

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

ITEM 1609-27: Approving the Selection of AECOM Technical Services, Inc. as the Consultant for the FY 2017 Air Quality Assistance

PROPOSAL

At its September 12, 2016 meeting, the Technical Advisory Committee (TAC) recommended that the Policy Board approve the selection of AECOM Technical Services, Inc., (AECOM) in association with WSP Parsons Brinckerhoff, Michael Baker International, and ACT Engineers (DBE firm) for the SJTPO FY 2017 Air Quality Assistance Project.

BACKGROUND

The Request for Proposal (RFP) for the FY 2017 Air Quality Assistance project was issued on July 21, 2016. This project will provide consultant support for various air quality analysis activities, including but not limited to:

- Regional emissions and conformity analysis for *Transportation Matters: A Plan for South Jersey*, and FY 2018–2027 Transportation Improvement Program, and
- Coordination with NJDOT, NJDEP, and USEPA on air quality planning issues
- Assistance in the preparation of the SJTPO portion of statewide emissions inventories

The Notice of Availability of Requests was sent to approximately 120 firms.

Proposals were due August 19, 2016. One proposal was received. The proposal was scored by a TAC-designated Consultant Selection Committee comprised of two representatives from SJTPO, and one representative each from Atlantic and Cumberland Counties. The selected committee unanimously supported AECOM, with sub-consultants WSP Parsons Brinckerhoff, Michael Baker International, and ACT Engineers (DBE firm).

Initially, the proposed cost was \$75,944. Negotiations were conducted with AECOM, during which the scope and cost were reduced by removing an entire task (Preparation of Ozone Maintenance Plan budgets), as well as reducing the number of coordination hours, and hours of technical assistance. The revised proposed cost is **\$48,832**. The DBE participation rate is 12.7%.

If this contract is awarded, the SJTPO DBE/ESBE participation rate for FY 2017 would be 12.4%. The attached resolution authorizes the Executive Director to negotiate minor revisions to the scope of work and fee to best advance the goals and intent of the project.

This project is funded out of Task 17-401: Professional and Technical Services, which is funded in the amount of \$40,000 with a project completion of July 30, 2017. The remaining \$8,832 will be funded through unexpended funds from Task 16-405: Local Safety & CMAQ Project Development.

SCOPE OF SERVICES

TASK 1. COORDINATION

This Task covers project management activities including communications and reporting. The AECOM team will establish an effective means of coordinating and reporting activities to SJTPO PM and staff.

At the beginning of the project the AECOM PM will prepare a schedule depicting major work elements, activities, and milestones. We will submit it at the kick-off meeting/conference call for the SJTPO review and approval. The AECOM team will follow the approved schedule as closely as possible throughout the course of the project, with any changes subject of approval of the SJTPO PM.

The AECOM team will assist SJTPO in arranging two ICG meetings/conference calls. The AECOM PM will be responsible for preparing meeting agendas, including handouts and/or electronic slideshow presentations if applicable. We will work directly with the SJTPO PM to coordinate with the ICG members, and will be responsible for preparing minutes and other needed meeting records and resolutions.

Bi-weekly status reports will be provided to the SJTPO PM in addition to the conference calls at project milestones. We will provide all related inputs, processes, outputs, and documents to SJTPO for their record. The AECOM PM will coordinate with SJTPO the best way of data and document transfer process.

The AECOM Team will arrange for one full-day staff training session at the SJTPO office. During this session we will conduct air quality post-processor installation with all related software and data.

AECOM will provide QA/QC of the process and deliverables according to the industry

standards and high quality management requirements set by ISO standards. Our approach to quality follows the international standard for quality management systems (QMS), ISO 9001. As one of the few ISO 9001-certified professional and technical services firms in North America, AECOM developed its system to address the standard's requirements, and we confirm compliance through formal auditing and verification. Initially certified in 2002, we have continuously expanded the scope of our ISO certification. In fact, during 2011 we achieved a single, unified ISO 9001:2008 certification covering all our business lines in North America.

Project deliverables for Task1: Coordination will include the following:

- The AECOM Team will assist in preparation and participate in two ICG meetings/conference calls. We will prepare minutes of the meetings.
- The AECOM Team will provide bi-weekly progress report to SJTPO PM via email. We will organize project kick-off meeting/conference call and task completion milestone conference calls with SJTPO PM and staff.
- The AECOM Team will update the CENTRAL/PPSUITE/MOVES users guide, create CENTRAL/PPSUITE installation DVD and provide a required software license to run the post-processor at the SJTPO office.
- The AECOM Team will assist with MOVES2014a, CENTRAL, and PPSUITE installation and conduct a one day staff training on site at SJTPO office in Vineland.
- The AECOM Team will provide a process DVD to the SJTPO. The DVD will provide sufficient backup such as process inputs, programs, raw outputs, and reports.

TASK 2. REGIONAL EMISSIONS ANALYSIS FOR TRANSPORTATION MATTERS - A PLAN FOR SOUTH JERSEY AND FY 2018-2027 TIP

The following describes the steps that will be undertaken to complete the Transportation Matters - A Plan for South Jersey (RTP) and the FY 2018-2027 Transportation Improvement Program (TIP) Conformity analysis that is expected to take place in the early spring of 2017. This will be the first conformity determination requiring the use of MOVES2014a. At this time, SJTPO will use the existing travel demand model and an operational CENTRAL/PPSUITE post-processor associated with that model in support of the emission estimates using MOVES.

2.1 Interagency Consultation

We will also coordinate with the ICG, NJDOT and NJDEP and additional updates in emission modeling, data development, and conformity determination process.

We will work directly with the SJTPO PM to coordinate with the ICG members, and will be responsible for preparing minutes and other needed meeting records and resolutions.

It is our understanding that coding of regionally significant, non-exempt transportation projects into the proper South Jersey Travel Demand Model (SJTDM) highway and transit networks and other input files will be done by the SJTPO staff. The AECOM Team will provide quality assurance by monitoring project effects on the emissions estimates for each scenario and year.

2.2 Emissions Calculations for Conformity Determination

Combinations of computer programs centered on the MOVES and PPSUITE post-processor programs will be used to analyze FY 2018-2027 TIP and RTP conformity in the SJTPO region.

The PPSUITE software has been developed

by AECOM and has been used by SJTPO, the NJDOT the NJDEP and NJTPA for emissions estimation in New Jersey. In addition, PPSUITE is used by other state DOTs, including Maryland and Pennsylvania, for their statewide analysis and emission inventories. PPSUITE is also used to conduct conformity determinations by MPOs such as NJTPA, and Baton Rouge Capital Region Planning Commission. PPSUITE has been successfully transitioned to MOVES2014a emission model, which will be utilized for the analysis at SJTPO. The AECOM team will also review the practicality to utilize the most recent emission model, if such become available during the time of this project.

PPSUITE has repeatedly been shown to meet all the Federal guidelines and regulations for regional Conformity Analysis as specified in the Transportation Conformity Rule 40 CFR Part 93. PPSUITE has repeatedly provided the local data that was the subject of SJTPO's certification by federal agencies.

MOVES and PPSUITE input data are fully reliant on local (i.e. MPO and State) data developed by the AECOM Team in collaboration with NJDEP and NJDOT. No MOVES national default activity data is used for the Conformity Analysis.

MOVES input data development associated with the scenario years will be completed within this task. The SJTPO emissions estimation process will strongly benefit from the use of non-activity MOVES input data developed by the NJDOT and the NJDEP as inputs to PPSUITE and MOVES. The NJDOT has historically provided support for the data preparation for emissions estimates and evaluation of federal policy and guidance related to regional air quality analysis.

The PPSUITE/MOVES software package as employed by the NJDOT/NJDEP can expedite SJTPO's data gathering, a flawless County Data Manager import and database creation processes within the pressures of the conformity determination schedule.

Emissions calculations will be generated with the use of SJTPO's travel demand model, MOVES2014a emission model and related non-activity data. As stated in the Request For Proposals, it is anticipated that SJTPO staff will provide complete model run results for each scenario year. AECOM staff members that were responsible for the development of the latest version of the SJTPO's travel demand model will be available to provide technical guidance to SJTPO staff as needed. The AECOM Team will run MOVES2014a to conduct emission estimates of the TIP and RTP scenarios.

Emissions will be calculated for two categories of pollutants: volatile organic compounds (VOC) and oxides of nitrogen (NOx). CO does not need to be reported and is not necessary for this conformity determination.

2.3. Conformity Report

The AECOM Team will provide a technical memorandum summarizing the emission estimate methodology and results for July weekday VOC and NOx for five scenario years. We will provide summaries of VMT, speed, criteria pollutant quantities, and other relevant information to support drafting of the conformity report by SJTPO staff.

The AECOM Team will assist the SJTPO staff in finalizing the conformity report by reviewing its draft, supplying notes regarding the emission estimation methodology and providing quality control of the document.

The AECOM Team will update the post-processor User's Guide documentation to reflect specific SJTPO implementation conditions.

We will create a backup and installation DVD for SJTPO. Also, full copies of PPSUITE/MOVES input and output files, for all scenarios, will be provided on this DVD.

Project deliverables for Task 2: Regional Emission Analysis will include the following:

- The AECOM Team will develop a set of tables of overall emissions quantities for five scenarios of VOC and NOx for summer season. This table will compare the estimates to the established budgets and a Pass or Fail grade will be given for each pollutant for the *Transportation Matters - A Plan for South Jersey and FY 2018-2027 TIP* scenario.
- The AECOM Team will assist the SJTPO PM in review and completion of the conformity document that will be issued to the USEPA and the NJDOT for the Conformity scenario.
- A data DVD with MOVES backup information, run specifications and databases and related inputs, following USEPA's standard format will be provided to support USEPA's conformity determination review. The AECOM Team has worked extensively with client jurisdictions, NJDEP and USEPA to refine the format and presentation of this data.

TASK 3. OTHER AIR QUALITY MODELING WORK

New Jersey Department of Environmental Protection coordinates statewide air quality analysis effort and data development. The AECOM team will help SJTPO with the data development and emission estimates for four counties to support NJDEP's undertakings in emission inventory and budget development. We will apply CENTRAL/PPSUITE/ MOVES2014a setup for emission estimates and reporting. The SJTPO staff will provide loaded highway networks for each year/ scenario and participate in coordination with NJDEP and NJDOT.

3.1. Assistance in Preparation of SJTPO Portion of Statewide Emissions Inventories for NJDEP

The AECOM Team will assist SJTPO in a statewide emission inventory development (SJTPO portion only) by estimating the ozone precursors for 2017 attainment year. The selection of the base year will be determined during the consultation with NJDOT and NJDEP to be consistent with the latest USEPA National Emission Inventory, NJDOT HPMS VMT, and other available data. The activity input data for 2017 analysis years will be developed based on loaded highway network received from SJTPO. The non-activity data will be assembled in coordination with NJDEP.

Project deliverables for Task 3: Other Air Quality Modeling will include the following:

- The AECOM Team will develop emission model MOVES2014a inputs for year 2017 and create emissions summary tables to support statewide emission inventory.
- The AECOM Team will deliver a brief technical memorandum summarizing process and results.
- The AECOM Team will provide a data CD to the SJTPO and NJDEP or transfer data via FTP.
- The AECOM Team will provide additional technical assistance within the number of budgeted hours for Task 3 (10 hours).

ADDITIONAL INFORMATION

This project budget includes installation of the updated CENTRAL and PPSUITE software at the SJTPO Vineland office, testing of the software execution, evaluation of the performance and emissions estimates results, and training of SJTPO staff.

A full site license (for the SJTPO office in Vineland) for CENTRAL/PPSUITE will be provided to SJTPO. The CENTRAL/PPSUITE software is for use in the SJTPO office only and may not be transferred to others without prior arrangement with AECOM. This will be a perpetual license. MOVES and related data are in the public domain.

A number of elements of this project cannot be determined at this time including:

Additional, unanticipated interagency meetings beyond those highlighted above (Task 1 and 3)

The number and extent of analyses needed to achieve air quality / emissions requirements and targets. (Tasks 2 and 3)

Should additional efforts be needed to complete any task item, AECOM will alert SJTPO as soon as this is noted. AECOM will then work with SJTPO to identify the best way to proceed while remaining within the available budget.

Project Schedule

The project schedule is shown in the following table. As specified in the Request For Proposals, Notice To Proceed is assumed to be on or about October 17, 2016. All emission analysis runs and results will be completed and delivered to SJTPO by June 15, 2017. The CD/DVD containing inputs, outputs and backup information will be submitted by June 15, 2017. The AECOM team assisted SJTPO in several rounds of air quality conformity and we continue to perform significant tasks in air quality technical assistance to NJDOT and NJDEP. We will use our extensive experience to conduct SJTPO conformity determinations and to support additional planning requirements related to air quality.

Task	Process	Estimated End Date
FY 2018-2027 TIP Conformity Determination		
	Notice to Proceed	10/15/16
1.1	Kickoff Meeting	11/01/16
1.2	Confirm Project List	2/28/17
1.3	Teleconference with Interagency Consultation Group and request concurrence of attendees on SJTPO's proposed schedule, latest planning assumptions, relevant budgets, required pollutant tests, latest emission model, analysis years, preliminary project lists, etc.	3/01/17
1.4	Provide Interagency Consultation Group with draft Conformity Determination. Request concurrence with findings using email and/or a conference call.	5/19/17
2.1	SJTPO staff completed FY 2018-2027 TIP project coding and Travel Demand Model Process	3/06/17 - 3/31/17
2.2	Consultants Travel Demand Model runs review	4/03/17
2.3	MOVES analysis	4/05/17 - 5/05/17
2.4	Regional emission summary with MOVES2014a	5/05/17
2.5	Assistance with SJTPO conformity report	5/16/17
2.6	Meetings at STJPO office	6/15/2017
Other Air Quality Modeling Work		
3.1	Assistance in Preparation of SJTPO Portion of Statewide Emissions Inventories for NJDEP	11/07/15-1/06/2017

Total Cost of Each Task

AECOM Technical Services, Inc. (AECOM) is pleased to submit this Cost Proposal to conduct air quality conformity analysis for the Transportation Matters - A Plan for South Jersey (RTP) and the FY 2018-2027 Transportation Improvement Program (TIP) as the part of FY 2017 Air Quality Assistance project. This Cost Proposal accompanies, under separate cover, the Technical Proposal which responds to the Request For Proposals dated August 8, 2016.

The cost of the proposed services is \$48,832.

The DBE participation is covered by ACT Engineers. *12.7% of the project cost will be by the DBE consultant.*

Costs by task are as follows. A comprehensive tabulation of hours and costs by task and person is provided on the following pages in the format specified by the Request For Proposals.

Task	Task Name	Total Cost per Task
Task 1	Coordination	\$11,649
Task 2	Regional Emissions Analysis for Transportation Matters - A Plan for South Jersey and FY 2018-2027 TIP	\$27,855
Other Air Quality Modeling Work		
Task 3.1	Assistance in Preparation of SJTPO Portion of Statewide Emissions Inventories for NJDEP	\$8,478
Task 3.2	Assistance in Preparation of Ozone Maintenance Plan Budgets	\$0
Expenses		\$850
<i>Total</i>		\$48,832



FY 2017 Air Quality Assistance

October 2016 - June 2017

SUMMARY BUDGET FORM

Updated September 7, 2016

LABOR COSTS	
Direct Labor	\$11,844
Overhead at 139.14%	\$16,480
Subtotal Labor	\$28,324
NON-SALARY DIRECT EXPENSES	
Graphics	\$0
Travel	\$400
Postage	\$50
Subtotal Non-Salary Direct Expenses	\$450
SUBCONSULTANTS	
WSP Parsons Brinckerhoff	\$5,164
Michael Baker International	\$5,291
ACT Engineers (DBE)	\$6,205
Subtotal Subconsultants	\$16,660
FIXED FEE (12%)	\$3,398
TOTAL	
	\$48,832
DBE Participation	12.7%

**FY 2017 Air Quality Assistance
Cost Proposal/Budget Detail**

Name	Task				Total Hours	Total Direct Labor	Multiplier (Overhead * Fee)		Total Labor Cost
	1	2	3.1	3.2			Percent	Cost	
AECOM									
Hours	42	136	66	0	244	\$11,844	167.8%	\$19,878	\$31,722
WSP Parsons Brinckerhoff									
Hours	2	30	0	0	32	\$1,806	183.1%	\$3,308	\$5,114
Michael Baker International									
Hours	24	12	0	0	36	\$1,830	186.4%	\$3,411	\$5,241
ACT Engineers									
Hours	6	48	0	0	54	\$1,687	250.0%	\$4,218	\$5,905
Sub-total hours	74	226	66	0	366	\$ 17,167		\$ 30,815	\$ 47,982

Direct Expenses	
Printing / Reproduction	\$25
Travel	\$700
Data Purchase	\$0
Postage	\$125
Graphics	\$0
Subtotal Direct Expenses	\$850
TOTAL	\$48,832

AECOM	\$32,172
Sub-Consultants	
PB	\$5,164
Baker	\$5,291
ACT Engineers (DBE)	\$6,205
TOTAL	\$48,832

**FY 2017 Air Quality Assistance
Staffing Plan**

September, 2016

AECOM						
Name	Title	Hours per Task				Total Hrs
		1	2	3.1	3.2	
Ira Quiat	Project Director	2	0	0	0	2
Gary Davies	Senior Advisor	0	2	0	0	2
Tushar Patel	Senior Advisor	2	2	0	0	4
Anna Aleynick	Project Manager	32	44	24	0	100
Arkady Nakhimovsky	System Developer	0	20	16	0	36
Jiji Kottommannil	Transportation Modeler	0	4	0	0	4
Priyal Pandya	Environmental Engineer	0	40	24	0	64
Jacquilyn Coelho	Assistant Engineer	6	24	2	0	32
	Sub-total hours	42	136	66	0	244
WSP Parsons Brinckerhoff						
	Title	Hours per Task				Total Hrs
		1	2	3.1	3.2	
Kyle Winslow	Senior Transportation Engineer	2	6	0	0	8
Leo Tsang	Lead Transportation Planner	0	24	0	0	24
	Sub-total hours	2	30	0	0	32
Michael Baker International						
	Title	Hours per Task				Total Hrs
		1	2	3.1	3.2	
Robert d'Abadie	Senior Transportation Planner	24	8	0	0	32
Ying-Tzu Chung	Environmental Specialist	0	4	0	0	4
	Sub-total hours	24	12	0	0	36
ACT Engineers						
	Title	Hours per Task				Total Hrs
		1	2	3.1	3.2	
Carol Beske	Principal	4	0	0	0	4
Eric Rosina	Project Engineer	2	4	0	0	6
Michael Countess	Environmental Engineer	0	44	0	0	44
	Sub-total hours	6	48	0	0	54

Summary of All Firms

Hours per Task				Total Hrs
1	2	3.1	3.2	
74	226	66	0	366

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

RESOLUTION 1609-27: Approving the Selection of AECOM Technical Services, Inc. as the Consultant for the FY 2017 Air Quality Assistance Project

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 2017 SJTPO Unified Planning Work Program includes Federal Highway Administration planning funds for this project; and

WHEREAS, the Notice of Availability of Requests was sent to approximately 120 firms on July 21, 2016; and

WHEREAS, the Request for Proposal (RFP) announcement and supplemental materials were also posted on the publicly accessible SJTPO website; and

WHEREAS, one (1) proposal was received; and

WHEREAS, the SJTPO Technical Advisory Committee (TAC), at their July 11, 2016 meeting, vested consultant selection authority in a committee consisting of one representative from Atlantic, and Cumberland Counties, and SJTPO staff, which reviewed and evaluated the proposals in accordance with SJTPO's published criteria; and

WHEREAS, the Consultant Selection Committee recommends AECOM Technical Services, Inc., in association with WSP Parsons Brinckerhoff, Michael Baker International, and ACT Engineers serving as the Disadvantaged Business Enterprise (DBE) firm; and

WHEREAS, the SJTPO TAC, at their September 12, 2016 meeting, endorsed the recommendation of the Consultant Selection Committee; and

WHEREAS, the technical study is to be funded out of Task 17-401: Professional and Technical Services, with \$40,000 programmed in the FY 2017 Unified Planning Work Program (UPWP); and

WHEREAS, the revised scope and project cost exceeds the programmed \$40,000 budget for this project by \$8,832; and

WHEREAS, the remaining \$8,832 will be funded through unexpended balanced in Task 16-405: Local Safety & CMAQ Project Development.

NOW THEREFORE BE IT RESOLVED, that the Policy Board of the South Jersey Transportation Planning Organization hereby approves the above selection for the FY 2017 Air Quality Assistance Project, with a maximum fee of \$48,832; and

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.

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 September 26, 2016.


John W. Riskey, Secretary/Treasurer