



**CENTRAL TEXAS  
Regional Mobility Authority**

September 28, 2016  
AGENDA ITEM #9

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Approve Amendment No. 8 to the  
Agreement with Stantec Consulting  
Services, Inc., for traffic and revenue  
consulting services

Strategic Plan Relevance: Regional Mobility

Department: Finance

Contact: Bill Chapman, Chief Financial Officer

Associated Costs: \$ 3,000,000

Funding Source: Operating Fund or General Fund

Board Action Required: Yes

Description of Matter:

Since 2007, Stantec has provided traffic and revenue consulting services to the Mobility Authority. This proposed amendment authorizes additional work by Stantec for traffic and revenue studies related to existing and new Mobility Authority projects in an amount not to exceed \$ 3,000,000.00.

Backup provided: Draft Amendment  
Draft Resolution

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

**RESOLUTION NO. 16-0XX**

**APPROVING AMENDMENT NO. 8 TO THE AGREEMENT WITH STANTEC  
CONSULTING SERVICES INC. FOR TRAFFIC AND REVENUE SUPPORT  
SERVICES FOR EXISTING AND PROPOSED MOBILITY AUTHORITY PROJECTS**

WHEREAS, by Resolution No. 07-62, dated October 3, 2007, the Board of Directors authorized an agreement with Stantec Consulting Services, Inc. (“Stantec”) to provide traffic and revenue studies for the Mobility Authority (the “Agreement”); and

WHEREAS, since 2007 the Authority has extended the original contract and Stantec has continued to provide traffic and revenue studies and services for the Authority; and

WHEREAS, the Authority has a continuing need to monitor traffic and revenue for its existing toll projects and for new Authority projects, and the Executive Director recommends continuing to use Stantec for traffic and revenue services described in the proposed Amendment No. 8 to the Agreement which is attached to this resolution as Exhibit A.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors authorizes the Executive Director to negotiate and execute Amendment No. 8 to the Agreement in the form or substantially the form attached as Exhibit A to this resolution.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 28<sup>th</sup> day of September, 2016.

Submitted and reviewed by:

Approved:

\_\_\_\_\_  
Geoffrey Petrov, General Counsel

\_\_\_\_\_  
Ray A. Wilkerson  
Chairman, Board of Directors

**Exhibit A**



**Stantec Consulting Services Inc.**  
50 West 23rd Street, 8th Floor, New York NY 10010-5272

September 21, 2016

Mr. Bill Chapman, CFO  
Central Texas Regional Mobility Authority  
3300 North IH-35, Suite 300  
Austin, TX 78705

**Reference: Stantec Professional Consulting Services Agreement, 8<sup>th</sup> Amendment**

Dear Mr. Chapman:

We are pleased to deliver our scope and budget (Exhibit A) to provide continuing Traffic and Revenue Consulting Services to the Central Texas Regional Mobility Authority as it moves forward with various toll road projects now in operation or in the planning stages. Following is a description of the anticipated work efforts that would be provided under this agreement:

**Level 3 Traffic & Revenue (T&R) Studies -- 2 projects**

We anticipate conducting two investment grade T&R studies over the next 3-year period and have included those efforts in our scope and budget. These studies would be similar to the October 2015 Bergstrom Expressway T&R Study. Each of the studies will produce traffic & forecasts and documentation suitable for financing, including coordination with the financial team as well as meetings and presentations to rating agencies and investors. We will use our latest edition of the regional traffic model and fully update the required inputs, including validating the peak period baseline conditions to actual levels in the study area; this will be vital to reflect presence of new projects with managed lanes. We have included an allowance for subconsultants to conduct specialized studies such as demographic updates, traffic counts & surveys and stated preference surveys.

**Level 2 Intermediate T&R Study -- 1 project**

The scope of this study would be less extensive than a Level 3 Study, with fewer surveys and validation efforts, but would provide a reasonable basis for deciding whether to advance the project to the financing stage.

**Level 1 Preliminary T&R Studies -- 2 projects**

This effort would use the latest version of the traffic model for planning purposes to support preliminary feasibility studies of new projects or changes to existing projects. As the underlying traffic model would be based on a Level 3 baseline, only limited new surveys would be conducted for the Level 1 Study, sufficient to provide an initial reading on likely traffic & revenue potential of the project.



September 21, 2016  
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**Reference: Stantec Professional Consulting Services Agreement, 8<sup>th</sup> Amendment**

**Monitor & Support (Ongoing Efforts)**

We will monitor the transaction and revenue data for 183A, the Manor Expressway and other elements that become operational, comparing actual conditions to forecast levels and identifying reasons for potential variations. We anticipate conducting sketch level studies and project evaluations, toll schedule evaluations, simulation studies and miscellaneous support in our role as the Authority's Traffic Consultant.

Stantec will be the prime consultant on this assignment, drawing on the expertise of subconsultants as needed for specialized studies. These may include Michael Bomba, Alliance Transportation Group, CJ Hensch & Associates, Quality Counts, GRAM Traffic Counting, and Resource Systems Group.

Our project personnel are especially qualified to undertake this work. Tom Harknett will function as the Principal in Charge and also serves as Stantec's Practice Leader for the Traffic and Revenue Studies Group. I will be the Project Manager (PM), with 30+ years of experience in toll feasibility studies and more than 15 years of involvement in Austin-based projects for the Mobility Authority as well as TxDOT. Sumeet Kishnani will be the Assistant PM and other key staff will include Tiffany Carson and Ann Hughitt.

Exhibit A presents a summary and details of the anticipated typical budget levels for the tasks described above. As discussed with you, the total budget is \$3,000,000.

We look forward to working with you in the coming years.

Very truly yours,

**STANTEC CONSULTING SERVICES INC.**

A handwritten signature in blue ink that reads "William Ihlo".

William Ihlo, PE  
Principal  
50 West 23<sup>rd</sup> Street, 8<sup>th</sup> floor  
New York, NY 10010  
Ph. (646) 490-3852  
William.Ihlo@stantec.com

Exhibit A	
Table of Contents	
Exhibit Number	Exhibit Title
Exhibit A-1	Hourly Labor Rate Table
Exhibit A-2	T&R Summary Budget
Exhibit A-3	Typical Level 3 T&R Budget
Exhibit A-4	Typical Level 2 T&R Budget
Exhibit A-5	Typical Level 1 T&R Budget
Exhibit A-6	Monitor & Support Budget

<b>Exhibit A-1</b>	
<b>Stantec Consulting Evergreen Contract</b>	
<b>Hourly Labor Rate Table September 21, 2016</b>	
<b>Labor Category</b>	<b>Hourly Rate</b>
Principal	\$ 117.00
Project Manager	\$ 95.00
Senior Engineer	\$ 80.00
Engineer	\$ 65.00
Junior Engineer	\$ 45.00
Entry Level Engineer	\$ 35.00
FAR Overhead	Current Rate
Profit	10.0%

Note: Rates subject to escalation from time to time.

<b>Exhibit A-2</b>	
<b>Stantec Consulting Evergreen Contract T&amp;R Summary Budget September 21, 2016</b>	
<b>Task</b>	
Level 3 T&R (2 Projects)	\$ 2,080,000
Level 2 T&R (1 Project)	\$ 420,000
Level 1 T&R (2 Projects)	\$ 162,000
Monitor & Support	\$ 338,000
<b>Total</b>	<b>\$ 3,000,000</b>



**EXHIBIT A-3**  
**Stantec Consulting Typical Level 3 T & R Budget September 21, 2016 (2 Projects)**

Task Description	Principal		WI Project Manager	SK & AH Senior Engineer	MK Engineer	TC Junior Engineer	Entry Level Engineer	Total Hours	Total Direct Labor	Total Labor Cost
	Task 1	8	40	40	40	20	20	20	148	\$10,836
Task 2	8	80	300	16	100	200	150	838	\$53,286	\$162,638
Task 3	8	16	16	16	16	16	16	88	\$6,056	\$18,484
Task 4	16	80	500	200	200	250	250	1296	\$82,472	\$251,719
Task 5	8	40	40	40	20	20	20	148	\$10,836	\$33,073
Task 6	16	80	340	340	120	200	170	926	\$59,422	\$181,366
Task 7	16	120	300	300	100	200	150	886	\$58,022	\$177,093
Task 8	16	80	240	80	80	120	120	656	\$43,472	\$132,684
Task 9	40	120	120	120	60	200	120	660	\$42,780	\$130,572
Task 10	40	120	120	120	40	100	60	480	\$34,880	\$106,460
Task 11	40	120	120	120	40	100	60	480	\$34,880	\$106,460
Task 12	40	120	220	220	80	110	80	650	\$46,630	\$142,323
Task 13	40	120	120	120	40	60	60	440	\$33,080	\$100,965
<b>Total Hours</b>	<b>296</b>	<b>1136</b>	<b>2476</b>	<b>916</b>	<b>1596</b>	<b>1276</b>	<b>1276</b>	<b>7696</b>	<b>\$516,652</b>	<b>\$1,576,910</b>
Labor Rate	\$117.00	\$95.00	\$80.00	\$65.00	\$45.00	\$35.00	\$35.00			
Total Direct Labor	\$34,632	\$107,920	\$198,080	\$59,540	\$71,820	\$44,660	\$44,660			
Multiplier (FAR 177.47%, fee 10.0%)	3.052	3.052	3.052	3.052	3.052	3.052	3.052			
<b>Total Labor Cost</b>	<b>\$105,703</b>	<b>\$329,390</b>	<b>\$604,574</b>	<b>\$181,726</b>	<b>\$219,207</b>	<b>\$136,310</b>	<b>\$136,310</b>			<b>\$1,576,910</b>
Direct Expenses										\$53,090
Total Stantec Effort										\$1,630,000
Demographic Update										
Subconsultant Bomba										\$150,000
Stated Preference Survey										
Subconsultant RSG										\$150,000
Supplemental Traffic Counts										
Subconsultant TBD										\$150,000
<b>Total All Work</b>										<b>\$2,080,000</b>

**EXHIBIT A-4**

**Stantec Consulting Typical Level 2 T & R Budget September 21, 2016 (1 Project)**

Task Description	Principal	Project Manager	Senior Engineer	Engineer	Junior Engineer	Entry Level Engineer	Total Hours	Total Direct Labor	Total Labor Cost
			Engineer	Engineer	Engineer	Engineer		Labor	Cost
Task 1 Project Definition (Alignment, access, lanes, tolls)	2	24	20	10	20	10	86	\$6,014	\$18,356
Task 2 Update Model Inputs	4	24	40	40	80	40	228	\$13,548	\$41,351
Task 3 Establish Screenlines	2	8	16	8	12	8	54	\$3,614	\$11,031
Task 4 Model Validation	4	20	160	80	120	40	424	\$27,168	\$82,921
Task 5 Modeling Runs (3 model yrs, 4 scenarios)	4	40	80	40	80	40	284	\$18,268	\$55,757
Task 6 Analysis of Results	8	60	60	40	60	60	288	\$18,836	\$57,491
Task 7 Sensitivities	8	60	60	20	40	40	228	\$15,936	\$48,639
Task 8 Documentation & Meetings	16	60	60	20	50	20	226	\$16,622	\$50,733
<b>Total Hours</b>	<b>48</b>	<b>296</b>	<b>496</b>	<b>258</b>	<b>462</b>	<b>258</b>	<b>1818</b>	<b>\$120,006</b>	<b>\$366,279</b>
Labor Rate	\$117.00	\$95.00	\$80.00	\$65.00	\$45.00	\$35.00			
Total Direct Labor	\$5,616	\$28,120	\$39,680	\$16,770	\$20,790	\$9,030			
Multiplier (FAR 177.47%, fee 10.0%)	3.052	3.052	3.052	3.052	3.052	3.052			
<b>Total Labor Cost</b>	<b>\$17,141</b>	<b>\$85,827</b>	<b>\$121,110</b>	<b>\$51,185</b>	<b>\$63,455</b>	<b>\$27,561</b>			<b>\$366,279</b>
<b>Direct Expenses</b>									<b>\$3,721</b>
<b>Total Stantec Effort</b>									<b>\$370,000</b>
<b>Demographic Update</b>									
Subconsultant Efforts									
Subconsultant -- Bomba									\$25,000
<b>Supplemental Traffic Counts</b>									
Subconsultant TBD									\$25,000
<b>Total All Work</b>									<b>\$420,000</b>

**EXHIBIT A-5  
Stantec Consulting Typical Level 1 T & R Budget September 21, 2016 (2 Projects)**

Task Description	Principal	Project Manager	Senior Engineer	Engineer	Junior Engineer	Entry Level Engineer	Total Hours	Total Direct Labor	Total Labor Cost
			Engineer	Engineer	Engineer	Engineer	Hours	Labor	Cost
Task 1 Project Definition (Alignment, access, lanes, tolls)	2	20	20	8	16	8	74	\$5,254	\$16,036
Task 2 Update Model Inputs	2	20	40	16	40	16	134	\$8,734	\$26,658
Task 3 Establish Screenlines	2	8	8	8	8	8	42	\$2,794	\$8,528
Task 4 Modeling Runs (3 model yrs; 4 scenarios)	4	20	40	16	40	16	136	\$8,968	\$27,372
Task 5 Analysis of Results	4	20	40	16	40	16	136	\$8,968	\$27,372
Task 6 Sensitivities	4	20	30	16	40	16	126	\$8,168	\$24,930
Task 7 Documentation	4	20	20	8	20	8	80	\$5,668	\$17,300
<b>Total Hours</b>	<b>22</b>	<b>128</b>	<b>198</b>	<b>88</b>	<b>204</b>	<b>88</b>	<b>728</b>	<b>\$48,554</b>	<b>\$148,195</b>
Labor Rate									
Total Direct Labor	\$117.00	\$95.00	\$80.00	\$65.00	\$45.00	\$35.00			
Multiplier (FAR 177.47%, fee 10.0%)	\$2,574	\$12,160	\$15,840	\$5,720	\$9,180	\$3,080			
<b>Total Labor Cost</b>	<b>3,052</b>	<b>3,052</b>	<b>3,052</b>	<b>3,052</b>	<b>3,052</b>	<b>3,052</b>			
<b>Direct Expenses</b>	<b>\$7,856</b>	<b>\$37,114</b>	<b>\$48,346</b>	<b>\$17,458</b>	<b>\$28,019</b>	<b>\$9,401</b>			<b>\$148,195</b>
<b>Total Stantec Effort</b>									<b>\$805</b>
									<b>\$149,000</b>
<b>Miscellaneous Support</b>									
Subconsultant Efforts									
Subconsultant -- TBD									<b>\$13,000</b>
<b>Total All Work</b>									<b>\$162,000</b>

**EXHIBIT A-6**

**Stantec Consulting Monitor & Support Budget September 21, 2016**

Task Description	Principal	Project Manager	Senior Engineer	Engineer	Junior Engineer	Entry Level Engineer	Total Hours	Total Direct Labor	Total Labor Cost
Task 1 Monitor Daily & Monthly Traffic & Revenue Reports	4	40	40	40	40	40	204	\$13,268	\$40,496
Task 2 Sketch Level Studies	4	40	80	40	40	40	244	\$16,468	\$50,263
Task 3 Toll Schedule Evaluation	4	40	40	40	40	40	204	\$13,268	\$40,496
Task 4 Simulation Studies	4	40	80	80	80	40	324	\$20,868	\$63,693
Task 5 Miscellaneous Support	4	120	140	140	100	40	544	\$38,068	\$116,190
<b>Total Hours</b>	<b>20</b>	<b>280</b>	<b>380</b>	<b>340</b>	<b>300</b>	<b>200</b>	<b>1520</b>	<b>\$101,940</b>	<b>\$311,138</b>
Labor Rate	\$117.00	\$95.00	\$80.00	\$65.00	\$45.00	\$35.00			
Total Direct Labor	\$2,340	\$26,600	\$30,400	\$22,100	\$13,500	\$7,000			
Multiplier (FAR 177.47%, fee 10.0%)	-3,052	3,052	-3,052	3,052	-3,052	3,052			
<b>Total Labor Cost</b>	<b>\$7,142</b>	<b>\$81,188</b>	<b>\$92,786</b>	<b>\$67,453</b>	<b>\$41,204</b>	<b>\$21,365</b>			
<b>Direct Expenses</b>									<b>\$311,138</b>
<b>Total Stantec Effort</b>									<b>\$1,862</b>
<b>Total Stantec Effort</b>									<b>\$313,000</b>
<b>Miscellaneous Support</b>									
<b>Subconsultant Efforts</b>									
<b>Miscellaneous Support</b>									
<b>Subconsultant - TBD</b>									<b>\$25,000</b>
<b>Total All Work</b>									<b>\$338,000</b>

Summary List of Stantec T&R Assignments -- 9/21/16			
Project	Task	Schedule	Comments
290E DC's: Sensitivities	T&R Results	By 9/23	With & W/O SH 130 widening
	1 Page Summary	By 9/27	
PBM Surcharge Options	T&R Model Output	By 9/30	Test range of values (1.33 to 2.00 for 2015 and 2020)
	Summary Memo	By 10/4	
Oakhill Parkway: Level 1 Study	T&R Results	By 10/28	At-grade & DC options
	Summary Memo	By 11/11	
290E DC's: Level 3 Study	Data Collection	Oct./Nov. '16	Check TxDOT cost sharing
	SED Update	Oct. '16 to Jan. '17	Check TxDOT & CAMPO cost sharing
	T&R Report	Spring 2017	
183A Phase 3: Level 3 Study	Data Collection	Spring 2017	Update traffic after MIP opening
	T&R Report	Fall 2017	