# UNIVERSITY TRANSPORTATION CENTERS PROGRAM

# FY 2013 GRANT SOLICITATION For Regional Centers in Federal Regions 3 and 10

Eligibility to apply under this solicitation is limited only to an eligible non-profit institution of higher education<sup>1</sup>, or consortium of two or more eligible non-profit institutions of higher education located in one or more of the states within one of the following regions:

- Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; or
- **Region 10:** Alaska, Idaho, Oregon, and Washington.

Opening Date: November 15, 2013

Closing Date: January 30, 2014

Research and Innovative Technology Administration U.S. Department of Transportation Washington, D.C. 20590-0001

http://utc.dot.gov/

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#### GENERAL INFORMATION ABOUT THIS SOLICITATION

The Research and Innovative Technology Administration (RITA) of the U.S. Department of Transportation (US DOT) is seeking applications from non-profit institutions of higher education<sup>1</sup> to operate one Regional University Transportation Center (UTC or Center) in each of two federal regions:

- **Region 3**, which includes Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; and
- Region 10, which includes Alaska, Idaho, Oregon, and Washington.

The purpose of these Regional Centers is to advance U.S. technology and expertise in the many modes and disciplines comprising transportation through the mechanisms of research, education, and technology transfer; to provide a critical transportation knowledge base outside the US DOT; and to address vital workforce needs for the next generation of transportation leaders. A Regional Center, including any consortium members, must be located within the federal region to be served. Each Regional Center must serve as a focal point within its respective region to help coordinate UTC transportation research and education needs with regional needs and initiatives.

RITA plans to competitively select and fund Regional Centers in the two federal regions. Each Center will receive \$2,592,500 from Fiscal Year (FY) 2013 funds and an approximately equal, additional amount from FY 2014 funds if available. Each Center is required to obtain matching funds from non-federal sources in an amount at least equal to the US DOT grant amount. These funds may be expended up to September 30, 2017.

The UTC Program's Catalog of Federal Domestic Assistance (CFDA) number is 20.701.

This solicitation reflects comments RITA received in response to an October 1, 2012, Notice of Funding Availability published in the Federal Register. Those comments were helpful in identifying in advance of the release of this solicitation any issues that were of concern to the university-research community, and we appreciate the efforts of those who submitted comments. Comments that were consistent with the UTC Program's authorizing legislation and Federal grant regulations have been incorporated in this solicitation.

<sup>&</sup>lt;sup>1</sup> The UTC Program's authorizing legislation, Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), does not define "institution of higher education." RITA, therefore, considers the statute to direct grant funds to universities, meaning institutions that conduct research and teaching and award degrees at the Bachelor level and higher. This is consistent with the way RITA has previously managed the UTC program.

## WHAT YOU NEED TO SEND TO US

# **Application**

If your university is eligible to receive an award under this solicitation (see Part II-A-1), your university's authorized representative must submit the application through the federal "Grants.gov" electronic grant identification and application system. **You will want to ensure well in advance that your university is registered with Grants.gov, as registration is not instantaneous.** Eligible entities must have or must secure a DUNS number for the purposes of formal application. The DUNS number is a unique nine-character number that identifies your organization. Each applicant's DUNS number will be maintained as part of the applicant's profile. This number can be obtained free through the D&B website (<a href="http://www.dnb.com/get-aduns-number.html">http://www.dnb.com/get-aduns-number.html</a>).

You are responsible for the accuracy and validity of all the administrative, fiscal, and technical information in your application.

The application will consist of:

- A. Standard Forms SF-424 "Application for Federal Assistance" and SF-424B "Assurances Non-Construction Programs;"
- B. A written prospectus no more than 35 pages long;
- C. Appendices to the prospectus containing supporting documentation and budget (specified in Part III-C below); and
- D. A copy of your institution's most recent negotiated overhead and fringe benefit rates.

In addition to submitting your application through Grants.gov, you must also submit to the UTC Program office in RITA hard copies as follows:

- One copy each of Standard Forms SF-424 and SF-424B;
- Five copies of the prospectus with all its appendices; and
- One copy of the negotiated overhead and fringe benefits rates.

These hard copies must contain identical information to what you submitted through Grants.gov. However, original signatures on forms SF424 and SF424B are not required.

Hard copies must be received by RITA no later than 5:00 PM EDT on January 31, 2014, (note that this is one day later than the Grants.gov deadline). RITA recommends that you use an overnight delivery or courier service that allows you to track and document delivery and receipt.

Please address your hard copy submission as follows, using all of the information shown:

Amy Stearns
US DOT/RITA/mail code RDT-30
Work Station E33-472
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Contact phone regarding hard copy submissions only: (202) 366-4957

Personally Identifiable Information (PII) such as Social Security numbers, birth dates, or home addresses must not be included in the application. Information submitted as part of the application may be subject to the Freedom of Information Act (FOIA).

## WHERE TO SUBMIT YOUR APPLICATION

Submit your application via Grants.gov, located at Internet address <a href="http://www.grants.gov">http://www.grants.gov</a>, Opportunity No. UTCLIMITEDREGIONCOMP2014.

#### DEADLINE FOR SUBMITTING YOUR APPLICATION

Your application must be submitted to Grants.gov no later than:

# 11:59 PM EDT, THURSDAY, January 30, 2014

Hard copies must be received by RITA as noted on the preceding page.

Your application will be considered complete as initially received by us; if you need to make changes after submission but before the due date, you will need to withdraw and resubmit your application in whole. Any materials submitted after the due date will not be incorporated into the review process unless we specifically request such material to complete the review of your application.

#### RETURN RECEIPT ACKNOWLEDGMENT

The electronic Grants.gov system will provide you with an acknowledgement of your submission.

# **QUESTIONS ABOUT THIS SOLICITATION**

If you have questions about this solicitation or need information about the UTC Program in general, you may contact the UTC program at <a href="https://utc.dot.gov"><u>UTCgrants@dot.gov</u></a> until 4:00PM EDT on January 28, 2014. **Please note**: <a href="mailto:Until a formal notice of award is issued, no communication by the government, either written or oral, shall be interpreted as a promise that an award will be <a href="mailto:made"><u>made</u></a>. Questions posed by applicants will be posted with RITA's answers on the UTC Program website at <a href="http://utc.dot.gov"><u>http://utc.dot.gov</u></a>.

#### PART I. INTRODUCTION TO THIS SOLICITATION

# A. Background on the UTC Program

In 1988, US DOT initiated the UTC Program as authorized in the Surface Transportation and Uniform Relocation Assistance Act of 1987. After a nationwide competition, US DOT awarded grants to create a UTC in each of the ten standard federal regions. The primary purpose of the program at that time was conducting research.

The Intermodal Surface Transportation Equity Act (ISTEA) of 1991 reauthorized the UTC Program through Fiscal Year 1997, and expanded its mission to include education and technology transfer, as well as research. In addition to the ten Regional Centers, ISTEA created three "national" Centers and six University Research Institutes at universities that were named in the Act. The program expansion led US DOT to adopt a strategic planning approach to program management based on a mission and goal set that was the same for all 13 Centers and 6 Institutes. US DOT extended the grants to the Regional Centers for three years, but announced its intention to reopen the program to competition. That occurred in 1994, at which time two of the ten regions experienced a change in the host institution of the Regional Center.

In 1998, the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) reauthorized the UTC Program for an additional six years and increased the total number of Centers to 33. In addition to the ten Regional Centers, which were selected competitively in 1999 (two of the ten Regional UTCs changed hands), TEA-21 created 23 other Centers at institutions named in the Act. TEA-21 established education as one of the primary objectives of a UTC and institutionalized the use of strategic planning in university grant management.

The Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU, Public Law 109-59), enacted in 2005, provided the most significant expansion of the UTC program to date. SAFETEA-LU increased the number of UTCs from the 33 established in TEA-21 to 60, including the ten Regional UTCs plus a new group of ten competitive centers called Tier 1 Centers; the other 40 UTCs were located at institutions named in the Act. Annual authorized funding for the UTC program also increased from \$32.5 million in TEA-21 to \$85.9 million in SAFETEA-LU.

The Surface Transportation Extension Act of 2011 (the Extension Act), Title 3, Section 306(c)(1)-(2), gave the US DOT the discretion to redistribute funds allocated to specified research projects and programs designated in SAFETEA-LU. The FY2011 funds were made available through full and open competition following the framework of the competitive UTC programs under SAFETEA-LU Sections 5506(e) & (f). Grants of approximately \$3.5 million each were awarded to ten Tier 1 UTCs, two Tier 1 Transit-Focused UTCs, and ten Regional UTCs. FY 2012 funds were added to these grants following additional extension legislation.

In 2012, Congress passed new transportation legislation—The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21). MAP-21 (Section 52009, University Transportation Centers Program, amending Section 5505 of Title 49 USC) continued the UTC program, authorizing the competitive selection of a new group of UTCs to receive funding through FY 2013 and FY 2014, subject to availability of funding.

US DOT held a full and open competition for these UTCs. On September 27, 2013 grants were awarded to:

- Five National UTCs, for \$2,828,200 per Center per fiscal year;
- Eight Regional UTCs (including one dedicated to comprehensive transportation safety), for \$2,592,500 per Center per fiscal year; and
- Twenty Tier 1 UTCs, for \$1,414,100 per Center per fiscal year.

No Regional Centers were selected in Regions 3 and 10. This solicitation, therefore, establishes another full and open competition for these two Regional Centers. Only UTCs for Regions 3 and 10 are being competed through this solicitation.

For additional information on the UTC Program, please visit <a href="http://utc.dot.gov/">http://utc.dot.gov/</a>

#### **B.** Mission

The role of each Regional Center shall be the following:

- 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 US DOT;
- Address vital workforce needs and educate the next generation of transportation leaders;
   and
- Serve as a focal point within its region to help coordinate UTC transportation research and education programs with regional needs and initiatives.

# C. Objectives

Specific objectives of the UTC Program and of each individual Center are:

**Research**: To conduct basic and applied research, the products of which are judged by peers or other experts in the field of transportation to advance the body of knowledge in transportation.

**Education and Workforce Development:** To provide an education program relating to transportation that includes multidisciplinary course work, participation in research, and workforce development activities and programs to expand the workforce of transportation professionals.

**Technology Transfer:** To deliver an ongoing program of technology transfer that makes transportation research results available to potential users in a form that can be implemented, utilized, or otherwise applied.

UTCs shall support the US DOT's Strategic Goals (available in US DOT's 2012-2016 Strategic Plan at <a href="http://www.dot.gov/dot-strategic-plan">http://www.dot.gov/dot-strategic-plan</a>).

- Safety: Improve public health and safety by reducing transportation-related fatalities and injuries.
- State of Good Repair: Ensure the U.S. proactively maintains its critical transportation infrastructure in a state of good repair.
- Economic Competitiveness: Promote transportation policies and investments that bring lasting and equitable economic benefits to the Nation and its citizens.
- Livable Communities: Foster livable communities through place-based policies and investments that increase transportation choices and access to transportation services.
- Environmental Sustainability: Advance environmentally sustainable policies and investments that reduce carbon and other harmful emissions from transportation sources.

While a UTC's activities may span more than one Strategic Goal, each UTC must choose one of the Strategic Goals as its primary focus area.

Although every Center has the same broad objectives, US DOT encourages diversity in the program participants and in the approaches individual Centers take to reach the program objectives. US DOT encourages unique approaches to research, education, workforce development and technology transfer, building on or reflecting institutional expertise, facilities, and partnerships. Finally, in order to achieve its vision of a truly multimodal integrated system, US DOT encourages UTCs to engage in research, education and workforce development, and technology transfer activities that cut across disciplines and span all modes of transportation, enabling improvements to the Nation's entire surface transportation system, inclusive of rail, maritime, highway, pipelines and transit. Centers may choose to specialize in any one of these modes of transportation.

# **D.** Regional Centers

A Regional Center, including any consortium members, must be located within the federal region to be served. The two federal regions included in this solicitation are:

- **Region 3**, which includes Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; and
- Region 10, which includes Alaska, Idaho, Oregon, and Washington.

Each Regional Center must serve as a focal point within its respective region to help coordinate UTC transportation research and education programs with regional needs and initiatives. At a minimum, a Regional Center should work with the other UTCs in its region to maximize the effectiveness of the region's collective services and programs.

In addition to choosing one of the US DOT's Strategic Goals (Safety, State of Good Repair, Livable Communities, Environmental Sustainability, Economic Competitiveness), as a primary focus area, a Regional Center should address critical transportation priorities as outlined in Sections 503(b)(2), (3), (4) and (5) of Title 23 USC, as amended by MAP-21 (Pub. L. 112-141 Sec. 52003 (effective Oct. 1, 2012)). For a Center not specializing in highways, one or more of the priorities listed in Section 503(b) that can be applied to any mode (long term safety gains, project delivery, vulnerability to extreme events, life-cycle cost, congestion, freight movement, and any other of these priorities that might apply) should be addressed.

# E. Multiparty Arrangements

UTCs may be a single non-profit institution of higher education or a consortium of two or more non-profit institutions of higher education led by one lead institution, all located within one of the two Regions stated above. Universities may collaborate with state DOTs, the private sector, and community, junior, or technical colleges; however, these organizations or others that are not U.S. non-profit institutions of higher education will not be considered members of a consortium. The grantee institution will be the direct and primary recipient of US DOT funds, and must perform a substantive role in carrying out Center activities, and not merely serve as a conduit for awards to another party. Under this solicitation there is no minimum requirement for concentration of funding at the grantee institution.

# F. Restrictions on Applying for and Receiving Multiple Grants

MAP-21 restricts the type of grants that an institution might receive, either as a sole or lead institution of a consortium or as a member of a consortium. Additionally, certain restrictions on submitting applications under this solicitation apply if you have already been awarded a UTC grant under the FY 2013 solicitation. (The full list of FY 2013 UTC grantees can be viewed at <a href="http://www.rita.dot.gov/utc/about/grant-recipients/html/2013">http://www.rita.dot.gov/utc/about/grant-recipients/html/2013</a> grant-recipients.html.)

#### These restrictions are that:

- If you received a UTC grant under the FY 2013 solicitation as a sole institution or an institution leading a consortium for a National Center, you are <u>not</u> eligible to apply or receive funds as a sole, lead, or consortium member of a Regional Center under this solicitation for Regions 3 and 10.
- If you are a consortium member of a National Center selected for funding under the UTC FY 2013 solicitation, you are <u>not</u> eligible to apply or receive funds as a sole or lead institution of a Regional Center under this solicitation for Regions 3 and 10. You <u>are</u>, however, eligible to be a consortium member of a Regional Center.
- If you received a UTC grant under the FY 2013 solicitation as a sole institution or an institution leading a consortium for a Tier 1 Center, you are <u>not</u> eligible to apply or receive funds as a sole or lead institution of a Regional Center under this solicitation for Regions 3 and 10. You <u>are</u>, however, eligible to participate as a consortium member of a Regional Center.
- If you are a consortium member of a Tier 1 Center selected for funding under the UTC FY 2013 solicitation, you <u>are</u> eligible to apply as a sole, lead, or consortium member for a Regional Center under this solicitation for Regions 3 and 10.

Additionally, if you have received a UTC grant under the FY 2013 solicitation (<a href="http://www.rita.dot.gov/utc/about/grant\_recipients/html/2013\_grant\_recipients.html">http://www.rita.dot.gov/utc/about/grant\_recipients/html/2013\_grant\_recipients.html</a>), you may not withdraw from that grant (as a sole, lead, or consortium member) in order to compete in and avoid the statutory restrictions under this solicitation. US DOT made its selections for the FY 2013 solicitation based on the collective resources and planned activities of all members of each application's consortium, which must be maintained in order for those grants to be effective.

In considering your participation on applications submitted under this solicitation, we encourage you to refer to Figure 1 below, which illustrates all possible combinations of multiple grants that are allowed or restricted under MAP-21.

Please note that any applications that are deemed to be in conflict with the restrictions detailed above and presented in Figure 1 will be disqualified immediately.

The horizontal and vertical axes depict the types of roles that your institution plays in a particular grant application. For example,  $N_L$  refers to the lead member of a National Center and  $T_M$  refers to a member of a Tier 1 consortium (a full legend is provided).

Starting at the top with the horizontal axis, select the type of applicant that your institution represents in your first grant application and trace the column below it; next, scroll down the vertical axis and select the type of applicant that you represent in your next grant application and trace the horizontal row to the right of it. The box in which the two traced lines intersect shows whether your institution is allowed to receive multiple grants, given your particular roles in that combination of applications.

Figure 1.	UTC	Reci	pient	Matrix
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	$N_{S}$	$N_{\rm M}$	$N_{ m L}$	$R_{S}$	$R_{M}$	$R_{\rm L}$	$T_{S}$	$T_{\mathrm{M}}$	$T_{\rm L}$
$N_{S}$	NO	NO	NO	NO	NO	NO	NO	YES	NO
$N_{M}$	NO	YES	NO	NO	YES	NO	YES	YES	YES
$N_{ m L}$	NO	NO	NO	NO	NO	NO	NO	YES	NO
$R_{\rm S}$	NO	NO	NO	NA	NA	NA	NO	YES	NO
$R_{\mathrm{M}}$	NO	YES	NO	NA	NA	NA	YES	YES	YES
$\mathbf{R}_{\mathrm{L}}$	NO	NO	NO	NA	NA	NA	NO	YES	NO
$T_{S}$	NO	YES	NO	NO	YES	NO	YES	YES	YES
$T_{\mathrm{M}}$	YES	YES	YES	YES	YES	YES	YES	YES	YES
$T_{ m L}$	NO	YES	NO	NO	YES	NO	YES	YES	YES

# Legend:

 $N_S$  The sole institution of a National Center.

 $N_{M}$  A member of a National Consortium.

 $N_L$  The lead institution of a National Consortium.

 $R_{\rm S}$  The sole institution of a Regional Center.

 $R_{M}$  A member of a Regional Consortium.

 $R_{L}$  The lead institution of a Regional Consortium.

 $T_S$  The sole institution of a Tier 1 Center.

 $T_{M}$  A member of a Tier 1 Consortium.

 $T_L$  The lead institution of a Tier 1 Consortium.

**NA** Not applicable, cannot have more than one Regional Center in a region.

#### G. Grant Deliverables and General Provisions

In addition to the guidance provided in this solicitation, applicants should also refer to two documents posted on the UTC Program website at <a href="http://utc.dot.gov/about">http://utc.dot.gov/about</a> that will become part of the Grant Agreement when awarded:

- Deliverables and Reporting Requirements for University Transportation Centers (September 2013); and
- General Provisions of Grants for University Transportation Centers (September 2013).

These documents provide detailed information about how UTC Program grants will be managed and implemented. RITA reserves the right to amend these documents as necessary.

# PART II. REVIEW, SELECTION, AND AWARD PROCESS

# A. Review of Applications

- 1. **Compliance Review.** After the closing date, RITA staff will conduct an initial review of applications to identify any that are incomplete, nonresponsive to this solicitation, or are ineligible to apply for or receive a UTC grant. Any such applications will be rejected.
- 2. **Merit Review**. RITA will utilize knowledgeable and experienced reviewers drawn from the transportation-research community and the US DOT to evaluate all complete and responsive applications. Reviewers will base their evaluations on the criteria listed below. Section B in Part III (Application Instructions) of this solicitation provides more specific information on these criteria.

# **Eligibility Criteria**

You must be located within federal Region 3 or Region 10 in order to be eligible to apply for a UTC grant under this solicitation.

Eligibility to apply under this solicitation is limited only to a university or group of universities located in one or more of the states within one of the following regions:

- **Region 3**: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; and
- **Region 10:** Alaska, Idaho, Oregon, and Washington.

In addition, you must demonstrate that, as the sole or lead institution in a consortium, you have a well-established, nationally recognized program in transportation research and education, as evidenced by:

- Recent expenditures in highway or public transportation research;
- A historical track record of awarding graduate degrees in professional fields closely related to highways and public transportation; and
- An experienced faculty who specialize in professional fields closely related to highways and public transportation.

You must also demonstrate your commitment and ability to provide leadership within your respective region, to collaborate with other UTCs in the region, and to coordinate UTC transportation research, education, and technology transfer programs with regional needs and initiatives.

# **Overall Criteria**

- **Research Capability**: A demonstrated ability to conduct research activities that are multimodal and multidisciplinary in scope and have as their primary focus one of the Secretary of Transportation's Strategic Goals:
  - o Safety
  - State of Good Repair
  - o Economic Competitiveness
  - Livable Communities
  - o Environmental Sustainability
- **Leadership:** Demonstrated ability to make significant contributions to the solution of immediate and long-range transportation problems.
- Education and Workforce Development: Demonstrated commitment to carry out transportation education and workforce development programs through degree-granting programs and outreach activities to attract new entrants into the transportation field.
- **Technology Transfer:** The ability to disseminate research results, spur implementation, and conduct continuing education programs.
- **Collaboration:** A commitment to forming collaborative relationships among different types and/or sizes of institutions.
- **Program Efficacy:** The demonstrated research, technology transfer, and education resources available to produce results and the ability to implement planned activities in an effective and cost efficient manner.
- **Diversity:** Applications that demonstrate a Center's commitment to broadening participation and enhancing diversity will be given additional consideration. This applies to National and Regional Centers as well as to Tier 1 Centers.

#### **B.** Additional Information

RITA reserves the right to request from any or all applicants such additional information as it may deem necessary to complete its review of applications.

#### C. Recommendation of Awards

Submitted proposals will be evaluated by one or more review panels consisting of subject matter experts. The review panel(s) will rate each proposal as "highly recommended," "recommended," or "not recommended" for funding. These recommendations will be forwarded to a committee made up of the Administrators of the Federal Highway Administration, the Federal Transit Administration, and RITA. The final decisions as to grant recipients will be made by the Secretary.

In conformance with the transparency requirements of MAP-21, upon request applicants may receive copies of any materials used in the evaluation of their proposals.

#### D. Awards

The Secretary will select two applicants to receive Regional UTC grants, one within Region 3 and one within Region 10. The selections made by the Secretary are final.

US DOT seeks to select a balanced portfolio across all selected Centers, including those selected in the FY 2013 solicitation

(http://www.rita.dot.gov/utc/about/grant\_recipients/html/2013\_grant\_recipients.html), which supports the US DOT's Strategic Goals, includes different types and/or sizes of universities, provides geographic diversity, and is multimodal in focus.

If no meritorious applications are received for one or more regions, then a new competition will be held for those regions in order to ensure the selection of a qualified Center.

#### E. Period of Performance

The funding and authorization available to RITA for this solicitation at this time are solely from federal FY 2013 and FY 2014 MAP-21 authorized funds. RITA will allow funds awarded to be spent over an approximately four-year period, from the award date up until September 30, 2017.

# F. Matching Funds

Total funding for a Center's operation will include the US DOT funding plus non-federal matching funds. Regional UTCs must obtain matching funds in an amount at least equal to the US DOT grant amount. In-kind matching funds are acceptable as long as the funds comply with the criteria for such matches, as stated in federal grant regulations (OMB Circular A-110).

The non-federal funds may include funds provided to a recipient under sections 504(b), or 505 of Title 23, United States Code (local technical assistance and state planning and research programs managed by the Federal Highway Administration). The non-federal funds may be cash or inkind, must be used to accomplish program objectives and the purpose of the grant, and must be fully documented in the Center's records. Grantees will have the length of the grant period to provide the full amount of required matching funds.

# PART III. APPLICATION INSTRUCTIONS (STEPS A-D)

The applicant (in the case of a consortium, the lead institution) will submit an application consisting of the following:

- A. Standard Forms SF-424 "Application for Federal Assistance" and SF-424B "Assurances Non-Construction Programs;"
- B. A written prospectus no more than 35 pages long;
- C. Appendices containing supporting documentation and budget; and
- D. A copy of your institution's most recently negotiated overhead and fringe benefit rates.

#### A. Standard Forms SF-424, and SF-424B

Prepare and submit Standard Forms SF-424 and SF-424B. For hard copy submissions of Standard Forms SF424 and SF424B, original signatures are not required.

# **B.** Cover Sheet and Prospectus

**Page Limit:** Your prospectus must not exceed a total length of thirty-five (35) 8.5x11 standard-size pages, single-spaced, Arial 12 font\*, with one-inch margins. A table of contents is not required, and if you choose to include one, it counts toward the 35 page limit.\*\* The cover sheet and Appendices do not count toward the 35 page limit. However, there are specific page limits for the Appendices, which are stated in Part III-C below.

NOTE: Any hyperlinks to external websites that provide supplemental content to the information contained in the prospectus will not be viewed by the review panels.

\*Arial Narrow may not be used, but Arial Bold and Arial Black are acceptable. Text and numbers within tables and figures, caption text, and text within headers and footers may go down to Arial size 9 font.

Title boxes and headings must remain in Arial 12 font.

\*\*A hard copy submission of an application must contain information that is identical to that found in the application submitted through Grants.gov. If a table of contents is included in a hard copy submission of an application, the same table of contents would need to be included in the electronic copy submitted to Grants.gov.

Prepare and submit a cover sheet and prospectus that includes the following:

- i. A cover sheet. Please indicate (in bold letters) on the cover page of the prospectus:
  - a. The federal Region in which you are located: (Region 3 or 10).
  - b. The US DOT Strategic Goal which is your primary focus: Safety, State of Good Repair, Economic Competitiveness, Livable Communities, or Environmental Sustainability. While your planned activities may span more than one Strategic Goal, you must select one goal as your key focus.
  - c. If a consortium, the names and addresses (city, state, and zip code) of all members of the consortium.
- ii. A narrative statement that addresses the following sections:
  - 1. Applicant Information
  - 2. Response to Evaluation Criteria
  - 3. Center Director and Key Staff

#### 1. Applicant Information

In this section, identify by name and city/state, the grantee university, and in the case of a consortium the other universities that will participate in your Center. In order for RITA to comply with federal agency reporting requirements, state whether any of the participating universities is a Minority Serving Institution (see Section (g) Diversity, page 22).

# 2. Response to Evaluation Criteria

The proposal submitted in response to this solicitation will serve as the Strategic Plan for any Center that is selected to receive funding. All the items listed below should be addressed clearly and completely.

As an applicant for Regional Center funding, you should discuss throughout your proposal how your Center will address regional issues. The discussion should include the following:

- How your Regional Center will serve as a focal point within your region to help coordinate UTC transportation research, education, workforce development, and technology transfer programs with regional needs and initiatives.
- How your Regional Center will work with the other UTCs in the region to maximize the effectiveness of their collective services and programs.
- Your institution's relevant experience, if any, in leading regional efforts.
- Ideas for how your Center can use regional efforts to further UTC program objectives.

# You must respond to the following evaluation criteria, in the exact order specified below.

# a. Research Activities and Capability

You must, first, describe the key research activities that you will undertake and, second, demonstrate your capability and experience to carry out these activities and achieve the objectives of the UTC Program. You must provide sufficient detail in this prospectus to enable the reviewers to understand what you intend to accomplish with your Center, to see how you plan to carry out the projects financed with your grant, and to evaluate the feasibility of your proposed approach as well as your capability to achieve the proposed outcomes within the designated grant time frame.

# i. Proposed Research Activities

- Describe your Center's proposed research activities (including projects) and their relationship to the US DOT's Strategic Goal (Safety, State of Good Repair, Economic Competitiveness, Livable Communities, or Environmental Sustainability) that you previously identified as your primary focus area. It is recognized that some of a Center's activities may go beyond a Center's primary focus area and that is acceptable.
  - MAP-21 identifies a number of research priorities. In describing your ideas for research activities, you should discuss how your proposed research activities relate to the research priorities identified in Section 503(b)(2), (3), (4), (5) of Title 23 USC, as amended by MAP-21 (Pub. L. 112-141 Sec. 52003 (effective Oct. 1, 2012)). US DOT welcomes a focused Center that will make dramatic impacts on one or a few closely related topics and is not necessarily looking for Centers trying to demonstrate the ability to connect to a large number of research topics.
- Discuss the degree to which your proposed research activities are multimodal (either across modes or involving modes other than highway) and multidisciplinary in scope, and how such an emphasis impacts the quality of the research. Although the US DOT seeks to fund an array of UTCs that together cut across disciplines and span all modes of surface transportation, one or more

individual Centers with an especially strong single-mode focus may be included in that group.

- Describe your commitment to, and implementation of, peer review principles and other research "best practices" in the selection and management of your research projects.
- State the performance metrics you will use to assess your performance in meeting your research goals.
  - o In addition, state how you will obtain and maintain the information included in those metrics.

# ii. Capability and Experience

- Describe the research resources already available with which you may conduct research, including those at any consortium universities. Among others, these resources may include the following, if relevant to the transportation research to be conducted:
  - o Dedicated laboratory space;
  - o Specialized computer or other technical equipment; and
  - O University support personnel with particular knowledge of transportationresearch needs such as a librarian or equipment fabricator.
- Describe any research resources you anticipate obtaining in order to perform your proposed research activities.
- Provide details on whether your proposed research activities are a continuation of
  existing research projects and programs within your university (or any members
  of the consortium), or are intended to provide opportunities to create and establish
  new research projects and programs.
- Describe your ability to address the specific topic areas you described above as proposed research activities. Please include:
  - Examples of significant impacts of past research on the transportation enterprise, including:
    - products;
    - patents;
    - change in practice; and
    - informing policy decisions.
  - Examples of research included in peer-reviewed journals, publications, and conferences.

 Qualifications of faculty expected to be involved in your proposed research activities.

# b. Leadership

In this section, you must describe your plans for providing and creating leadership to solve immediate and long range national and/or regional transportation problems and advancing transportation expertise and technology. You should provide examples of:

- Your high standing within the national and international arenas of transportation research as evidenced by activities such as publications, committee work, participation in professional transportation organizations and conferences (e.g., presentations, steering committees, session chairs, etc.), awards, and other indicators of leadership excellence.
- Your experience in contributing to the solution of regional and/or national transportation problems.
- Your plans for the development of future leaders (young faculty and graduate students).
- Demonstrated leadership in the development and delivery of programs. This includes innovative transportation education, workforce development, technology transfer, and research activities.
- The performance metrics that you will use to measure your Center's leadership and how you will obtain the information to track these outcomes.

# c. Education and Workforce Development

Education and workforce development efforts should result in the development of a transportation workforce that is prepared to design, deploy, operate, and maintain the complex transportation systems of the future. In describing your Center's planned education and workforce development activities, you must provide the following information:

- Describe any accredited degree-granting programs with transportation components and/or specializations that will be part of this grant, and provide the number of degrees conferred annually during the past five years (undergraduate, masters, and Ph.D.) as well as the number of full-time faculty in each program.
   Describe how the grant will be used to support, increase and improve these academic programs. Discuss what you propose to do to facilitate the connections between your students and transportation industry employers.
- Describe any transportation non-degree programs that will be supported by the grant. Include in your description a narrative on how the grant will support, increase or improve non-degree transportation education programs.

- Describe the number and types of seminars, workshops and/or training courses you will offer with support from the grant and the target audience(s) for those seminars, workshops and/or training courses. Include in your description a narrative on how the grant will support, increase or improve these offerings.
- Describe the outreach and educational activities you propose to undertake with support from the grant to attract new entrants into the transportation field. Discuss any specific plans to reach out to primary and secondary school students and connect your activities with the career technical education system in your state or geographic proximity. Discuss any activities to foster and sustain the interest of primary and/or secondary students in transportation careers beyond the initial exposure. Include in your narrative the target groups by age, grade, ethnic/race, and/or gender characteristics. Provide details on the annual numbers of students to be involved in the proposed programs, what will be done to promote outreach and educational efforts, and how successes will be documented and shared.
- Describe additional education and workforce development programs and activities that are not listed above. Be sure to include a description of program purpose, target audience(s), and numbers of events and participants in the narrative.
- Include the performance metrics that you will use to measure the effectiveness of degree granting programs, other educational efforts, outreach, workforce development, and other educational and workforce activities and how you will obtain the information to populate these metrics.

# d. Technology Transfer

UTC programs must include an ongoing program of technology transfer to make research results available to potential users in a form that can be implemented, utilized, or otherwise applied. In this section, you must describe the technology transfer activities you will undertake to ensure the handoff of information and technology to those who can use it, especially current transportation practitioners. You should also provide examples of your prior experience in outreach, dissemination, and technology transfer related to transportation research and education.

- Describe your planned activities and prior experience in technology transfer activities, such as:
  - Partnerships across sectors, with private enterprise or state and local government, to move research into practice;
  - Technical assistance to others who might take leadership in applying research results;
  - Use of technology transfer mechanisms, such as licensing, patents, commercialization, cooperative research and/or user agreements, or the creation of new business entities;

- Use of peer reviewed journals or academic publications to showcase research results;
- Information exchanges, including new or social media campaigns and activities;
- Academic and continuing education programs targeted towards transportation professionals, such as statewide or region-wide continuing education courses and/or distance learning, seminars, symposia, and workshops related to transportation; and
- Placement of research outcomes in the US DOT Research Hub through research.hub@dot.gov.
- State the performance metrics that you will use to measure the effectiveness of outreach efforts as well as the progress in implementing research results, including how you will obtain the information to track these outcomes for reporting purposes to RITA.

#### e. Collaboration

Centers are encouraged to form consortia and other collaborative relationships with other academic and/or research institutions in order to achieve their objectives. Centers must also demonstrate a commitment and capability to form substantial and effective partnerships with public and private entities, in order to advance transportation expertise and technology and address critical workforce needs.

In this section, you should describe:

#### • Your plans for:

- O Collaborating with other universities or research institutions. If you are proposing a consortium, describe how the participating universities will draw upon diverse types and/or sizes of institutions, including Minority Serving Institutions, how the members will work together within the proposed consortium, including roles and responsibilities of lead and other organizations, what each university brings to the proposed consortium, and how the presence of multiple parties will enhance your ability to reach your goals.
- Establishing collaborative relationships and linking your research, education, workforce development, and technology transfer activities among collaborative partners.
- Developing collaborations with other entities, including private sector concerns, Minority Serving Institutions, state DOTs, Metropolitan Planning Organizations, other public sector organizations at all levels

of government, and non-profit institutions such as the American Association of State Highway and Transportation Officials (AASHTO), the Transportation Research Board (TRB), and the American Public Transportation Association (APTA).

- The composition of any existing or planned advisory committees.
- Your prior experience forming collaborative relationships, including the outcomes of these relationships.
- The performance metrics that you will use to measure the effectiveness of collaborative efforts and how you will obtain the information to track these outcomes.

# f. Program Efficacy

In this section, you should describe your management approach and procedures, and how you will implement planned activities and produce results in an effective and cost efficient manner. This should include the following:

- A description of the availability of institutional resources to carry out planned activities. If your Center includes more than one institution, describe the institutional resources available from all.
  - Institutional resources encompass such things as research and training facilities, human resources, physical facilities, and institutional support capabilities. If you are proposing a multiparty arrangement, such as a consortium or partnership with another university, discuss the collective resources that will be available to your Center. **NOTE:** If there is any pre-existing center of transportation studies or research at the institution[s] comprising your Center, describe how the UTC's activities and accomplishments will relate to, and be distinguishable from, those of the other center[s].
- Plans for overall management and oversight of fiscal and technical activities, including methods for ensuring cost efficiency, including the ability to implement the program in a cost efficient manner.
- Procedures for tracking and coordinating research efforts.

#### g. Diversity

Applications should demonstrate a Center's commitment to broadening participation and attracting new entrants to the transportation field in order to enhance diversity. Diversity is the inclusion of people of different genders, races, and cultures. Applications should describe planned outreach or workforce development activities designed to increase interest in STEM (science, technology, engineering, and mathematics) disciplines and/or raise awareness of transportation careers among underrepresented groups including women and minorities.

Minority institutions are encouraged to apply as a lead institution for a Center or to be part of consortia or other collaborative relationships with other institutions of higher education. Section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k) defines a minority institution as an institution of higher education whose enrollment of a single minority or a combination of minorities exceeds 50 percent of the total enrollment. The following link provides a complete listing of all colleges and universities that fall within a particular category of institution:

http://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html

Minority institutions that apply as lead institutions or consortia members must have demonstrated abilities in transportation-related research and education.

# 3. Center Director and Key Staff

The Center Director is the person responsible for ensuring compliance with all UTC Program requirements. This role is particularly important in multiparty consortia involving distant partners. The Center Director is expected to represent the Center and/or the UTC Program at external meetings, and is required to participate in up to two annual meetings convened by US DOT with the directors of all UTCs.

In this section, name the individual who will lead the Center and the key staff who will support the Center Director in accomplishing the goals of the grant. For purposes of management and oversight, RITA requires that a single Center Director be identified and affiliated with the grantee institution, not any of the sub-grant consortium-member institutions.

- Describe how your Center Director plans to effectively direct and oversee the Center's funds, personnel, and programs.
- State the titles and describe the duties and responsibilities of any other key Center staff that will spend 50 percent or more of their time on Center activities.
- Briefly discuss the qualifications of the Center Director and key staff. (NOTE: The curriculum vitae for the Center Director and key staff are a required attachment, as described in Section C below.)

# C. Appendices

Prepare and submit the following in appendices attached to your prospectus. You must arrange them <u>in the exact order</u> specified below.

#### Please note:

- (a) RITA will accept CVs in any readable format;
- (b) The budget may be in any format you choose, so you may choose any readable font for that appendix, and
- (c) Submissions should be modeled closely after the format of Exhibit A including font and type size.

# i. Curriculum Vitae for Center Director and Key Staff.

Key staff includes any individual that anticipates spending 50 percent or more of his/her time on UTC activities.

You must limit curriculum vitae to two pages per individual, and you should include only those individuals noted previously in section 3 of your prospectus. Do not include personal information such as home address, etc.

# ii. Center Budget Plan.

Provide a completed Center Budget Plan, including match, (see Exhibit B to this solicitation) for your UTC. Your budget should reflect the \$2,592,500 amount for which you are applying and should cover a period of performance under the grant of 4/1/2014 to 9/30/2017).

If your proposed UTC is a consortium of two or more universities, in addition to the Center Budget Plan, provide individual budget plans for each consortium member and the lead. For a consortium, the Center Budget Plan should be a roll-up, by category, that totals the amounts shown on all of the individual budgets plans for each category.

You may provide the budget plan in any format you choose, but it must use only the budget categories specified in Exhibit A.

UTCs selected to receive grants under this solicitation may, subject to availability of funds, receive a second increment of funding toward the grant in 2014. UTC grantees will have through 9/30/2017 to expend all funds. Prior to awarding such additional funds, RITA will ask grantees to submit a revised budget reflecting the two increments of funding.

# D. Confirmation of Negotiated Overhead and Fringe Benefit Rates.

- As a separate document from the Prospectus, provide a legible copy of your institution's
  most recent negotiated overhead rates and fringe benefits rates, including the name and
  telephone number of the federal audit agency representative.
- If your UTC is a consortium of two or more universities, obtain the same evidence from each of the consortium institutions and provide that as well.

# EXHIBIT A Center Budget Plan 04/1/2014 – 09/30/2017

CATEGORY	Budgeted Amount from Federal Share	Budgeted Amount from Matching Funds	Explanatory Notes
Center Director Salary			
Faculty Salaries			
Administrative Staff Salaries			
Other Staff Salaries			
Student Salaries			
Staff Benefits			
<b>Total Salaries and Benefits</b>			
Student Tuition			
Permanent Equipment <sup>1</sup>			
Expendable Property, Supplies, and Services <sup>2</sup>			
Domestic Travel			
Foreign Travel <sup>3</sup>			
Other Direct Costs (specify) <sup>4</sup>			
<b>Total Direct Costs</b>			
F&A (Indirect) Costs			
TOTAL COSTS			

<sup>1</sup> Permanent Equipment includes any item of equipment having a unit acquisition cost of \$5,000 or more. Per the grant's *General Provisions* document, written permission must be obtained from RITA prior to the purchase of such equipment.

<sup>2</sup> Expendable Property, Supplies, and Services include such tangible items as office and laboratory supplies and such intangible services as telecommunications.

<sup>3</sup> Foreign Travel includes travel to or from any destination outside of the United States and its territories. Per the grant's *General Provisions* document, written permission must be obtained from RITA prior to the initiation of such travel or else such travel may not be funded under the grant.

<sup>4</sup> Itemize other anticipated direct costs not mentioned above.