

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE CENTRAL TEXAS
REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 10-45

**Work Authorization No. 1 to the Agreement for
Traffic & Revenue Services Engineering Services
With Wilbur Smith Associates**

WHEREAS, the Central Texas Regional Mobility Authority (“CTRMA”) was created pursuant to the request of Travis and Williamson Counties and in accordance with provisions of the Transportation Code and the petition and approval process established in 43 Tex. Admin. Code § 26.01, *et. seq.* (the “RMA Rules”); and

WHEREAS, the Board of Directors of the CTRMA has been constituted in accordance with the Transportation Code and the RMA Rules; and

WHEREAS, the CTRMA is currently pursuing the development of the proposed MoPac Improvement Project; and

WHEREAS, in Resolution No. 08-34, dated June 25, 2008, the Board of Directors instructed the Executive Director and CTRMA staff to undertake the procurement of traffic and revenue services (“T&R Services”) from one or more providers in accordance with the CTRMA’s Policies for Procurement of Goods and Services (the “Procurement Policies”); and

WHEREAS, in Resolution No. 09-14, dated February 25, 2009, the Board of Directors authorized the Executive Director to negotiate and execute contracts with the list of recommended providers, including Wilbur Smith Associates (“WSA”), for the provision of various T&R Services; and

WHEREAS, the CTRMA subsequently executed an Agreement for Traffic and Revenue Engineering Services with WSA effective August 1, 2009; and

WHEREAS, attached hereto and incorporated herein as Attachment “A” is Work Authorization No. 1 to the Agreement for Traffic and Revenue Engineering Services with WSA (“Work Authorization No. 1”) for the provision of various market valuation support services, analyses for the proposed MoPac Improvement Project, and an investment grade traffic and revenue study for the proposed MoPac Improvement Project; and

WHEREAS, it is necessary that the Board of Directors approve Work Authorization No. 1 and its execution by the Executive Director.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the CTRMA hereby approves Work Authorization No. 1 in the form or substantially the same form attached hereto as Attachment "A"; and

BE IT FURTHER RESOLVED, that Work Authorization No. 1 may be finalized and executed by the Executive Director on behalf of the CTRMA and that Work Authorization No. 1 may be amended from time to time by written amendment as deemed necessary by the Board of Directors.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 26th day of May, 2010.

Submitted and reviewed by:

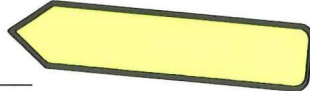
Approved:



Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority



Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number 10-45
Date Passed: 05/26/10



ATTACHMENT "A"
TO
RESOLUTION NO. 10-45
WILBUR SMITH WORK AUTHORIZATION NO. 1

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 1

AGREEMENT FOR TRAFFIC AND REVENUE ENGINEERING SERVICES

This Work Authorization is made as of this ___ day of _____, 2010, under the terms and conditions established in the AGREEMENT FOR TRAFFIC AND REVENUE ENGINEERING SERVICES, dated as of August 1, 2009 (the "Agreement"), between the Central Texas Regional Mobility Authority (the "Authority") and Wilbur Smith Associates ("Consultants"). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

Consultants will provide professional services related to Congestion Pricing for the proposed MoPac Improvement Project. Consultants will assist the Authority through the Market Valuation discussions with the Texas Department of Transportation ("TxDOT"), undertake peer reviews or conduct Sketch Level studies, assist with Operational Analyses, perform a Level 2 Intermediate Study (if required), and a Comprehensive Traffic and Toll Revenue ("T&R") study to bring this project to the bond market including presentations to rating agencies. Consultants will also provide T&R support for the securitization of a Transportation Infrastructure Finance and Innovation Act ("TIFIA") loan or a State Infrastructure Bank ("SIB") loan or Pass-Through Financing for this important project as may be required. The necessary traffic and revenue study documents will be prepared by Consultants.

In order to provide Traffic and Revenue support as noted above, the Authority will provide previously collected data, updated Travel Demand Model developed by Capital Area Metropolitan Planning Organization ("CAMPO"), operational models, and other relevant data to Consultants.

Section A – Scope of Services

A.1. Consultant shall perform the following Services:

A.1.(a) Market Valuation Support (Not to exceed \$60,000)

Consultants will provide the following services to the Authority under this task:

- Assemble and analyze all available data and studies developed by the Authority and TxDOT.
- Analyze data validity, existing travel demand models, travel demand modeling procedures and parameters, initial toll rate settings, and economic parameters used as inputs to travel demand growth.
- Review previous technical reports, license plate data collected by the Authority, and all relevant assumptions and procedures implemented in determining the traffic and toll revenue potential.

- Advise the Authority on the likely range of the high, medium and low revenue potential of the conceptual level existing traffic and toll revenue results.
- Attend relevant project meetings as requested by the Authority.
- In consultation with the Authority, request any readily available data from relevant local agencies including CAMPO as part of the Market Valuation technical support.

It is anticipated that Consultant may be asked to attend up to 10 internal meetings or conference calls and provide technical assistance and project management.

The development of independent estimates of traffic and toll revenue by the Consultants will be undertaken as part of subsequent tasks.

A.1.(b) Operational Analyses Support (Not to exceed \$80,000)

Consultants will provide support for Operational Analyses for the proposed MoPac Improvement Project corridor. The following tasks are envisioned:

- Review the existing developed CORSIM operational model and the peer reviews of the model by other Consultant teams and the Texas Transportation Institute (“TTI”).
- Respond to traffic and revenue questions and provide reviews as needed on the operational elements for the Environmental Documentation to be developed by TxDOT.
- Review and provide an opinion on the current access/egress configuration currently proposed as part of the environmental process.
- Evaluate the project under up to 5 different project configurations (such as access/egress points, lane configurations, phased construction) and incorporate up to 5 operational scenarios (such as tolling regimes, eligibility markets, growth scenarios) for evaluation as may be requested by the Authority.
- Develop a VISSIM operational model and re-evaluate results of the previously developed CORSIM model.
- Conduct select link analyses to confirm the proposed logical access and egress locations.
- Conduct an assessment of the proposed Direct Connectors (“DCs”) from the Managed Lanes to the downtown central business district based on a configuration to be provided by the Authority.

A.1.(c) Sketch Level Study (Not to exceed \$80,000)

Consultant will conduct studies to evaluate the toll feasibility of the proposed MoPac Improvement Project corridor and the following tasks are envisioned:

- Extend the study corridor to include Parmer Lane to Loop 360 (Capital of Texas Highway (approximately 14 miles as a two-lane managed lane facility). The existing model limits are from Parmer Lane to Lady Bird Lake, and this extension to the intersection of Loop 360 (Capital of Texas Highway) in the south will enable the analysis of additional alternatives currently under development.
- Incorporate several key parameters and investigate the risk profiles around each of the variables to provide the traffic and revenue estimates of the projects under a defined set of business term assumptions and configurations as determined by the Authority.
- Conduct an initial traffic and revenue feasibility assessment for the potential toll project to support the Authority and provide a sense of the project's traffic and revenue potential.
- Analyze the impact of parameters on the traffic and revenue including: opening year of the toll facility, historical traffic growth, toll rate setting, attractiveness of the toll facility, truck percentages, value-of-time, and expected economic development within the corridor.
- Evaluate the project under up to 5 different project configurations (such as access/egress points, lane configurations, phased construction) and incorporate up to 5 operational scenarios (such as tolling regimes, eligibility markets, growth scenarios) for evaluation as may be requested by the Authority.
- Provide traffic projections and estimated toll revenue for a 50-year period.

A.1.(d) Comprehensive Investment Grade (Level 3) Traffic and Toll Revenue study (Not to exceed \$500,000)

The services to be provided under this task will be a natural transition from the Data Collection and Level 2 Intermediate study efforts to conduct a Comprehensive Investment Grade Level 3 Analysis of the proposed MoPac Improvement Project corridor. The objective of the study will be to incorporate all relevant data from the data collection from the Level 2 study to generate investment grade traffic and revenue forecasts that can be used to support the project financing. The following tasks are envisioned under this effort:

- Perform and coordinate the collection of updated spot traffic counts along the proposed MoPac Improvement Project corridor as may be warranted to determine significant changes to traffic patterns or trends, including existing ramp-to-ramp and mainline traffic demand as well as traffic demand along the existing competitive routes within the corridor.
- Evaluate the origin/destination (“O-D”) survey and a stated preference survey previously collected to reconfirm the existing traffic profiles and behavioral characteristics of the major travel markets along the proposed MoPac Improvement Project corridor.

- Perform a detailed evaluation of the network coding and trip distributions currently forecasted by the CAMPO model.
- Incorporate the extensive data collection efforts implemented as a necessary part of the investment-grade effort.
- Apply corrections to the overall databases to ensure a clean and valid version of the model is used for toll feasibility valuation of the defined corridor segments.
- In coordination with an independent economist, AngelouEconomics, investigate the growth potentials along the corridor to assess the current trends and potential changes in distributions that have occurred since the last CAMPO land-use updates and the Level 2 Intermediate study.
- Adjust socioeconomic databases and trip tables if warranted, to evaluate the effects to the overall demand in the defined corridors.
- Evaluate the project under up to 5 different project configurations (such as access/egress points, lane configurations, phased construction) and incorporate up to 5 operational scenarios (such as tolling regimes, eligibility markets, growth scenarios) for evaluation as may be requested by the Authority.
- Advise and assist the Authority and its financial investment bankers, bond council, and general consulting engineer (collectively, the “marketing committee”) in modifying and excerpting portions of the final report for inclusion in the official statement.
- Participate in meetings with the marketing committee by written communication, telecommunication, and personal attendance to plan the sale of bonds, assist in the writing of the official statement and the trust agreement, and to meet with rating agencies, major investors, and bond insurers.

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority:

A.1.(d) Data Collection and Level 2 Intermediate Study (if needed) (Not to exceed \$600,000)

Consultant will undertake a Comprehensive Data Collection and a Level 2 Analysis of the proposed MoPac Improvement Project corridor. The following tasks are envisioned under data collection effort:

- Coordinate and implement the data collection for the proposed MoPac Improvement Project corridor using non-invasive methodologies to support the traffic and revenue assessment of the corridor.
- Update previously collected license plate matching data by the Authority to enhance the understanding of traffic patterns within the corridor.
- Collect traffic counts along the proposed MoPac Improvement Project corridor to determine the magnitude of existing ramp-to-ramp and mainline

traffic demand as well as traffic demand along the existing competitive routes within the corridor. (Traffic data to be collected by GRAM Traffic Counting, Inc.)

- Implement an O-D survey effort and a stated preference survey effort to observe the existing traffic profiles and behavioral characteristics of the major travel markets along the proposed MoPac Improvement Project corridor. (O-D data to be collected by GRAM Traffic Counting, Inc. Stated preference survey to be conducted by NuStats.)
- Compare the collected data to previously collected economic information to evaluate the socio-economic trends within the corridor.
- Collect sufficient information to satisfy the traffic data requirements for the implementation of a Comprehensive Level 3 Investment Grade Traffic and Toll revenue study using industry standard practices. (However, an independent economic assessment that is required for a Comprehensive Level 3 study is not conducted under this task. It will be conducted under the Comprehensive Level 3 study).
- Analyze and prepare the data collected to be distributed to the Authority and other partner agencies as directed by the Authority as a baseline source to traffic data.
- Review data collected for consistency and accuracy, and compile for distribution to other agencies in an industry standard format.

Consultant will perform a Level 2 Intermediate traffic and revenue estimate. The following tasks are envisioned:

- In consultation with the Authority, obtain the latest CAMPO model and perform a review and modification of the initial validated model inputs and databases.
- Investigate the model network and trip table databases and validate the corridor specific socioeconomic attributes.
- Extend the study corridor to include proposed MoPac Improvement Project from Parmer Lane to Loop 360 (Capital of Texas Highway) in the south for an approximate length of 14 miles.
- Use the collected traffic data on the existing segments of the project and competing routes to calibrate the models to reflect current conditions as reflected by the collected new data. The calibration will use the empirical evidence of critical parameters such as the hourly and weekly distributions of traffic, the electronic toll collection and video billing shares, truck percentage and axle distributions, and value-of-time characteristics obtained from the stated preference survey efforts.
- Perform a detailed evaluation of the network coding and trip distributions currently forecasted by the CAMPO model. The level of detail contained in the procedure will provide a sense of the existing and forecasted demand along the defined project in relation to existing trends. Corrections to the overall databases will be performed to ensure a clean and valid version of the model is used for valuation of the defined corridor segments toll feasibility.

- Investigate the growth potentials along the study corridor using readily available databases to assess the current trends and potential changes in distributions that have occurred within the Capital Area Metropolitan Planning Organization model.
- Evaluate the project under up to 5 different project configurations (such as access/egress points, lane configurations, phased construction) and incorporate up to 10 operational scenarios (such as tolling regimes, eligibility markets, or growth scenarios) for evaluation as may be requested by the Authority.

A.3. In conjunction with the performance of the foregoing Services, Consultant shall provide the following submittals/deliverables (“Documents”) to the Authority:

A.3.(a) Market Valuation Support:

Technical Memorandum documenting reviews, attendance at meetings or conference calls as warranted by the Authority, and technical assistance.

A.3.(b) Operational Analyses Support:

Technical Memorandum summarizing the analyses.

A.3.(c) Sketch Level Study:

Electronic file of the report and supporting spreadsheet files with the tables of the 50-year traffic and revenue projections for the 5 scenarios.

A.3.(d) A.1.(e) Comprehensive Investment Grade (Level 3) Traffic and Toll Revenue study:

A final report that will be designed to be suitable for possible inclusion in an official statement or other financing documents. Presentations to financial community including rating agencies. Electronic spreadsheet file and tables of the 50-year traffic and revenue projections.

A.3.(e) Data Collection and Level 2 Intermediate Study (if needed):

Report summarizing the major tasks undertaken, operational analyses and data collected as part of the Level 2 Intermediate study. Electronic file of the report and supporting spreadsheet files with the tables of the 50-year traffic and revenue projections.

Section B – Compensation

In return for the performance of the foregoing obligations, the Authority shall pay to Consultant the amount not to exceed \$ 1,320,000, based on the following fee estimate. Compensation shall be in accordance with the Agreement:

B.1. Market Valuation Support - Not to exceed \$60,000

B.2. Operational Analyses Support - Not to exceed \$80,000

B.3. Sketch Level Study - Not to exceed \$80,000

B.4. Comprehensive Investment Grade (Level 3) Traffic and Toll Revenue study - Not to exceed \$500,000

B.5. Data Collection and Level 2 Intermediate Study - Not to exceed \$600,000

Section C – Other Provisions

Consultant will invoice the Authority for the actual cost of services on a Cost Plus Fixed Fee basis and on a monthly schedule through invoices submitted to the Authority for work completed. The developed fee is based on the phased approach as outlined within the scope and incorporates an evolution of the project from a Level 2 to an eventual Level 3 study. Under this phased approach the Level 2 study will capture the majority of the data collection and model development efforts that will be necessary for inclusion in the Comprehensive Level 3 study. Consultant will provide an ongoing update on the project status and will notify the Authority before performing any additional and unforeseen work efforts that may extend beyond the estimated maximum fee. This fee arrangement, if not acceptable to the Authority, can be modified.

**AUTHORITY:
CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

**CONSULTANT:
WILBUR SMITH ASSOCIATES**

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____