbook

September 2016

**Joseph F. Coughlin**

Director

[coughlin@mit.edu](mailto:coughlin@mit.edu)

**Paula Magliozzi**

Program Administrator

[paulam@mit.edu](mailto:paulam@mit.edu)

**Karen van Nderpelt**

Financial Officer

[kvanned@mit.edu](mailto:kvanned@mit.edu)

# Table of Contents

- Project Checklist.....2**
  
- Introduction .....3**
  
- 2.0 USDOT Reporting Requirements.....4**
  - 2.1 Project Description.....4**
  
  - 2.2 Program Progress Performance Report .....4**
  
  - 2.3 Performance Indicators .....6**
  
  - 2.4 Final Report.....7**
  
- 3.0 Project Closeout.....8**
  
- 4.0 USDOT Spotlight Newsletter .....8**
  - 4.1 USDOT Transportation Innovation Speaker Series .....9**
  
- 5.0 Matching Funds.....9**
  
- 6.0 No-Cost Extension Requests.....9**
  
- 7.0 International Travel Request..... 10**
  
- 8.0 UTC Attribution..... 10**

## Project Checklist

For your convenience.

Past project performance is a critical factor in future funding decisions!

Project Title: \_\_\_\_\_

Project Number: \_\_\_\_\_

End Date: \_\_\_\_\_

<b>Project Requirement</b>	<b>Due Date</b>
<input type="checkbox"/> Initial Project Description	Within one month after funding award
<input type="checkbox"/> Subsequent Project Descriptions	Every 6 months for the life of the project
<input type="checkbox"/> PPPR: bi-annual progress report	Every 6 months for the life of the project
<input type="checkbox"/> Performance Indicators	Once a year for the life of the grant
<input type="checkbox"/> Final Report	No later than 60 days after project is completed

## Introduction

Congratulations on receiving a UTC award! The New England University Transportation Center (New England UTC) is a Regional Center funded by the United States Department of Transportation and managed by USDOT's Office of the Assistant Secretary for Research and Technology (OST-R). We are located in Region 1: New England.

We leverage the region's unique richness in both high-technology innovation and transportation expertise to conduct research activities under three integrated technology themes—**ubiquitous intelligence, big data, and user performance**—and their application to the advancement of USDOT's strategic goals and research priorities, with a focus on safety and economically competitive, yet livable, communities.

Our mission is to:

- Advance transportation expertise and technology in the many disciplines that comprise transportation through research, education and workforce development, and technology transfer;
- Provide a critical transportation knowledge base outside the USDOT; and
- Address vital workforce needs and educate the next generation of transportation leaders.

This guide is intended to assist New England UTC Principal Investigators (PIs) with the expectations associated with their funding award.

Awards are made only after a rigorous peer-reviewed proposal selection process to ensure that the best projects that fit well with the New England UTC theme and USDOT priorities are funded. PIs are obligated to comply with all grant requirements and should take the grant obligations seriously since successful adherence to budget, schedule, and project requirements will be used as review criteria for future proposals submitted. The requirements are also intended to ensure the integrity of the project throughout the life of the grant.

Projects must show significant progress during the grant, demonstrate relevant outcomes, and further the New England UTC's theme. Activities should result in an increase in collaboration and greater participation of faculty and students representing a multitude of disciplines. Research and education projects will culminate in the development of a Final Report that will synthesize the results of the effort. Results should also be disseminated via journal publications and presentations at recognized conferences.

## 2.0 USDOT Reporting Requirements

These reporting requirements are mandated by USDOT and ensure that progress is being made on all funded projects; it also allows us to communicate progress efficiently and effectively to our federal sponsor. The requirements are as follows:

### 2.1 Project Description

These reports will be solicited within one month after project selection and every 6 months *thereafter* for the life of the project—functioning as 6-month updates for USDOT. Each Project Description must be submitted on our official template and must adhere to a 4-page maximum length. After filling in some identifying information, the template consists of 4 points:

- Brief description of project
- Describe intended implementation of research
- Describe anticipated impacts/benefits of implementation
- Web links

The New England UTC submits each project description to the Transportation Research Board's Research in Progress (RiP) database where it is maintained and updated as necessary.

We also post the first report on the New England UTC website as the Initial Project Description. As these reports are updated every six months, we post the subsequent reports as Updated Project Descriptions, each one to be superseded by the last. Your very last submission will be posted as your Final Project Description.

The New England UTC understands that unexpected project delays can occur, especially when awards are delayed. If the start of your project has been delayed for any reason, after the first Project Description is collected, each 6-month Project Description update should be handled thusly:

- Fill out Brief Description of Project and then state that the start of the project has been delayed, explaining the reason for this. Then enter N/A on the rest of the Project Description points.

### 2.2 Program Progress Performance Report (PPPR)

These reports will be solicited every 6 months during the life of the grant. The mandatory PPPR template follows the new, uniform format—customized for UTC program grants—developed by the National Science Foundation for use in progress reporting on Federal research grants.

These reports provide staff with a mechanism to ensure that the funded activity is progressing as planned. They also support the New England UTC's required reporting to our

federal sponsor as we must prepare and submit a consolidated PPPR to our OST-R Grant Administrator every 6 months.

If the start of your project has been delayed for any reason, you will not need to contribute to the PPPR until the work begins—simply state as such in your email submittal.

These reports consist of the following:

### **Project Status**

You must report on the current status of your project. This is the primary method the New England UTC uses to track each project's status from "active" to "completed."

### **Accomplishments**

For all funded projects, you must report on the accomplishments under each specific goal: research, education and technology transfer. One paragraph suffices to report on your project activities. After the first couple of reports early in the grant, USDOT wants the emphasis to shift from reporting activities to reporting accomplishments, including major activities, significant results, or other achievements.

### **Dissemination**

Again, one paragraph suffices to report on your project's dissemination activities. Include here any outreach activities that have been undertaken to reach members of communities who are not usually aware of our activities. Report on activities undertaken for the purpose of enhancing public understanding and which increase interest in learning about transportation careers.

### **Products**

Provide full citations on products such as:

- Journal publications
- Books, dissertations, or one-time publication
- Other publications, conference papers and presentations
- Websites
- Media
- Technologies or techniques
- Inventions, patent applications, and licenses

### **Participants and Other Collaborating Organizations**

You must list partner organizations—academic institutions, industrial or commercial firms, state or local governments, schools, or other organizations—that have been involved with your project. Provide the organization name and location and identify the partner's contribution to your project. USDOT is interested in organizations that have been involved as partners and other collaborators or contacts.

### **Impact**

Describe ways in which the work, findings, and specific products of your UTC project have had an impact during the reporting period. Planned events and actions should not be included

here; cite only impacts that have been demonstrated. Impacts can be, for instance:

- The impact on the development of the principal disciplines of the program
- The impact on other disciplines
- The impact on the development of transportation workforce development
- The impact on physical, institutional, and information resources at your university or other partner institutions
- The impact on technology transfer
- The impact on society beyond science and technology

### **Additional Information**

Identify project results by outputs, outcomes or impacts. Impacts should be linked to national goals expressed in the Secretary's [Strategic Goals](#).

### **Outputs**

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

### **Outcomes**

Outcomes are broader changes that are expected to result.

### **Impacts**

Impacts are the longer-term, fundamental changes as a result of your activities. Describe ways in which the work, findings, and specific products have had an impact during the reporting period.

## **2.3 Performance Indicators**

The Performance Indicators will be solicited once each year for the life of the grant. Each report must be submitted on our official 2-page template.

The data requested are required so that we can collect performance measures and gauge how well programs are working towards achieving the goals of the program and USDOT priorities. We must report these program-wide indicator metrics to USDOT for each completed grant year. The performance indicators are also published on the New England UTC website.

### **Page 1 consists of Program-Wide indicators:**

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 New England UTC.
2. Number of students participating in transportation research projects funded by this grant.

3. Number of transportation-related advanced degree programs that utilize grant funds to support graduate students.
4. Number of students supported by this grant.
5. Number of students supported by this grant who received degrees.

**Page 2 consists of UTC-specific indicators:**

1. Research Capability
2. Leadership
3. Education and Workforce Development
4. Technology Transfer
5. Collaboration

A complete explanation and definition of each point is provided in the template. Each project PI must contribute to this report whether or not one's project is delayed or has ended.

## **2.4 Final Reports**

Final Reports are due within 60 days of a project's end. Every research and education project must submit a Final Report on our official template.

The report requires a summary of research findings or educational findings, and should document the project in total, including a complete description of the problem, objectives, approach, methodology, findings, conclusions, and recommendations. The report should document all data gathered, analyses performed, and results achieved. The report template, style guidelines and cover page specifications are available on our [website](#).

The use of visuals such as photographs, graphs, or charts is highly encouraged to further enrich reports and deliverables.

All Final Reports will be posted on the New England UTC website and the report's URL provided to the TRB TRIS database and USDOT's on-line National Transportation Library.

Upon your Final Report submission, your project will be considered completed. We will change the status of your project from "active" to "completed" in the TRIS database and you will no longer have to submit Project Descriptions or contribute to the PPPRs.

### 3.0 Project Closeout

The proper procedure for officially concluding your UTC Research or Education project is as follows.

Although we collect project status from all PIs every six months in our PPPR reports, if you complete your project during any of the interim periods, drop Paula Magliozzi a quick email to that effect. When your project is completed, your Final Project Description and Final Report are due no later than 60 days thereafter.

First, review the online [UTC final report submission procedure and rules](#). Then complete these three steps:

1. Compose your **Final Report** on the 2-page online template.
2. Compose your **Final Project Description** on the online template.
3. Submit both via email to Paula Magliozzi (PDFs are not acceptable).

For the outside schools in our UTC consortium, MIT's closeout checklist includes both report submissions in order to close out your Purchase Order. For all of us, future funding for the UTC program is contingent upon the completion of our government-mandated UTC reporting requirements.

Technology transfer projects do not require a Final Report but they do require a Final Project Description.

### 4.0 USDOT Spotlight Newsletter

This online USDOT [newsletter](#) highlights recent accomplishments and products from one University Transportation Center each month. It is hosted by the Office of Research and Technology (OST-R) which manages the UTC Program.

The newsletter is a simple two-pager that highlights a specific research project underway at a UTC-funded institution. The project can be funded in whole or in part by the UTC grant program; in some cases, it may not be directly funded by the grant program, but has somehow been the result of—or leveraged—by the program.

USDOT welcomes our contributions. If you have a worthy piece to contribute, please email Paula Magliozzi and she will submit it to DOT for approval.

#### Technical specs

Word count must be between 750-900, depending upon how many pictures will be included. All pics and graphics must be 300 dpi or better, and include captions and credits.

## 4.1 USDOT Transportation Innovation Speaker Series

This seminar series is hosted by the Office of Research and Technology (OST-R) which manages the UTC Program. More information will be forthcoming.

## 5.0 Matching Funds

The funds awarded under this UTC grant are subject to a non-Federal match. Matching funds are funds that are set to be paid in equal amount to funds available from other sources and are quite common in situations of public good. The terms cost-sharing, in-kind, and matching are often used interchangeably.

All Regional UTCs are required to provide to USDOT non-Federal matching funds at 100% of the amount of Federal funds awarded. Matching funds may be cash or in-kind and must be used to accomplish program objectives, and be fully documented and fully accounted for in our records. Any restriction on the use of Federal funds applies equally to non-Federal matching funds.

Karen van Nederpelt has the responsibility to ensure reasonable progress over time toward meeting the non-Federal match requirement. Any questions on matching funds should be directed to her.

Allowable matching funds include costs such as salaries, supplies and equipment that actually benefit the project. These costs must be eligible to be charged to the project and are charged as a commitment to the project by the corresponding project PI's university. Prime examples of matching funds are faculty effort and its associated fringe benefits and overhead, tuition subsidies, and equipment purchases.

Typically, each university in our consortium should have cost sharing/matching funds information available online. MIT's may be found under the [Office of Sponsored Programs](#). There is also a useful link on this page: [Read MIT's Cost Share Policy](#).

## 6.0 No-Cost Extension Requests

No-cost extension requests for projects are granted on a case-by-case basis. Each request is carefully considered and evaluated, especially as the end date of the grant nears. All requests must include a justification for the need for the extension.

Email [Karen van Nederpelt](#) with your extension request and include:

- Reason for extension request
- Anticipated project end date

She will route your request to the New England UTC director for approval and notify you of the outcome.

## 7.0 International Travel Request

A written request for prior approval from USDOT is required for travel outside of the United States and its territories that is paid with either UTC Federal or matching funds. In order to be approved, the need for the proposed foreign travel and the value to be gained by the New England UTC must be clearly demonstrated.

Requests should be emailed to [Karen van Nederpelt](#) and must include:

- The need for the proposed travel and the value to be gained by the New England UTC
- A written justification that states the name and relationship of the traveler to the New England UTC
- A description of how the travel will further the goals of the UTC Program
- A detailed itinerary (i.e., travel dates, location, lodging) and breakdown of planned expenses (i.e., airfare cost, lodging cost, ground transportation and per diem) with a final total cost,

The request will be routed to the New England UTC director for endorsement before submitting it to the USDOT grant administrator at OST-R for approval. Ms. van Nederpelt will notify you of the outcome.

All travel requests are evaluated on a case-by-case basis. Requests containing all the required information must be submitted at least 60 days prior to the start of foreign travel. No requests submitted after the travel has begun will be approved. Note that inclusion of an amount for foreign-travel costs in your UTC project's budget does not satisfy the requirement for prior USDOT approval.

## 8.0 UTC Attribution

PIs should make proper attribution to the UTC grant program in presentations, papers, submitted articles, websites, and other project dissemination with the following statement:

- This paper was supported [or partially supported] by funds from the New England University Transportation Center at MIT. The New England UTC is a consortium of five universities funded by the U.S. Department of Transportation, University Transportation Centers Program, and is the designated Region 1 Center."

Alternatively, you may just cite our grant number:

- This paper was supported [or partially supported] by funds from the New England University Transportation Center under Grant No. DTRT13-G-UTC31.

You may use abbreviations such as UTC, USDOT, etc.