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November 19, 2012

Fort Bend County Toll Road Authority
c/o Mr. Bill Jameson
WJ Interests, LLC
2333 Town Center Drive, Suite 100
Sugar Land, TX 77478

**Subject: Fort Bend County Toll Road Authority
Systemwide Level 2 T&R Study 2012**

Dear Mr. Jameson:

CDM Smith is pleased to submit this proposal at your request to perform a Level 2 Traffic and Revenue Study for the Existing and Committed Fort Bend County Toll Road Systems. This study would include updated long-term revenue forecasts for the existing facilities, specifically the Fort Bend Parkway and the Fort Bend Westpark Tollway. In addition, the study would include updated traffic and revenue estimates for two committed expansions of the existing FBCTRA System:

- The Fort Bend Westpark Expansion; and
- The Fort Bend Parkway Extension.

CDM Smith has performed previous analyses of these new facilities including a recently completed Level 2 T&R study for the Westpark Expansion; estimates will be updated to reflect recent project configurations, new modeling inputs and other changes. Segment D of the S.H. 99 Grand Parkway, currently being financed by Fort Bend Grand Parkway Toll Road Authority, will not be included in our analysis.

STUDY OBJECTIVE AND SCOPE

The objective of the study is to develop long-range revenue forecasts for the existing Fort Bend County Toll system. The updated forecasts will reflect the latest socioeconomic growth assumptions, the latest planned highway improvements for the region, the most recent traffic levels at all toll plaza facilities and the recently adopted toll policy, which will determine future rate increases on the FBCTRA System. The results would not be of sufficient detail to support project financing, but elements of the work effort could still be employed to advance the analysis to investment grade at a later date if used within a reasonable timeframe.



The study will include a review of the latest socioeconomic forecasts, and a detailed assessment of recent trends and impacts on traffic and revenue due to regional toll adjustments, the economic downtown and gasoline price variability.

The study will also include a capacity analysis, recognizing that some portions of the FBCTRA System already experience congestion during peak periods. In addition to insuring appropriate capacity limits as part of the revenue forecasting process, the study would evaluate when various portions of the existing system may be in need of widening, or perhaps variable pricing measures to deal with future capacity issues.

Finally, a limited number of sensitivity tests will be undertaken to further aid understanding of the potential risk. Potential changes in basic study assumptions regarding economic growth, both higher and lower, as well as future gas prices and the potential impacts of future competing or complimentary new toll facilities or other highway improvements would be tested.

The study work program would be comprised of nine overall tasks, including:

- Task 1: Data Collection and Mobilization;
- Task 2: Recent Traffic Trend and Impact Analysis;
- Task 3: Economic Growth Analysis;
- Task 4: Existing System Long Range Traffic and Revenue Analysis;
- Task 5: Updated Analysis of Fort Bend Parkway Extension;
- Task 6: Updated Analysis of Westpark Expansion;
- Task 7: Base Case Systemwide Revenue Forecast;
- Task 8: Sensitivity Tests; and
- Task 9: Documentation and Meetings.

A brief description of work elements and deliverable products associated with each of these tasks is provided below.

TASK 1: DATA COLLECTION AND MOBILIZATION

Shortly following receipt of notice-to-proceed, the study would be initiated with a kick-off meeting in Houston, with representatives of FBCTRA, others from Fort Bend County, and any others you may designate. In addition to establishing lines of communication and refining deliverables and project schedules, various assumptions regarding the study would be discussed. These would include assumptions regarding timing, and whether or not to assume, the implementation of other planned toll facilities, both those which have been designated to FBCTRA as well as other facilities such as the Grand Parkway. Other important assumptions would relate to future toll rates, presuming that the study would include the future impacts of the previously agreed upon rate

setting policy for FBCTRA. It would also be important to refine the latest project configurations for both FBCTRA extension projects.

This task would also include development of a complete updated data profile for all parts of the FBCTRA System. CDM Smith maintains regular files of monthly traffic and revenue data by section and has limited data by specific toll plaza location. If possible, CDM Smith would like to update this to get a monthly profile by toll plaza as well as samples of hourly traffic variations at all mainline toll plaza locations.

CDM Smith would develop “benchmark” traffic and revenue profiles, including a breakdown of traffic by vehicle classification, hourly variations and directional splits at all mainline and ramp locations.

Updated information regarding the regional transportation plan would also be obtained, including the proposed timing of facility expansions and new facilities, whether these are toll or toll-free. Any planned transit initiatives would also be reviewed for potential impacts on the FBCTRA System.

TASK 2: RECENT TRAFFIC TREND AND IMPACT ANALYSIS

CDM Smith would conduct a five-year traffic trend analysis, by toll plaza. This would allow patterns to be established regarding recent historical growth which would be important to FBCTRA’s financial advisors and others in assessing the reasonableness of the updated long-term forecasts. In addition, this would permit a detailed analysis of impacts of several recent significant events, all of which will be important to discuss in the traffic and revenue study. These would include:

- Recent toll increases;
- The recent downturn in the regional and national economy resulting from the housing crisis and credit crunch; and
- The potential impacts of significant increases in gas prices.

Historical data regarding past toll increases have shown relatively small impacts on the FBCTRA system. It will be important to try to isolate this impact from corollary impacts due to slowing economy and higher gas prices.

A draft report chapter will be prepared at the conclusion of this task. This will provide useful insights to FBCTRA staff regarding short and long-term effects of economic conditions, capacity constraints, and rapidly increasing motor fuel prices. It also will provide important insights into evaluating the potential long-term impact of possible continued increases in fuel prices.

TASK 3: ECONOMIC GROWTH ANALYSIS

Given the fact that the existing FBCTRA System now has a long record of successful operation and strong revenues, it is not proposed that a full independent economic forecast be developed as part of the study. CDM Smith will retain the services of CDS Market Research (CDS), a highly regarded local economic forecaster for the greater Houston region, to provide a general review and comment on the most recently developed forecast prepared by H-GAC. CDS will develop detailed zone by zone, updated estimates for the two corridors under study here to add to the recent work performed for several recent Fort Bend studies.

CDM Smith will also review and analyze the population and employment forecasts in each of the FBCTRA project corridors and corridor segments. This will include the development of historical and projection trend tables and graphics displaying anticipated growth levels by traffic zone in each corridor.

The analysis would focus on critical socioeconomic variables including population, households and employment. To the extent available, CDM Smith would also obtain information regarding income trends in each corridor.

TASK 4: EXISTING SYSTEM LONG RANGE TRAFFIC AND REVENUE ANALYSIS

The development of updated Level 2 long-range forecasts for the existing system will begin with the “rebenchmarking” of existing traffic and revenue on each section of the FBCTRA System. This would be developed from the updated systemwide traffic profile developed in Task 1, and would reflect the impacts analyzed in Task 3.

Unless advised otherwise, the future forecasts would assume annual rate increases provided by the FBCTRA Rate Setting Policy, adopted in 2011. That policy anticipates that rates will be adjusted at the beginning of each new fiscal year to reflect the change in the consumer price index (CPI) over the past 12 months. Rates will be adjusted when computed rates reach appropriate thresholds based on rounding criteria for each individual payment category and each type of toll plaza.

The forecast will include estimated impacts on existing facilities from proposed nearby new toll facilities, such as the S.H.99 Grand Parkway and Sam Houston Tollway widening projects. However, new revenue forecasts for those other facilities will not be developed as part of this analysis.

The latest travel demand model provided by H-GAC and refined for recent Houston-area studies will be used in developing the long-range forecasts, specifically to estimate traffic growth in each of the corridors and to model impacts of anticipated future toll rate adjustments. The model will be fully calibrated in each of the existing FBCTRA facility corridors. Some of this has already been

completed in recent studies. However, it will be necessary to fully recode some of the Fort Bend County toll facilities, to properly recognize appropriate tolling measures and capacity constraints. H-GAC has used a more simplified coding technique for the existing FBCTRA facilities which will need to be revised for purposes of this study.

A series of future traffic assignments would be made to the existing system. Model runs would be made separately for AM peak, PM peak and off-peak conditions. Assignments would be run at 2011/12, 2015, 2020, 2030 and 2040 levels. Toll rate assumptions for each of these future years would be computed based on an assumed 2.5 percent per year rate of inflation, unless advised otherwise at the kick-off meeting.

An important aspect of the base case existing system traffic and revenue forecast would be a detailed capacity analysis of all mainline sections and toll plazas. While the model will be sensitive to capacity constraints, in some cases post model capacity adjustments may be needed to specifically recognize limitations in certain locations during certain hours.

The development of long-term forecasts, with traffic assignments made at five-year increments through 2040, will enable identification of when capacity problems can be expected to exist on the existing system in future years.

TASK 5: UPDATED ANALYSIS OF FORT BEND PARKWAY EXTENSION

Recognizing new travel demand models are now available, new T&R Estimates for this project would be fully updated in this task. The new revenue estimates would recognize the current configuration, and phasing, and planned toll plaza locations. It will also recognize the future rate increases due to the rate setting policy.

Traffic and revenue impacts of the proposed Extension would be based both on revenue estimates for the new toll plaza on the Extension itself, as well as possible impacts at other existing toll facilities along the Parkway. Annual revenue estimates would be prepared and summarized. The results of the analysis would be summarized in a technical memorandum to be submitted at the completion of the task. The analysis would also be documented in a chapter of the final traffic and revenue study report.

TASK 6: UPDATED ANALYSIS OF FORT BEND WESTPARK TOLLWAY EXPANSION

In 2011, Level 2 analyses were undertaken for the proposed Fort Bend Westpark Expansion. Accordingly, the analysis will now be fully updated to reflect the refinements being considered for this systemwide study.

Traffic and revenue impacts of the proposed Extension would be based both on revenue estimates for the new toll plaza on the Extension itself, as well as possible impacts at other existing toll facilities along Westpark. Annual revenue estimates would be prepared and summarized. The results of the analysis would be summarized in a technical memorandum to be submitted at the completion of the task. The analysis would also be documented in a chapter of the final traffic and revenue study report.

TASK 7: BASE CASE SYSTEMWIDE REVENUE FORECAST

In this task, the traffic and revenue estimates developed for the base system in Task 5, as well as the updated forecast for the Fort Bend Parkway Extension and the Fort Bend Westpark Expansion would be brought together into a new long term revenue forecast for the entire FBCTRA System. This would include revenue by facility, as well as revenue impacts of the new facilities on any of the existing toll roads. The revenue forecasts would also reflect new toll rate assumptions, based on the Toll Rate Setting Policy.

TASK 8: SENSITIVITY TESTS

A very limited number of sensitivity tests would be performed to test the potential impacts on base case revenue forecasts associated with possible changes in certain basic assumptions. Sensitivity tests might well include the impact of higher or lower economic growth assumptions. It would also be important to include the sensitivity test of more significant increases in gasoline prices over the long term, a test which is becoming increasingly important to the financial community. In total, up to 6 sensitivity tests have been budgeted, with each scenario tested in a single analysis year being considered one test.

TASK 9: DOCUMENTATION AND MEETINGS

This task would include all study documentation. The draft and final reports would be submitted as an electronic version. After final comments are received, twenty (20) copies of the final report in compact disk form would be provided.

This task would also include major meetings conducted as part of the study. In addition to the kick-off meeting, this would include a meeting to present study findings.

STUDY SCHEDULE

CDM Smith is prepared to initiate the study immediately upon receipt of notice-to-proceed. A period of four months would be required to complete all aspects of the study up to and including submittal of the draft final study report. Assuming notice-to-proceed would be received by around



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November 30, 2012, this would result in delivery of the full draft report by approximately March 31, 2013. The final report would be delivered within two weeks of receipt of final comments.

STUDY BUDGET

The lump-sum, fixed-fee for conduct of the study in accordance with the scope and schedule defined above is \$ 315,226.00. A detailed breakdown of this cost is provided in Exhibit 1.

The lump-sum fixed-fee would be payable monthly based on the estimated percentage of work on each task completed during each month. This would be documented in a written progress report to be submitted within two weeks following the completion of each month.

* * *

We sincerely appreciate the opportunity to be of continued service to the Fort Bend County Toll Road Authority. We hope this proposal meets your requirements. If not, we would be most pleased to discuss with you ways in which it could be made more responsive.

Sincerely,

Robert "Butch" Babineaux, Jr., PE
Associate
CDM Smith Inc.

ACCEPTED BY CONTENT AND TERMS:

James D. Condrey
NAME

Chairman Board of Directors
TITLE

Fort Bend County Toll Road Authority
ORGANIZATION

SIGNATURE

11/28/12
DATE



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Proposal - FBCTRA Systemwide T&R Study 2012/13

Personnel Category	1	2	3	4	5	6	7	8	9	Total Hours	Average Rate	Salary Cost
Principal	4	8	4	16	16	10	4	8	16	86	\$95.68	\$8,228
Project Manager	16	32	16	80	64	40	32	40	72	392	\$69.68	\$27,315
Associate	0	0	0	0	0	0	0	0	0	0	\$59.28	\$0
Senior Engineer/Planner	0	40	0	120	100	80	40	20	20	420	\$52.00	\$21,840
Engineer / Planner	0	0	0	0	0	0	0	0	0	0	\$42.64	\$0
Assistant Engineer / Planner	56	80	40	240	120	80	64	40	20	740	\$36.40	\$26,936
Technician	0	40	20	80	80	40	0	0	80	340	\$30.16	\$10,254
Other Support Staff	0	4	8	0	0	0	8	8	40	68	\$28.08	\$1,909
Total Hours	76	204	88	536	380	250	148	116	248	2,046		
Total Salary	\$3,536	\$9,306	\$3,781	\$24,494	\$17,971	\$12,022	\$7,247	\$6,273	\$11,852			\$96,483
Overhead (173% of Salary)	\$6,111	\$16,082	\$6,535	\$42,328	\$31,056	\$20,776	\$12,523	\$10,841	\$20,481			\$166,732
Profit (10%)	\$965	\$2,539	\$1,032	\$6,682	\$4,903	\$3,280	\$1,977	\$1,711	\$3,233			\$26,321
Subtotal	\$10,611	\$27,926	\$11,348	\$73,505	\$53,930	\$36,078	\$21,747	\$18,826	\$35,566			\$289,536
Direct Expenses												
Travel	-	-	-	-	-	-	-	-	\$3,200			\$3,200
Subsistence	-	-	-	-	-	-	-	-	\$1,440			\$1,440
Production (CDs)	-	-	-	-	-	-	-	-	\$250			\$250
Data (economy.com)	-	-	\$1,000	-	-	-	-	-	-			\$1,000
Traffic Courts	-	-	-	-	\$2,400	\$2,400	-	-	-			\$4,800
Subconsultants	-	-	\$15,000	-	-	-	-	-	-			\$15,000
Total Direct Expenses	-	-	\$16,000	-	\$2,400	\$2,400	-	-	\$4,890			\$25,690
Total Cost	\$10,611	\$27,926	\$27,348	\$73,505	\$56,330	\$38,478	\$21,747	\$18,826	\$40,456			\$315,226

Work Tasks

- Task 1: Data Collection and Mobilization
- Task 2: Recent Traffic Trend and Impact Analysis
- Task 3: Economic Growth Analysis
- Task 4: Existing System Long Range Traffic and Revenue Analysis
- Task 5: Updated Analysis of Fort Bend Parkway Extension
- Task 6: Updated Analysis of Fort Bend Westpark Tollway Expansion
- Task 7: Base Case Systemwide Revenue Forecast
- Task 8: Sensitivity Tests, and
- Task 9: Documentation and Meetings

ESTIMATED BASIC STUDY FEE
EXHIBIT 1