



University Transportation Research Center
RFP Cover Sheet

Title: Development of a System Local Bus Database
Proposal Number: 2010-16
Sponsor: NJDOT
Date Issued: July 12, 2010
Pre-Proposal Meeting: Contact NJDOT by July, 23, 2010
RFP Due at NJDOT: by September 10, 2010
RFP Closing Date: September 10, 2010

If you plan to apply:

1. Please contact Camille Crichton-Summers (camille.crichton-summers@dot.state.nj.us) or Stephanie Nock (609-530-5637 or STEPHANIE.NOCK@dot.state.nj.us) to request a pre-proposal meeting, and so that you will receive information about this meeting if it is held. *This meeting will be your only opportunity to ask questions about this proposal.*
2. If you plan to submit a proposal through UTRC, please notify us by email at peickemeyer@utrc2.org and ckamga@utrc2.org. Please indicate whether you are open to teaming up with faculty at other universities on this project.

Proposal submission guidelines:

Please contact Penny Eickemeyer (peickemeyer@utrc2.org, 212-650-8074) to discuss submission logistics. After UTRC confirms that the proposals' budgets meet UTRC and NJDOT guidelines, please use the UTRC cover sheet available at <http://www.utrc2.org/research/resourcesforpis.php> for submission of printed proposals to NJDOT.

Proposals must be prepared in accordance with NJDOT's Information and Instructions for Preparing Proposals. Please visit: <http://www.state.nj.us/transportation/refdata/research/pdf/techpropresproj.pdf>

For questions about budget preparation, contact: Camille Kamga, ckamga@utrc2.org

NJDOT has not specified a budget or timeline for this project. Please note that matching funds up to \$35,000 are available from UTRC for this RFP.

New Jersey Department of Transportation

Bureau of Research

RESEARCH PROJECT

Request for Proposals

2010 Program

Date of RFP

07-12-10

Closing Date

09-10-10

Development of a System Local Bus Database

Project 2010-16

(Proposals must be prepared in accordance with NJDOT's *Information and Instructions for Preparing Proposals*. Please visit: <http://www.state.nj.us/transportation/refdata/research/pdf/techpropresproj.pdf>
Revised Proposal Evaluation Forms are available for your information on the website.)

Proposals will be based on the merit of the information contained in the proposal. Budgets will be evaluated separately. Please place three (3) copies of the budget for this project in a separate sealed envelope.

1. RESEARCH PROBLEM STATEMENT, BACKGROUND AND OBJECTIVES

The NJ TRANSIT Research Department's primary goal is to develop, review, implement and analyze surveys to support ridership forecasting and other NJ TRANSIT efforts. This includes developing and maintaining databases for detailed analysis. In addition to collecting and analyzing data for forecasting purposes, the research department provides data and analysis to various departments and organizations including management for the purposes of decision making, marketing for market analysis, NJ TRANSIT planning departments, MPOs and other planning entities for integration into planning analysis and documents, consultants for use in planning, analysis, and decision making, and real estate developers and other businesses for use in making business decisions and performing market analysis.

Over the last several years, the NJ TRANSIT research department has collected an array of data on bus routes covering various areas of New Jersey. However, the data was collected during individual surveys of routes and groups of routes. Separate datasets are maintained for each survey effort.

The current data is disjointed and the various datasets are incompatible in their current form. The objective of this project is to develop a single dataset, combining all previous bus survey databases, so that all collected information is accessible in a single file, while maintaining the integrity of the data. The data merge will provide a system-wide database of demographics, travel characteristics, and origin-destination information, which can be used for multiple purposes. The merged data will allow for more complete forecasting methods due to the complete and compatible data provided to the NJ TRANSIT forecasting department and transportation planning organizations for forecasting purposes. In addition, the merged database will allow the NJ TRANSIT research department and other end users of data to run analysis that will allow decision makers to evaluate and prioritize data on a more even scale, as data will be compatible and therefore easily evaluated. The data merge will also allow for easy recall of data from a single file, rather than performing data searches for each individual route to be evaluated, thus providing significant time savings for analysts while performing data mining operations.

2. Tasks

Task 1: Review the following surveys and databases provided by NJ TRANSIT: Greater Newark, Northwest Bus Study, New Brunswick, Princeton, South Jersey, JARC and Bergen Passaic. Identify common variables and values that can be used to develop a local and interstate bus survey database.

Task 2: Create Record Layout and Data Dictionary for the new database. Recode new variables that can be copied into the system database.

Task 3: Import the data from all of the survey datasets and import it into the new database (SPSS or Excel).

Task 4: Run frequencies, crosstabs, etc. to ensure that the data was imported into the new variables correctly and adjust any errors found by NJDOT and NJTRANSIT staff.

Task 5: Summarize key variables and prepare analytical draft and final reports.

The NJDOT is seeking the insight of proposal responders on how best to achieve the research objectives. Proposers are expected to describe a research effort that can realistically be accomplished as expeditiously as possible. Proposals must present the proposers' current thinking in sufficient detail to demonstrate their understanding of the problem and the soundness of their approach for conducting the required research.

PHASE I – Research Approach and Anticipated Results

Clear description of how you will solve the problem and implement anticipated findings. Work may be divided into phases (e.g., Laboratory, Field or Year 1, Year 2) as necessary to clarify tasks. *Exit Criteria* must be developed during this phase.

3. Implementation and Training Plan

The Principal Investigator, (PI), must meet with the Research Project Selection and Implementation Panel (RPSIP) and other NJDOT units to present the findings and as appropriate train these personnel in the use of the project results.

The PI will develop an implementation plan as per the guidelines provided by NJDOT Research Bureau.

4. Deliverables: [List of minimum deliverables necessary to complete the project]

- Discussion to Support and Refine the Project Tasks.
- Project work plan.
- Technical Memorandum on how the files will be merged.
- Fully coded, labeled and integrated SPSS or Excel data file.
- Quarterly Reports.
- Final report, in color, with appropriate tables, graphs and charts in hard copy version, PDF file format, Word, and on CD ROM. Two copies plus one per RSIP member of each presentation, technical memorandum, draft final report and Final Report (plus 10 copies). The Final Report and Tech Brief are due three (3) months before the end date of the project to allow time for review by the Research Project Selection and Implementation Panel. Final Acceptance will be granted upon receipt of ten copies of the approved final report.

5. Contract Time:

The PI must provide the anticipated research study duration based on the proposed tasks. Consideration should be given to potential impediments so that adjustments are incorporated into the schedule minimizing the need for time extensions.

6. Contacts:

A meeting may be scheduled with interested parties upon request after the RFP's are distributed to refine the objectives and deliverables and to promote a better understanding of the research needs. Questions on this

topic **shall not** be directed to any Research Project Manager, Research Customer, or any other NJDOT person. All questions and answers would be addressed during this meeting or through the Bureau Manager. Contact Camille Crichton-Summers (Camille.CrichtonSummers@dot.state.nj.us) on or before July 23, 2010 to confirm your interest in participating in such a meeting.

7. DEADLINE

Proposals (10 single-bound copies) are due at the NJDOT Bureau of Research no later than 4:00 p.m. September 10, 2010

Authorization to Begin Work: as negotiated

8. Delivery Instructions:

For private, paid messenger services such as Federal Express, DHL, UPS, etc., or for hand-carried deliveries:

2010 PROPOSAL-NJDOT
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Bureau of Research
1035 Parkway Avenue
Trenton, New Jersey 08625-0600

For U.S. Postal Service mail:

New Jersey Department of Transportation
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