#### RAIL CAPACITY IMPROVEMENT STUDY

**AGENCY**: Federal Transit Administration (FTA), DOT **ACTION**: Notice for Request for Applications (RFA)

**SUMMARY:** FTA is seeking research proposals for a Rail Capacity Improvement Study. FTA's research activities are authorized by 49 USC 5312, Research, Development, Demonstration, and Deployment Projects. Improving Capital and Operating Efficiencies is one of FTA's five Strategic Research Goals. Under this goal, FTA has set forth objectives to identify practices and technologies to control capital costs and identify methods and technologies to improve transit operational efficiency. Rail transit operations (commuter, heavy and light rail) comprise over 50% of transit service and represent a much larger component of capital expenditures and operating costs. FTA seeks applications for research proposals that will support the achievement of these goals and objectives.

**DATES**: An applicant must submit a proposal electronically to <a href="http://www.grants.gov">http://www.grants.gov</a> by August 31, 2008 for consideration. All potential applicants are advised to begin the <a href="http://www.grants.gov">http://www.grants.gov</a> registration process immediately, if they have not previously submitted Federal assistance applications through <a href="http://www.grants.gov">http://www.grants.gov</a>, in order to be able to meet the deadline. FTA expects to award funds through a cooperative agreement in October 2008. In the event of a system problem or technical difficulty with the application submittal, the applicants should contact the FTA Project Manager for delivery instructions.

**ADDRESSES**: The website *http://www.grants.gov* allows applicant organizations to electronically find and apply for competitive opportunities from all Federal agencies that award Federal assistance. This website is the single access point for over 1000 Federal assistance programs administered by the 26 Federal agencies.

**FOR FURTHER INFORMATION CONTACT**: Technical, program management and administrative questions should be directed to Terrell Williams, Office of Technology (TRI-20), E43-469, Federal Transit Administration, U.S. Department of Transportation, 1200 New Jersey Ave, SE, Washington, D.C. 20590; email address: Terrell.Williams@dot.gov, or by phone at 202-366-0232.

**SUPPLEMENTARY INFORMATION:** The selected firm should become familiar with data from the DOT's Conditions and Performance report. Reports from the Transit Cooperative Research Program on Rail Capacity should also be referenced.

### **Objectives**

This study would look at the current capacity and ridership of up to five of the largest rail transit systems to determine how close they are to capacity and project when they will reach capacity. The study would also look at the cost and effectiveness of various infrastructure investments (CBTC, automated operation, additional vehicles, substations, energy storage technologies, track structure improvements, etc.) to increase capacity and how long it would take to put them into place. Ultimately, the study will provide a road map for FTA and the Congress to address future transit needs.

## **Background**

Over the last decade, rail transit system ridership has increased in a rough parallel with gasoline prices. Besides the fuel cost-transit ridership linkage, other factors will drive ridership increases. These include the DOT congestion initiatives in 4 major cities (Miami, San Francisco, Seattle, and Minneapolis) and environmental concerns (air pollution/global warming) that will drive local jurisdictions to enact policies to increase transit use.

Many major heavy rail systems (like WMATA) are at or approaching capacity now. Capital investments to increase capacity (like signal system upgrades and new vehicle procurements) take years from initiation to completion. Many older heavy rail systems are behind the curve on infrastructure rehabilitation/replacement and infrastructure projects that take a long time to complete. All these factors could come together in a "perfect storm" driven by events beyond U.S. control (oil prices) and transit would not be capable of fully handling increased ridership. The nation and the economy would suffer as a result.

# **Project Description**

This study would look at the current capacity and ridership up to five of the largest rail transit systems to determine how close they are to capacity and project when they will reach capacity. The study would also look at the cost and effectiveness of various infrastructure investments (CBTC, automated operation, additional vehicles, substations, energy storage technologies, track structure improvements, etc.) to increase capacity and how long it would take to put them into place.

The selected organization should conduct the following tasks;

- 1) Determine how close the selected systems are to capacity and project when they will reach capacity.
- 2) Develop an inventory of specific infrastructure investments that would increase core capacity of rail transit systems.
- 3) Evaluate the estimated cost of implementing each investment to determine the cost/benefit. This figure should include the initial investment, any life-cycle cost and the cost to maintain the improvements.
- 4) Determine how much time each investment would take to implement, (assuming the funding is already in place).
- 5) Summarize and recommend the top infrastructure investments that transit agencies could make with the biggest impact on capacity improvements.

### **Award Information**

FTA will fund one application under this program. The total available funding is \$300,000. Future funding will depend on Appropriations. The FTA will participate in activities by attending review meetings, commenting on technical reports, maintaining frequent contact with the project manager and approving key decisions and activities including redirecting activities if needed.

## **Cost Sharing or Matching**

Federal transit funds are available to research projects at up to 100 percent of the project cost. However, cost sharing will be an evaluation criterion.

## **Eligibility Information**

Eligible recipients include State and local government agencies, public and private transit agencies, universities, non-profit organizations, consultants, legally constituted public agencies, operators of public transportation services, and private for-profit organizations.

# **Proposal Content**

This announcement includes all of the information that you need to apply. The following forms are available in grants.gov and are required to be completed:

- 1. SF 424 Mandatory
- 2. Other Attachments Form

### SF 424 Mandatory

Most of SF424 is self explanatory. The application should answer the following items as follows:

1a – application

1b – annual

4a – Leave blank

4b - 26

#### Other Attachments Form:

1. The application should attach a pre-application (not more than 15 pages in length) as outlined in Chapter II (Item 9.b) of FTA Circular 6100.C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines. <a href="http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html">http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html</a>

This pre-application should also address the six criteria laid out below in the Application Review Information section. The project budget justification should include identification of any matching funds and their source. The Formal Application described in the Circular is not being requested at this time.

2. The application should attach information on the qualifications of key personnel, including biographies.

Anyone intending to apply should initiate the process of registering on <a href="http://www.grants.gov">http://www.grants.gov</a> by August 31, 2008 for consideration. All potential applicants are advised to begin the <a href="http://www.grants.gov">http://www.grants.gov</a> registration process immediately, if they have not previously submitted Federal assistance applications through <a href="http://www.grants.gov">http://www.grants.gov</a>, in order to be able to meet the deadline.

# **Application Review Information**

A review panel will be convened to review each proposal. Project proposals will be evaluated based on the following criteria;

- Proposed Research, which includes the applicability of the proposed research to the
  requirements, the uniqueness and or need for the research, and the expected results.
  Projects should be narrowly defined to explain how a particular practice or technology will
  improve rail capacity. The proposed research must identify the current rail capacity issue
  facing public transportation, why it is of national significance, the uniqueness or
  relationship of this project to other research, and how the proposed research will address
  the issue.
- 2. Qualifications of Key Personnel, which includes knowledge of and prior experience with rail transit operations.
- 3. Technical Management Plan, which includes the management approach for planning, scheduling, administering, coordinating and conducting the work effort.
- 4. Past Performance on activities relevant to the proposed work.
- 5. Cost and Cost Sharing.
- 6. Plan for evaluation and data collection. The proposal must address how success will be measured (e.g. before and after studies).

#### **Award administration Information**

The anticipated notification date for successful applications is October 2008. Following receipt of the notification letter, the successful entities will be required to submit the Formal Application as outlined in Chapter II (Items 10-25) of FTA Circular 6100.C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines. <a href="http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html">http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html</a>: through the FTA Transportation Electronic Award Management (TEAM) system website.

FTA will manage the cooperative agreement through the TEAM system Web site. Before FTA may award Federal financial assistance through a Federal grant or cooperative agreement, the entity must submit all certifications and assurances pertaining to itself and its project as required by Federal laws and regulations. Since Federal fiscal year 1995, FTA has been consolidating the various certifications and assurances that may be required of its awardees and the projects into a single document published in the Federal Register. Fiscal year 2008 Annual List of Certifications and Assurances for FTA Grants and Cooperative Agreements and guidelines is published in the Federal Register and posted on the FTA Web site at:

http://www.fta.dot.gov/funding/apply/grants\_financing\_7411.html.

Recipients will be required to manage their projects in accordance with FTA Circular 6100.C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines.: <a href="http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html">http://www.fta.dot.gov/laws/circulars/leg\_reg\_4121.html</a> This includes requirements on project management and administration including quarterly reporting, financial management, and payment.