

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

ITEM 1603-10: Approving the Selection of McCormick Taylor, Inc. as the Consultant for the SJTPO NJ 55/47/347 Purpose and Needs Statement Project

PROPOSAL

At its March 14, 2016 meeting, the Technical Advisory Committee recommended that the Policy Board approve the selection of McCormick Taylor in association with AmerCom Corporation serving as the DBE firm, for the SJTPO NJ 55/47/347 Project.

BACKGROUND

On January 25, 2016, SJTPO released a Request for Proposal (RFP) seeking a qualified firm to develop a Purpose and Need Statement which would serve as documentation of existing and projected transportation needs in the NJ 55/47/347 corridor in Cumberland and Cape May Counties. Compiling the Purpose and Need Statement is the first step in the process for eventually securing federal and state funds for transportation improvements. While the identification of transportation needs was conducted in the late 1990's, recent vehicle crashes, traffic growth, and other events indicate the need for a re-evaluation of conditions in the corridor. The Notice of Availability of Requests was sent to approximately 120 firms.

At its January 11, 2016 meeting, the Technical Advisory Committee vested consultant selection authority in a committee consisting of Cumberland County, Cape May County, SJTA, and SJTPO staff. Five proposals were received and scored by the selection committee with McCormick Taylor, Inc. as the top ranked firm.

The initial cost proposal submitted totaled \$99,939.57. Negotiations with McCormick Taylor's reduced the cost to \$99,099.97 with a 20.12% Disadvantaged Business Enterprise/Emerging Small Business Enterprise allocation. If this contract is awarded, the SJTPO DBE/ESBE participation rate would be 16.1%. 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 and two other technical studies (34th Street Adaptive Signal Systems Engineering and FY 2016-2017 Traffic Data Collection) are funded out of Task 16/404: Program Support Data Collection; which is funded in the amount of \$250,000 with a project completion of July 30, 2017.

PROJECT APPROACH

TASK 1: PROJECT MANAGEMENT

The objective of the McCormick Taylor Project Team is to work with the South Jersey Transportation Planning Organization (SJTPO) and Cumberland and Cape May Counties to address the transportation needs of its constituents through the successful development of a Purpose and Need Statement for the NJ 55/47/347 corridor. McCormick Taylor will deliver a quality product that satisfies both State and Federal requirements. The McCormick Taylor Project Manager will be the point of contact for this study. Our Project Team will implement project controls that will be tailored to the needs of the project as described below.

A. Project Schedule

The project schedule will be broken down by task and identify critical activities and key milestones. The detailed project schedule will be developed using Primavera software. As stated in the RFP, the project is scheduled to commence in April 2016 and will be completed by December 29, 2016. The schedule will be maintained on a monthly basis. McCormick Taylor is prepared to fully commit our resources to meet or exceed the project schedule. Attached is a preliminary schedule which will be refined and submitted for SJTPO approval upon Notice to Proceed.

B. Meetings/Coordination

McCormick Taylor will be available to attend status meetings with SJTPO throughout the project. We anticipate bi-weekly conference calls with SJTPO along with sit-down progress meetings if requested. Additional public involvement efforts are detailed in Task 2.

C. Invoicing and Progress Reports

Monthly progress reports and invoices will be submitted based on SJTPO and SJTA requirements. Progress reports will detail tasks performed during the billing period. Invoices will detail the budget for each task as well as previous and current costs, and the balance remaining in each task.

Task 1 Deliverables: *Project Schedule (updated monthly)*
Status Meeting Minutes
Monthly Invoices and Status Reports

TASK 2: PUBLIC INVOLVEMENT

McCormick Taylor has been at the forefront of developing and implementing innovative and cost-effective community outreach programs for various transportation and safety improvement projects. We offer an in-house staff of qualified and dedicated professionals who possess extensive experience in a broad range of public involvement-related disciplines, including: media and public relations; meeting facilitation and consensus-building; community outreach and stakeholder coordination; graphic design, website design and video production; and social media program strategies. Our professionals have prepared community outreach and public involvement programs for countless major transportation improvement projects, and are known within the industry for delivering creative, dynamic and effective programs for our clients.

A. Study Advisory Committee

As part of this task, McCormick Taylor will assist the Project Team in organizing and facilitating a Study Advisory Committee (SAC) that includes key stakeholders in the study area. Local stakeholders often have knowledge of local issues, and can provide helpful insight and guidance to the Project Team throughout the course of the project. We will work with SJTPO, Cape May County, Cumberland County and the local municipalities within the study area to establish the committee membership, role and objectives. As a starting point, we propose the SAC to include, but not be limited to, representatives from:

- SJTPO
- Cape May County
- Cumberland County
- SJTA
- NJDOT
- NJ Turnpike Authority
- NJDEP

- FHWA
- Pinelands Commission
- Maurice River Township
- Dennis Township
- Middle Township
- Lower Township
- Wildwood City

Our public involvement specialists are adept at reaching and engaging elected and local officials, resource agency personnel, key stakeholders, businesses, and special interest groups. This allows our team to vet the transportation issues that matter most to a community, and work with that community to help resolve those issues while also meeting the goals of our clients.

It is anticipated that the SAC will meet at two (2) key stages throughout the study. McCormick Taylor will make meeting arrangements including a mailing list, meeting invitations and agendas. McCormick Taylor will facilitate the committee discussions to achieve effective communication and reach the consensus that's required for a successful study outcome.

Early on, the first SAC meeting will ask attendees to assist the Project Team in identifying local issues, constraints and opportunities related to the study, including: summer traffic congestion; safety concerns; police, fire and EMS personnel opinions and input; local travel, commuting, school busing, and service delivery patterns; the location and contact information of major property owners; and opportunities for enhancing the outreach activities for the study. For the second SAC meeting, the Project Team will present the results of the data collection and analysis efforts and the Draft Purpose and Need Statement to obtain feedback from SAC members.

Handouts and display boards will be prepared as needed for each meeting. Each SAC meeting will provide SAC members with an opportunity to provide comments and input on the progress of the study. These meetings will give the SAC access to the information needed to make informed decisions and will allow the Project Team to listen and respond to their concerns.

Task 2 Deliverables: *Summary of Public Involvement Effort (to be included in the Summary Report prepared under Task 3)*

TASK 3: DATA COLLECTION AND ANALYSIS

A. Previously Completed Studies

McCormick Taylor will collect and review previous plans and studies conducted along the Route 47, Route 347 and Route 55 corridor within the project limits. These plans and studies include, but are not limited to, the following:

- *Shore Connection Concept Development Report* (McCormick Taylor, 2003)
- *NJ Route 49/50 and NJ Route 47/347 Corridor Enhancements, ITS and Operational Improvements Concept Development & Preliminary Engineering Report* (McCormick Taylor, 2012)
- *Shore Connection Committee Report* (Parsons Brinckerhoff, 1998)
- *Route 55 Freeway Extension Feasibility Study* (Gannett Fleming, Inc., Taylor, Wiseman & Taylor, Inc., and NJDOT Bureau of Environmental Analysis, 1993)
- *Emergency Evacuation Assessment for the SJTPO Region* (Parsons Brinckerhoff, 2004)
- *NJ Hurricane Evacuation Study – Technical Data Report* (NJSP Office of Emergency Management, FEMA Region II, National Weather Service and US Army Corps of Engineers, 1992)
- *New Jersey Hurricane Evacuation Study Transportation Analysis – Technical Memorandum* (PBS&J, US Army Corps of Engineers Philadelphia District, and FEMA, 2007)
- *Analysis and Modeling of Cape May County Roadway Elevations and Evacuation Routes Final Report* (NJIT, NJDOT and FHWA, 2006)
- Analyses and information related to the recent signalization of Route 47 and CR 646 (Port Elizabeth-Cumberland Road) intersection in Port Elizabeth
- *Southern New Jersey to Philadelphia Transit Study* (DRPA and STV, 2005)
- *Southern New Jersey to Philadelphia Mass Transit Expansion Alternative Analysis Study* (PATCO, DRPA and STV, 2009)

Upon review of the collected studies, plans and data, McCormick Taylor will prepare a written summary of information from these sources that is related to the NJ 55/47/347 corridors within the project limits. This may include material related to coastal evacuation routes, traffic congestion, and improvement recommendations. This information will be utilized to support the development of the Purpose and Needs Statement for the project.

B. NJDOT Management Systems Data

McCormick Taylor will prepare a shotgun letter to request NJDOT Management Systems data and rankings for Routes 55, 47 and 347 within the project limits. We will request data from the following NJDOT units:

- Pavement Management System
- Bridge Management System
- Drainage Management System
- Congestion Management System
- Safety Management System
- Maintenance Management System
- Geotechnical Data Management System

McCormick Taylor will prepare a written summary of all data obtained from NJDOT including relative rankings of any corridors, intersections, and bridges on the Management Systems. These data will help identify locations where problems have been previously recognized such as congested corridors, high crash intersections or segments, poor pavement condition, drainage or ponding issues, and poor bridge condition. This information will be utilized to support the development of the Purpose and Needs Statement for the project.

C. Traffic Counts and Analysis

Automatic Traffic Recorder (ATR) Counts

ATR counts have been conducted at numerous locations within the project limits between 2010 and 2014. With the exception of the SJTPO counts from 2011, many of the counts were conducted during weekdays and did not include summer weekend traffic. Additionally, turning movement count data for signalized intersections within the project limits are not available. Therefore, McCormick Taylor recommends that updated traffic counts be conducted during Summer 2016 to ensure that the Purpose and Need Statement is based on the most up-to-date traffic data.

ATR counts will be conducted by our subconsultant, AmerCom Corp., at the following locations throughout the project limits:

- 1) Route 55, approximate MP 20.4
- 2) Route 347, approximate MP 4.0
- 3) Route 47, approximate MP 3.5
- 4) Route 47, approximate MP 10.0
- 5) Route 47, approximate MP 20.0
- 6) Route 47, approximate MP 31.8

ATR counts will be conducted for a 7-day period in July 2016 (subsequent to July 4th weekend) to include weekdays and weekends. The counts will be used to identify time-of-day and daily traffic volume variations. The count locations identified above are locations where previous ATR count data is available from SJTPO and/or NJDOT. As such, a comparison of historical data can be conducted to help evaluate potential future growth along the NJ 55/47/347 corridor.

Turning Movement Counts

Manual turning movement classification counts will be conducted in Summer 2016 during the Saturday and Sunday peak periods by our subconsultant, AmerCom Corp. Based on the summer weekend traffic volume data that is currently available, it is anticipated that traffic counts will be conducted from 10:00 AM to 3:00 PM on both Saturday and Sunday. AmerCom will utilize Scout Video Collection Units for this study. These units can be set up to start and stop multiple times during the day to capture video from different time periods, or can be set up to count continuously. The video is processed via software that will aggregate volumes in 15-minute intervals by traffic movement and will provide a breakdown of light, moderate, and heavy vehicles as well as bicycles and pedestrians. Utilization of video data collection is a cost-effective and accurate method of conducting turning movement counts for this study.

Turning movement counts will be conducted at the following signalized intersections:

- 1) Route 55 and Route 47
- 2) Route 47 and CR 670
- 3) Route 347 and CR 670
- 4) Route 47 and Route 347
- 5) Route 47 and CR 610 (Petersburg Road)
- 6) Route 47 and CR 611 (Tyler Road)
- 7) Route 47 and Route 83
- 8) Route 47 and CR 657
- 9) Route 47 and Route 9

Staff members from McCormick Taylor will also observe and record findings in the field during the data collection process, such as queues and travel times.

Traffic Volume Forecasts

McCormick Taylor will obtain historic and projected population and employment data using available US Census data. We will also coordinate with SJTPO to determine if SJTPO can provide future year traffic data from the project area from the South Jersey Travel Demand Model (SJTDM). We will utilize the available data to recommend an appropriate annual background growth rate (ABGR) for future travel projections.

McCormick Taylor will apply the ABGR to Existing Year 2016 Saturday and Sunday Peak Hour volumes to forecast Design Year 2040 Saturday and Sunday Peak Hour volumes. .

Existing Conditions Traffic Analysis

McCormick Taylor will complete traffic capacity analyses using Synchro/SimTraffic software. The Synchro/SimTraffic models will encompass the study area (NJ 55, 47 and 347) and will include the nine (9) signalized intersections listed above. Analyses will be conducted for the Existing Year 2016 Saturday and Sunday Peak Hours based on the collected traffic count data. McCormick Taylor will request and obtain Traffic Signal Installation and Electrical Plans as well as timing directives from NJDOT for the traffic signals, which will be used in the Synchro analysis of existing conditions. Field observations including recorded queues and travel times will be used to calibrate the Existing Year traffic models.

LOS, delay and queue results will be summarized in tabular format for inclusion in the Summary Report to help quantify the existing summer traffic congestion issues along the NJ 55/47/347 corridors.

Future No Build Conditions Traffic Analysis

McCormick Taylor will use the calibrated existing conditions Synchro models to develop Synchro models to analyze the Design Year Saturday and Sunday Peak Hours under No Build Conditions. This scenario assumes that no geometric improvements are constructed along the corridors. LOS, delay and queue results will be summarized in tabular format for inclusion in the Summary Report to help quantify future summer traffic congestion issues along the NJ 55/47/347 corridors.

D. Crash Analysis

McCormick Taylor will utilize the Rutgers CAIT Plan4Safety crash tool to supplement the crash data provided by SJTPO and obtain any additional crash data for the study area. Crash data will be analyzed to identify roadway segments and/or intersections where crashes exceed the statewide average or where clusters of crashes have been reported. Results of the crash analysis will be used to identify safety deficiencies within the project area.

E. Roadway Deficiencies

McCormick Taylor request and review any available as-built plans for the NJ 55/47/347 corridor from Cape May and Cumberland Counties. We will also conduct a visual windshield survey of existing geometric conditions and utilize the NJDOT Straight Line Diagram to identify potential Controlling Substandard Design Elements (CSDEs). High crash locations will be evaluated to determine if existing CSDEs are contributing factors to crashes.

F. Environmental Constraints

McCormick Taylor will conduct a limited Environmental Screening of the NJ 55/47/347 corridor to provide baseline environmental and land use conditions, as well as agency regulatory jurisdictions, for consideration during the development of the project Purpose and Need Statement.

The Environmental Screening will be limited to desktop background research utilizing NJ GeoWeb and other available, pertinent information sources; and will encompass all areas generally within 300 feet of the existing pavement edge of the corridor roadways. A field reconnaissance will not be conducted at this time. The following elements will be addressed:

- Air / Noise Sensitive Receptors
- Socioeconomics including Community Facilities, Land Use, Parkland/Open Space, etc.
- Environmental Justice populations utilizing existing census information and USEPA EJ Screen tool
- Cultural Resources (Historic Sites, Districts, and Archaeology Grids)
- Section 4(f) Properties (Parkland, Recreational Areas, Historic Sites, Wildlife/Waterfowl Refuges)
- Wetlands, Floodplains, Threatened & Endangered Species (State and Federal) including a USFWS IPaC System Report, Vernal Pools, Forested Areas, Sole Source Aquifers, etc.
- Wild and Scenic Rivers
- Hazardous Waste/Contaminated Sites
- Regulated / Protected Areas and Potential Permit Encumbrances including:
 - NJDEP CAFRA, Waterfront Development, and Coastal Wetlands
 - NJDEP Freshwater Wetlands
 - NJDEP Flood Hazard Areas and Riparian Zones
 - NJDEP Tidelands (including obtaining Tidelands claims/conveyance mapping)
 - NJDEP Dam Safety
 - NJDEP Green Acres Program
 - NJ No Net Loss Reforestation Act
 - NJ Pinelands Commission
 - NJ Soil Erosion and Sediment Control Act
 - Wild & Scenic Rivers
 - US Army Corps of Engineers
 - US Coast Guard

The results of the above will be considered when developing the Purpose and Need Statement.

G. Bicycle/Pedestrian and Transit

McCormick Taylor will coordinate with local, County and State officials as well as the SAC to identify existing bicycle and pedestrian facilities as well as potential needs along the NJ 55/47/347 corridor. Facilities may include bicycle lanes, bicycle-compatible shoulders, sidewalks, ADA-compliant curb ramps and detectable warning surfaces, and pedestrian signal equipment (countdown heads and pushbuttons).

Additionally, we will obtain information regarding existing transit facilities along the corridor (e.g., NJ Transit bus service, bus shelters, etc.). We will also review previous studies completed for potential transit opportunities in South Jersey (e.g., Southern New Jersey to Philadelphia Transit Study, Glassboro-Camden Line, etc.) to determine future needs in the project area.

Task 3 Deliverables: *Traffic Flow Diagrams for Existing Year 2016 and Design Year 2040 Saturday and Sunday Peak Hours*
Summary Report of Data Collection and Analysis of Existing/Future Conditions
(Report format including appendices)

TASK 4: PURPOSE AND NEED STATEMENT

McCormick Taylor will utilize the results of the Data Collection and Analysis of Existing Conditions efforts to develop a Purpose and Need Statement for the NJ 55/47/347 corridor. The Purpose and Need Statement is a fundamental requirement for a project that will require future NEPA documentation, an EIS or an EA and permitting. The Purpose and Need Statement will include the following three (3) parts:

- *Project Purpose* – The Purpose is essentially the problem statement and identifies/defines the transportation problem that needs to be addressed. The Purpose will focus on the NJ 55/47/347 corridors. The Project Purpose is normally stated in one sentence and should be broad enough so that several alternatives can be considered to address the identified problem.
- *Project Need* – The Need includes the data that supports the Project Purpose. The Need may include factors such as safety deficiencies, roadway deficiencies, roadway capacity, and transportation demand. The Need should establish that a problem(s) exists based on the analysis of existing and future conditions.
- *Project Goals and Objectives* – The Goals and Objectives will identify additional issues to be considered and resolved as part of a successful solution. Goals and Objectives may address issues such as the County or local transportation systems, bicycle/pedestrian needs, and minimizing impacts to surrounding communities and the environment.

Task 4 Deliverables: *Draft NJ 55/47/347 Project Purpose and Need Statement (to be presented at SAC Meeting #2)*
Final NJ 55/47/347 Project Purpose and Need Statement
(Final Purpose and Need Statement to be included in Summary Report prepared under Task 3)



SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION/SOUTH JERSEY TRANSPORTATION AUTHORITY
 REQUEST FOR PROPOSAL
NJ 55/47/347 Purpose and Needs Statement
STAFFING PLAN

Staff Name	Title	Hours Per Task				Total Hours	Percent of Total Hours
		Project Management	Public Involvement	Data Collection & Analysis of Existing Conditions	Purpose and Need Statement		
		1	2	3	4		
McCormick Taylor							
Kenneth Burkhardt	Project Manager	24	8	8	16	56	76.3%
Amy Sokalski	Senior Engineer	16	16	40	32	104	
John Mullen	Senior Planner	0	16	8	8	32	
Walter Marks	Senior Engineer	0	0	24	0	24	
Kevin Boulden	Senior Engineer	0	0	16	0	16	
James Vena	Engineer	0	0	160	0	160	
Evan Rosario	Junior Engineer	0	0	24	0	24	
David Verdia	Junior Engineer	0	24	80	0	104	
Brian Kelly	Junior Engineer	0	0	72	0	72	
Emily Watts	Planner	0	40	0	0	40	
Katie Carver	Planner	0	36	0	0	36	
McCormick Taylor Subtotal		40	140	432	56	668	
AmerCom Corp. Consulting Engineers (DBE)							
William Munczinski	Senior Engineer	0	0	8	0	8	23.7%
Steve McNally	Engineer	0	0	120	0	120	
Dave Serra	Junior Engineer	0	0	80	0	80	
AmerCom Subtotal		0	0	208	0	208	
PROJECT TEAM TOTAL HOURS		40	140	640	56	876	100%

DBE Percentage (AmerCom Corp.) = 23.7% of total hours

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

RESOLUTION 1603-10: Approving the Selection of McCormick Taylor, Inc. as the Consultant for the SJTPO NJ 55/47/347 Purpose and Needs Statement 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 2016 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 January 25, 2016; and

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

WHEREAS, five proposals were received; and

WHEREAS, the SJTPO Technical Advisory Committee (TAC), at their January 11, 2016 meeting, vested consultant selection authority in a committee consisting of Cumberland County, Cape May County, the South Jersey Transportation Authority, and SJTPO staff, which reviewed and evaluated the proposals in accordance with SJTPO's published criteria; and

WHEREAS, the Consultant Selection Committee recommends McCormick Taylor, Inc. in association with AmerCom Corporation serving as the Disadvantaged Business Enterprise (DBE) firm; and

WHEREAS, the SJTPO TAC, at their March 14, 2016 meeting, endorsed the recommendation of the Consultant Selection Committee;

NOW THEREFORE BE IT RESOLVED, that the Policy Board of the South Jersey Transportation Planning Organization hereby approves the above selection for NJ 55/347/347 Purpose and Need Statement Project, with a maximum fee of \$99,099.97; 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 March 28, 2016.

Will Pauls /mal

Will Pauls, Secretary/Treasurer