

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

RESOLUTION 1006-20: Approving the Selection of Consultant for the FY 2011-2012 SJTPO Model Improvement Peer Review Services

WHEREAS, the South Jersey Transportation Planning Organization (SJTPO) is the Metropolitan Planning Organization (MPO) designated under Federal law for the southern region of New Jersey including Atlantic, Cape May, Cumberland, and Salem Counties; and

WHEREAS, the Fiscal Year 2011-2012 SJTPO Unified Planning Work Program includes Federal Highway Administration and Federal Transit Administration planning funds for this project; and

WHEREAS, the Selection Committee recommends Dr. Michael Anderson, P.E., of the University of Alabama in Huntsville.

NOW THEREFORE BE IT RESOLVED, that the Policy Board of the South Jersey Transportation Planning Organization hereby approves the above selection for the FY 2011-2012 SJTPO Model Improvement Initiative Project, with a maximum fee of \$46,000.

BE IT FURTHER RESOLVED, that the Policy Board authorizes the Executive Director to execute scope of work and cost modifications to the original contract amount, provided that funding is available and such modifications have been approved by the NJDOT and Project Sponsor.

BE IT FURTHER RESOLVED, that the Policy Board requests that the South Jersey Transportation Authority execute the appropriate contractual arrangements with the consultant on behalf of the SJTPO.

Certification

I hereby certify that the foregoing is a correct and true copy of a resolution adopted by the Policy Board of the South Jersey Transportation Planning Organization at its meeting of June 28, 2010.


Louis N. Magazzu, Secretary/Treasurer

FY 2011-2012 South Jersey Travel Demand Model (SJTDM) Improvements Peer Review Proposal

Prepared for:

Mr. David S. Heller, P.P., AICP, Senior Transportation Planner
South Jersey Transportation Planning Organization
782 S. Brewster Road, Unit B-6
Vineland, New Jersey 08361

Prepared by:

Dr. Michael Anderson, P.E.
2622 Excalibur Drive SE
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June 4, 2010

Introduction

The South Jersey Transportation Planning Organization (SJTPO) has made a solicitation for peer review services to aid in the FY 2011-2012 phase of the South Jersey Travel Demand Model (SJTDM) Improvement Initiative. This document is being submitted to Mr. David S. Heller to formally express an interest in performing the work described and provide a scope of services, timeline and budget to complete the desired tasks. Additionally, the proposer's qualifications are included and a detailed resume are provided.

Scope of Services

The scope of work proposed to the SJTPO to complete the FY 2011-2012 Peer Review includes four distinct tasks:

- Assist in testing the new migrated model in CUBE/Voyager,
- Review model enhancements and improvements,
- Oversee the model calibration and validation process, and
- Review final products prepared as part of the FY 2012-2012 Model Development Improvement Project.

Each of these tasks will be addressed separately.

Task 1. Assist in testing the new migrated model in CUBE/Voyager

The first task will be to assist in testing the new migrated model in CUBE/Voyager. This task will involve:

- Reviewing the output documentation provided by the consultant performing the migration,
- Run the migrated modules to verify results documented, and
- Conduct statistical tests to ensure migration was performed successfully.

A summary report will be developed documenting the work performed and confirmation of the consultant's work.

Task 2. Review model enhancements and improvements

The second task will be to provide oversight into the model enhancement and improvements. This task will include:

- Review the traffic counts conducted by the consultant,
- Examine the network improvements made by the consultant, and
- Validate the improvements made to the model within each of the four-steps of the process. This will include a brief review of the data used to perform the enhancements and the consultant's use of the data. This information is expected to be supplied by the consultant.

A summary report will be developed documenting the work performed and confirmation of the consultant's work.

Task 3. Oversee the model calibration and validation process

The third task will be to review the calibration and validation of the model after the enhancements and improvements. The consultant is expected to conduct the calibration and validation using the tests recommended by the Model Validation and Reasonableness Checking Manual. The peer reviewer will validate that the calibration and validation is performed correctly and provides the SJTPO a model capable of conducting accurate modeling. A summary report will be developed documenting the work performed and confirmation of the consultant's work.

Task 4. Review final products prepared as part of the FY 2011-2012 Model Development Improvement Project

The fourth, and final, task will be to review all products prepared by the consultant performing the Model Development Improvement Project. This will include all items performed by the consultant not explicitly documented in this proposal. A summary report will be developed documenting the work performed and confirmation of the consultant's work.

Timeline

The FY 2011-2012 Peer Review is proposed will begin early July 2010 and will be completed by June 30, 2012. Anticipated milestone dates for this effort include:

- Late March/early April 2011 – submittal of report regarding migrated model,
- Late October/early November 2011 – submittal of report regarding model enhancements and improvement and model calibration and validation, and
- June 2012 – submittal of report documenting complete review of all products.

The dates are subject to change depending on the fluid nature of the project, milestones meet by the prime consultant performing the model improvements, and required deadlines established by the SJTPO.

Personnel and Qualifications

The FY 2011-2012 Peer Review is proposed by Michael Anderson, Ph.D., P.E. Dr. Anderson serves as an Associate Professor of Civil Engineering at the University of Alabama in Huntsville where he has twelve years of experience teaching courses and conducting research related to transportation modeling and traffic engineering. Dr. Anderson will perform the work as a sole proprietor and will perform all the work described in this proposal. Dr. Anderson does not anticipate using any sub-consultants or hiring and employees to perform this work.

During the spring and summer of 2010 he performed the FY 2010 Peer Review for the SJTPO. This project involved assisting the SJTPO in selecting the software to migrate toward and developing the scope of services for the FY 2011-2012 Model Development Improvement Project. The project was adjusted to include a review of the existing travel

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Improvements Peer Review Proposal

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Budget

The budget for the FY 2011-2012 Peer Review is based on the anticipated number of hours needed to complete each task. The hour charged to SJTPO associated with the completion of each of the tasks identified will reflect actual hours worked on the project, but will not exceed the total number of hours identified in the budget. It is anticipated that this project will require a maximum of 25 hours per month to complete; however, it is understood by the peer reviewer that some months may not require any hours as there might not be any items to review. A detailed breakdown by task is provided. Since the consultant performs work as a sole proprietor, a loaded rate of \$100/hour is used.

<u>Task</u>	<u>Anticipated Hours</u>	<u>Maximum Budget</u>
Assist in testing the new migrated model in CUBE/Voyager	80	\$8,000
Review model enhancements and improvements	100	\$10,000
Oversee the model calibration and validation process	180	\$18,000
Review final products prepared as part of the FY 2011-2012 Model Development Improvement Project	100	\$10,000
<hr/> Total	<hr/> 460	<hr/> \$46,000