Request for Applications: **DISSERTATION & THESIS FELLOWSHIPS**

1. Overview

The **Center for Transportation Equity, Decisions and Dollars (CTEDD)** invites qualified applicants to apply for Spring 2018 Doctoral Dissertation and Master’s Thesis Research Fellowships. This grant is part of the University Transportation Center (UTC) program funded by the U.S. Department of Transportation (USDOT). Please see utc.dot.gov for more information.

The Center for Transportation Equity, Decisions and Dollars (CTEDD) is a consortium of five universities leading transportation policy research that improves economic development through the more efficient and cost-effective use of existing transportation systems, and offers better access to jobs and opportunities.

CTEDD will address these needs through the innovative use of cutting edge technology and policies that harness private resources for public infrastructure.

CTEDD and its consortium members aim to serve their fast-growing regions and the nation as a whole through various programs that expand economic prosperity, provide outreach to policy makers, address infrastructure needs through innovative methods, and educate future leaders of the transportation field.

Fellowships up to $10,000 for dissertation research and $5,000 for thesis research will be awarded to cover expenses for the recipient while working on their research. CTEDD is focused on contributing to transportation-related research that supports innovation in the focus areas discussed below.

- **FOCUS AREA 1: Creative use of Existing Infrastructure for Future Transportation Needs:**
  - Using existing lanes and tracks for alternative shared mobility options, such as van pools, high speed rail, and regional express buses.
  - Integration of new technology (such as big data collection technologies, information and communication technologies, automated vehicles, microtransit, LiDar) into the current transportation systems.
  - Smart land use, and transportation designs and policies that enhance transit ridership.
  - Enhancing shared-use mobility options for broadening access to jobs and services.
• **FOCUS AREA 2: Innovative Funding Strategies for Future Transportation Infrastructure, and Better Maintenance of Existing Infrastructure:**
  - Understanding and resolving political and financial obstacles, as well as systemic inefficiencies to meeting infrastructure maintenance needs.
  - Smart transportation investment strategies, and use of new revenue concepts for proper maintenance of transportation infrastructure.
  - Challenges and benefits of leveraging private investment to support transportation infrastructure.
  - Impact of funding stream challenges for maintaining transit operations.

• **FOCUS AREA 3: Transportation Systems, Economic Competitiveness, and Equal Access:**
  - Transportation, access to opportunities, and upward mobility.
  - Economic development and supportive transportation concepts.
  - Creative adaption of transportation networks to connect competitive mega-regions.
  - Ensuring sufficient mobility and opportunity access for transit dependent population.

• **FOCUS AREA 4: Employing Big Data and Innovative Techniques to Improve System Efficiency:**
  - Improving efficiency of roadway repairs and maintenance using performance based data collection and mining.
  - Measuring efficiency and equality of transportation service.
  - Upgrading traditional public participation in transportation decision making.
  - Online media, social marketing and transportation user’s experience.

• **FOCUS AREA 5: Ensuring Transportation System Vitality through Performance Management and Monitoring Systems:**
  - Evaluating efficiency and effectiveness of internal policies such as procurement, contracting, and asset management.
  - Reliable transportation infrastructure asset management framework development based on sensing/instrumentation, performance data and available financial resources.
  - Integrating mixed modes with existing transportation infrastructure.

• **FOCUS AREA 6: Transportation Policy and Decision Making:**
  - Understanding the challenges of sub-state, local transportation policy and decision making, such as infrastructure rights of way, and political or financial obstacles.
  - Challenges of building cross-state transportation infrastructure.
  - Community role vs. lobbyist/legislature in shaping transportation policy.
  - Improving inclusion of agencies in policymaking.
  - Return on investment based on interest groups, taxpayers and geography.
2. **Eligibility**

   Students must be a **U.S. Citizen or permanent resident** and have advanced to candidacy for their Ph.D. degree or have advanced to thesis research in their Master’s program prior to the application deadline.

   **CTEDD** fellowships are open to students currently enrolled in a transportation-related program at the University of Texas at Arlington, University of South Florida, California Polytechnic State University, Georgia Institute of Technology, and University of Wisconsin-Madison.

   Successful fellowship proposals will combine advanced research with applied projects that are suited for one or more of the CTEDD focus areas, linking to articulated U.S. DOT priorities, specifically livability, environmental sustainability, and safety.

3. **How to Apply**

   All applications must be submitted by **January 31st, 2018**. Please complete the fellowship application form (below) and compile as a single PDF. Include all other requested information from the form within the same PDF.

4. **Selection Process**

   The pool of applicants will be reviewed by a committee of faculty from CTEDD partner campuses. Fellowships will be awarded on the basis of the committee’s assessment of the originality and significance of the research topic, the applicant’s overall record of academic and professional accomplishment, and the relevance of the research topic to current issues in transportation as it relates to the CTEDD focus areas. Applicants must be in the final year of their program, expecting to defend their dissertation or present their thesis within one year of the award dispersal.

5. **Other Terms and Conditions**

   1. Fellowships are awarded to cover student expenses while working on the dissertation/thesis.
   2. Awards are conditional on the student working on the topic as described in the fellowship application. If the student decides for any reason to change topics or to terminate studies, the student must notify CTEDD immediately and a pro rata share of the fellowship must be returned.
   3. Award recipients must provide a paper copy and electronic version in PDF of the dissertation/thesis when it is completed.
   4. Award recipients agree to acknowledge CTEDD support in the research itself and in any publications that may stem from it.
   5. Award recipients must submit quarterly progress reports, in addition to a final report. Form templates will be provided.
   6. Award Recipients must prepare a webinar for their research upon completion.
DISSERTATION & THESIS FELLOWSHIP
APPLICATION FORM

The following must be submitted by January 31st, 2018. Please email application form and contents in a single PDF to C-TEDD at c-tedd@uta.edu.

Section 1: Application Overview and Contact Details

Project Title:

Doctoral/Masters Candidate:

Date of Advancement to Candidacy:

Home Mailing Address and Home Phone:

Campus Mailing Address, Phone:

E-mail Address:

Are you a U.S. Citizen or permanent resident (y/n)?

Faculty Supervisor (name, title, dept., campus address, phone, & email):

Other Dissertation/Thesis Committee Members (name, title, dept., campus address, phone, & email):
Section 2: CTEDD Focus Area(s)

(Please select from CTEDD research focus areas listed below)

☐ FOCUS AREA 1: Creative Use of Existing Infrastructures for Future Needs

☐ FOCUS AREA 2: Innovative Funding Strategies for Future Transportation Infrastructure, and Better Maintenance of the Existing Infrastructure

☐ FOCUS AREA 3: Transportation Systems, Economic Competitiveness, and Equal Access

☐ FOCUS AREA 4: Employing Big Data and Innovative Techniques to Improve System Efficiency

☐ FOCUS AREA 5: Ensuring Transportation System Vitality through Performance Management and Monitoring Systems

☐ FOCUS AREA 6: Transportation Policy and Decision Making

Section 3: Personal Statement (limit 8000 characters)

The Personal Statement should include relevant background and future goals. Please outline your educational and professional development plans as well as your career goals. Describe how your education will prepare you for a career in transportation.

Section 4: Research Plan and Impact Statement (limit 8000 characters)

The Research Plan and Impact Statement should summarize both your plan of study and research plan. Describe how your research will impact and enhance the field of transportation; contribute to an understanding of transportation, and provide societal benefits. The proposed research must be conducted in a transportation-related academic discipline.

In this section, please also include the following:

a) The research problem and its relevance to transportation as it relates to the CTEDD focus areas.

b) Research approach, including tasks to be completed, methodology, and data sources.

c) Expected results and their significance.

d) Schedule for completion of all tasks.

A copy of the dissertation/thesis must be submitted when complete. Successful applicants should intend to complete their dissertation by December 31, 2018.

Section 5: Curriculum Vita (2 pages maximum)

Section 6: Current GPA

Section 7: Letter of nomination from the dissertation Chair and Statement of Advancement to Candidacy from the applicant’s school/department or from thesis advisor (applicants must be in their final year of the program)