



TO: Chancellors, Deans, and Directors

FROM: Philip Furmanski

SUBJECT: TCC/FTA Graduate Fellowship Program in Transportation and Application Instructions –
Third Round

Attached please find the Transportation Coordinating Council/Federal Transit Administration (TCC/FTA) graduate fellowship program announcement and application instructions for the third round. This is one of two Rutgers programs developed in response to federal funding provided to encourage university study and research related to transportation. Details concerning eligibility and the application process are included in the application documents. Please distribute this program announcement broadly to relevant departments, faculty members and graduate students.

For more information on the TCC visit:

<http://www.tcc.rutgers.edu/>

Please keep in mind the following in relation to the fellowship application:

- **Deadline for the submission of applications is Friday, June 26, 2009**
- Proposals must bear a relationship to planning priorities of the Federal Transit Administration
- Notification of award of fellowships is anticipated by late July 2009
- Period of fellowship is generally one year

Transportation Coordinating Council / Federal
Transit Administration (TCC/FTA) Fellowship
Program

<http://www.tcc.rutgers.edu/>

**Graduate Fellowship Program
in
Transportation**

Third Round

Information and Application Form
for
Student Applicants

**TRANSPORTATION COORDINATING COUNCIL/FEDERAL TRANSIT ADMINISTRATION
(TCC/FTA)**

GRADUATE FELLOWSHIP PROGRAM IN TRANSPORTATION

PROGRAM GOAL

The goal is to increase the number of qualified professionals in transportation through graduate education leading to a master's or a doctoral degree in transportation/infrastructure engineering, planning, policy, and related fields. To learn more about TCC and our program please visit our website at www.tcc.rutgers.edu

The program will provide annual stipends of up to \$20,000 to applicants selected for the program. The stipend is generally paid over a 12-month period, but special arrangements will be considered. The program will also provide tuition support. It is anticipated that two fellowships will be awarded this year.

WHO SHOULD APPLY

Careers in transportation require a diverse range of skills, backgrounds, experiences, and outlooks ranging from engineering and science to social science expertise. Thus, graduate students from diverse fields who wish to focus or further their graduate training by concentrating on research that bears a relationship to the broad field of transportation should consider applying. Proposals must bear a relationship to the strategic priorities of the Federal Transit Administration. Applicants should review the *Synthesis of Information Related to Transit Problems* (Transportation Research Board, December 2006) available for download at http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rrd_80.pdf when preparing their research statements.

Interested applicants must meet the following requirements:

- a. Have a bachelor's degree or be a graduating senior.
- b. 3.0 GPA in undergraduate or 3.5 GPA in graduate program.
- b. Be enrolled or admitted as a full-time student in a graduate program at Rutgers University.
- d. Have a research project proposal approved by his or her assigned faculty advisor, who must be a full-time tenured or tenure-track faculty member at Rutgers University.

Fellowship recipients:

- a. May not hold full-time employment or Graduate Assistantship during the duration of the fellowship. Special circumstances, such as full-time summer employment, will be evaluated on a case-by-case basis. We reserve the right to reduce the amount or duration of an award if the support provided from part-time employment exceeds a level typical for full-time student support.
- b. A student may not receive more than one stipend/fellowship originating from a USDOT or FTA source simultaneously.

Faculty members:

- a. No faculty member shall be responsible for sponsoring and mentoring more than one fellowship recipient.

PROGRAM ADMINISTRATION

The Graduate Fellowship Program is administered by the Transportation Coordinating Council (TCC) Graduate Fellowship Committee, which evaluates applications and makes award recommendations. The Committee also oversees the implementation of the fellowship program. Fellowship recipients will be required to prepare a paper describing the transit-related work that was enabled by the fellowship.

BACKGROUND: Strategic Research Plan for the Federal Transit Administration

A significant part of the research at USDOT is conducted by operating administrations such as FTA, where the specific goals and objectives of research relate to agency missions, interactions with stakeholders, and knowledge of transportation technologies and challenges. The general theme of the research program for FY2006-FY 2010 at FTA is “Delivering Solutions that Improve Public Transportation.” This plan contains the strategic framework for FTA’s research priorities and will be the agency’s guideline for investing scarce public funds in relevant and useful research projects that will improve the nation’s public transportation systems.

According to the Plan, the primary objectives of FTA research are to: (1) provide industry and policymakers with the information and skills to make good business decisions with regard to transit technology, operations analysis, and capital investments; (2) use research results to identify best practices and share this information with others who can benefit from it; and (3) show a range of outcomes that helps direct where future investments should be made. An executive summary of FTA’s vision, strategic research mission, goals and objectives from FTA’s *Strategic Research Plan* is presented below.

| FEDERAL TRANSIT ADMINISTRATION'S VISION | | | | |
|---|---|--|--|--|
| <i>"Public transportation is the mode of choice in America"</i> | | | | |
| FTA STRATEGIC RESEARCH MISSION | | | | |
| <i>"Deliver Solutions that Improve Public Transportation"</i> | | | | |
| FTA STRATEGIC RESEARCH GOALS | | | | |
| 1. Provide Transit Research Leadership | 2. Increase Transit Ridership | 3. Improve Capital & Operating Efficiencies | 4. Improve Safety & Emergency Preparedness | 5. Protect the Environment & Promote Energy Independence |
| OBJECTIVES BY GOAL | | | | |
| 1.1 Ensure transit research supports national goals 1.2 Continue to improve research management 1.3 Facilitate implementation of research results by the transit industry | 2.1 Identify best practices and technologies to increase transit ridership 2.2 Identify and overcome barriers to the adoption of ridership enhancement techniques 2.3 Identify solutions to provide public transportation for targeted populations 2.4 Identify cost-effective solutions to provide rural public transportation services | 3.1 Identify practices and technologies to control capital costs 3.2 Identify solutions to control operating costs 3.3 Identify methods and technologies to improve transit operational efficiency 3.4 Identify solutions to improve transit infrastructure maintenance 3.5 Improve the capacity of the transit industry and workforce | 4.1 Identify solutions to improve transit safety 4.2 Identify solutions to reduce criminal activity 4.3 Identify solutions to improve transit emergency preparedness | 5.1 Facilitate development of technologies to improve energy efficiency and reduce transit vehicle emissions 5.2 Identify and overcome barriers to adoption of clean technologies |

Rutgers staff has been advised that the recent change in federal administrations has led to the highlighting of new areas of research emphasis: livable communities

- “green transportation” (fuel efficiency)
- “state of good repair” for existing infrastructure
- rail transit evaluation (including streetcars)
- transit innovation in Intelligent Transportation Systems
- design for universal access, and
- impact of the American Recovery and Reinvestment Act on jobs and the transportation system.

APPLICATION PROCEDURE

The fellowship application should consist of the following:

- a. Completed background information form and research statement form, including signatures;
- b. A detailed resume;
- c. Transcripts for all colleges and graduate programs attended;
- d. A CV for the faculty advisor.

Research statements must bear a relationship to FTA's strategic priorities. Unless fellowship proposals meet this criterion, they will not be eligible for an award.

Application information should be checked for completeness and accuracy. **Applications that do not comply with the above other instructions will not be accepted.** The Transportation Coordinating Council / Federal Transit Administration (TCC/FTA) Research Program requires five (5) copies of the application and an electronic copy on compact disc (preferably in a single PDF file). Submit the application to the Transportation Coordinating Council/Federal Transit Administration (TCC/FTA) Research Program **by 5:00 p.m. on Friday, June 26, 2009** at the following address:

TCC/FTA Graduate Fellowship Program
c/o Patrick Szary, The Center for Advanced Infrastructure and Transportation
100 Brett Road
Piscataway, NJ 08854

Electronic submissions will not be accepted.

Questions about the program may be directed to Patrick Szary (szary@rci.rutgers.edu or 732-445-0579 ext.106).

EVALUATION CRITERIA FOR THE FELLOWSHIP AWARD

The following criteria will be used to evaluate fellowship applications.

| |
|--|
| EDUCATION & ELIGIBILITY |
| A. Educational experience and major degree area |
| B. Transcripts and GPA |
| C. Overall eligibility |
| EXPERIENCE (per resume) |
| D. Work/research experience |
| E. Honors and certifications |
| F. Activities and skills |
| G. Publications, patents, presented papers, and attended conferences |
| H. Technical and honor society memberships |
| RESEARCH STATEMENT |
| I. Student's general ability and technical expertise, ability to meet project schedule and perform project tasks, net cost |
| J. Relationship of topic to Federal Transit Administration (FTA) goals (see above) |
| |

Background Information (continued)

Other anticipated Fellowships and Appointments: List all anticipated fellowships and appointments during the period of this proposed fellowship, generally one year from September 1 through August 31. Please attach additional pages, if needed.

Fellowship or Appointment Name

Approx. Dates (to-from)

Current program (or program admitted to): _____

School/Department: _____

Year in program: _____

Applicant's Signature _____ Date _____

Research Statement (continued)

Describe the proposed research topic and its relationship to the Federal Transit Administration's Strategic Research Plan. The description should include the following section headings:

1. Research Objective(s) – This section should include a brief statement regarding the objective(s) of the proposed research.
2. Research Approach – This section should include a description of the proposed research approach and methodology (including existing or prospective data sources intended to be used);
3. Relationship to FTA Strategic Research Plan – This section should describe how the proposed research relates to SAFETEA-LU goals and the FTA strategic research plan.

Attach separate sheets as needed. The research statement should be no longer than 5 pages long

Faculty Advisor's Signature: The faculty advisor's signature indicates that he/she has read the project description and the applicant's proposed role in the project, approves the proposed project, and agrees to act as a mentor to the student in relation to the project.

Faculty Advisor's Signature _____ Date _____