



June 11, 2010

Fort Bend Grand Parkway Toll Road Authority
Sugarland, TX 77479

**Re: Proposal for an Investment Grade Traffic and Revenue Study
Grand Parkway Segment D**

Gentlemen:

As requested, Wilbur Smith Associates (WSA) is most pleased to submit this proposal to Fort Bend Grand Parkway Toll Road Authority (FBGPTRA) for a comprehensive traffic and revenue study for the proposed Grand Parkway Toll Road, Segment D (GP/D).

As requested we have refined and revised a work plan, budget and schedule for this project to have WSA simultaneously perform the Comprehensive Traffic and Study of multiple segments of the Grand Parkway, currently assumed to be Segment D in Fort Bend County plus Segments E, F1, F2 and G in neighboring counties. Where possible certain common tasks have been designed to achieve economies that could be passed on to multiple county agencies. This amounts to significant savings as compared to a process which commissioned the works as totally independent studies. Efficiencies have been possible though cost-sharing of common activities, tasks, meetings and expenses etc. As authorization for these other agencies has not been approved WSA has also provided a budget should the Segment D study proceed as a stand alone study.

WSA has not approached sub-consultants at this time and all cost estimates here within should be considered reasonably accurate but indicative at this time; in particular WSA would need to obtain firm cost estimates with sub-consultants before notice-to-proceed.

GRAND PARKWAY SEGMENT D

The proposed Grand Parkway Segment D is located west of Houston, beginning just south of I.H. 10 and continuing approximately 18.2 miles to a terminus at U.S. 59. Future extensions of the Grand Parkway would fully encircle the Houston metropolitan area. Currently, the facility is constructed as S.H. 99, a four-lane divided state highway, except between Oyster Creek and Owens Road where a four-lane undivided roadway exists.

The portion of Segment D that begins at I.H. 10 and proceeds southward to the Westpark Tollway will be un-tolled. The portion of the GP/D that extends from Westpark south to U.S. 59 will be tolled where mainlane overpasses will be constructed as toll facilities.

SCOPE OF WORK

A comprehensive work program has been developed to meet each of the specific objectives of the study, and designed specifically to yield an "investment-grade" analytical result which can be used in support of possible project financing. As defined in more detail below, the study would be comprised of a total of 9 tasks, including:

- Task 1: Mobilization and Data Collection;
- Task 2: Origin-Destination Surveys;
- Task 3: Stated Preference and Market Research;
- Task 4: Independent Economic Review;
- Task 5: Regional Model Update;
- Task 6: Toll Collection Operations Concept;
- Task 7: Traffic and Revenue Analysis;
- Task 8: Sensitivity Tests; and
- Task 9: Documentation and Meetings.

Following completion of the basic study, WSA would remain available to provide input into the financing team, possibly including rating agency presentations, bond insurer presentations, document reviews and more. In particular, as the schedule for the studies of the other segments of the project is longer than for Segment D, it may be necessary to refine or enhance the Segment D analysis. Since it is not possible to know the precise level of effort required at this point in time, these supplemental services would be considered optional and compensation for that task would be based on our standard schedule of hourly rates and would be on an "as needed" basis.

TASK 1: MOBILIZATION AND DATA COLLECTION

The study would commence immediately upon receipt of notice-to-proceed. It would begin with a refinement of the study approach and an early kick-off meeting in the Houston area to officially begin the work. At that kick-off meeting, it would be important to discuss details and physical limitations of the project as currently envisioned as well as exploring the various possible dimensions of the project's configurations and operations plans which will need to be considered and the possible institutional and regulatory issues associated with them.

In addition, staffing, lines of communication and other items regarding project administration would be discussed and agreed.

An extensive data collection program would also be undertaken in this task. All available prior studies on the Grand Parkway corridor would be obtained and reviewed. This includes any

available reports or other documentation regarding the planned construction of the Grand Parkway.

Given the nature of this project, an extensive program of speed-delay runs would be made on existing elements of the Grand Parkway and other competing roadways. This would include multiple vehicle runs in each travel direction during peak and off-peak conditions. In addition to recording total travel times at major intersections, data would be recorded on a small distance increment basis to enable development of speed/distance diagrams to pinpoint areas of recurring congestion under current operating conditions.

This task would also include assembly of complete updated information on the regional transportation improvement program. This would include, of course, details about the planned expansion of U.S. 290 and any other improvements. In addition, any information on competing planned capacity improvements to the highway system would be obtained. Information on any planned transit initiatives would be inventoried, reviewed and incorporated into the model network of facilities and services.

All available traffic count information in the corridor, as obtained by TxDOT, H-GAC, HCTRA or others would be assembled and reviewed. This would be supplemented by a comprehensive program of machine traffic counts conducted by WSA and its sub consultants.

TASK 2: ORIGIN-DESTINATION SURVEYS

An important objective of the study would be to develop a detailed operating profile of potential users of the proposed Grand Parkway Toll Road. This would include origin and destination surveys of travelers in the study corridor. This task will involve collection of origin-destination information to obtain a "real world" measure of travel movements in the project corridor. It is proposed that these surveys are conducted when schools are in session, during late August or early September. Survey management, planning and travel efficiencies have been accounted for based on similar activities for other segments occurring simultaneously.

Eight origin-destination survey locations are proposed as part of the Segment D Grand Parkway study analysis. These would include the following:

<u>Route</u>	<u>Location</u>	<u>Survey Type</u>
S.H. 99	South of I.H. 10	Video
S.H. 99	North of U.S. 59	Video
S.H. 99	Off Ramp (T.B.D)	Mailback Handout
S.H. 99	Off Ramp (T.B.D)	Mailback Handout
S.H. 99	Off Ramp (T.B.D)	Mailback Handout
T.B.D. Arterial	Intersection of T.B.D	Mailback Handout
T.B.D. Arterial	Intersection of T.B.D	Mailback Handout
T.B.D. Arterial	Intersection of T.B.D	Mailback Handout

Two origin and destination survey formats are being proposed in order to obtain the necessary information. The first is a video license plate capture approach designed to intercept motorists traveling along the existing S.H. 99 south of I.H. 10 and North of U.S. 59. This approach is proposed to minimize impacts on mobility along the heavily traveled facility. Under this survey approach video cameras would be positioned on overpasses at the locations described above. Individual cameras would be trained on each of the mainlanes passing the S.H. 99 segment indicated above. The captured license plate information would be entered into data files and forwarded to WSA.

WSA would then remove any "duplicate" plates from the raw data base file of observed license plates. This final data base of license plates would then be forwarded to FBGPTRA/HCTRA, who would then match the observed license plates with a Department of Public Safety (DPS) data base of vehicle owners. The names and addresses of vehicle owners would be added to the file provided by WSA and forwarded to a qualified mailing house who would then forward postage-paid, pre-addressed mailback survey questionnaires to motorists. Motorists would be asked to complete the form and return it via mail as soon as possible. WSA will discuss this approach with the various agencies immediately after notice to proceed to obtain the relevant permissions and determine the exact procedures needed.

The second is a mailback handout format that is designed to intercept motorists at the six arterial survey locations. Under this approach, survey sites would be set up at S.H. 99 off ramps and at the selected intersection locations described previously (to be determined). Traffic survey ahead warning signs would be positioned along the approach to the intersection advising motorist of the survey operation ahead. When the traffic signals turn red, survey personnel would pass among the stopped vehicles and distribute postage-paid, pre-addressed mailback survey questionnaires. When the traffic signals turn green, survey personnel would exit the intersections and motorists would pass unimpeded. They would be requested to complete the form and return it via mail as soon as possible.

Under both survey approaches the survey questionnaires are setup so that the survey remains anonymous with no linkage between the motorist and the questionnaire. Motorist would be queried as to their trip origin and destination. In addition, information regarding trip purpose, trip frequency and vehicle occupancy would be obtained. The hour, day and direction of each survey would also be indicated on the survey questionnaire. Surveys would be conducted on weekdays only from 7:00 a.m. to 7:00 p.m. At all arterial intersection locations WSA would employ police to assist with traffic operations and safety procedures.

The questionnaires would also invite survey participants to participate in more detailed surveys via the internet, if desired. This would be entirely optional on the part of the origin-destination survey respondent. The more detailed surveys would involve additional market research, described in Task 3 below. Those origin-destination survey participants indicating a willingness to participate in the internet survey would be requested to provide their email address to participate further.

In conjunction with survey operations a comprehensive traffic count program would also be conducted. This would include continuous 7-day hourly traffic counts at each of the survey sites. Vehicles would be classified by axle groupings.

The machine classification counts would then be used to expand the survey sample to peak hour and daily traffic level conditions. The survey data would be geo-coded and ultimately converted to the H-GAC traffic zone system throughout the region. The data would then be screened for logical movements and other quality control measures. Improper data would be deleted; the data would then be expanded using the control count information for subsequent use in the analysis.

A technical memorandum would be provided at the conclusion of this task summarizing the results of the survey, including a summary of traffic counts, trip characteristic distributions, survey sample and more.

TASK 3: STATED PREFERENCE AND MARKET RESEARCH

WSA has worked extensively in the Houston region and possesses a wealth of information and experience about local motorists' perceptions and willingness to pay tolls.

As part of the multi-county efforts for the Grand Parkway project, Task 3 would include extensive stated preference surveys. These surveys are to be distinguished from origin-destination surveys (Task 2) in that they are intended to obtain insights into motorists' preferences, a range in the perceived value of travel time of motorists and the probability of using the facility under a variety of hypothetical operating conditions. The stated preference surveys would also aid in assessing the potential public response to various initiatives related to the EZTag program in the region.

The stated preference surveys would make use of an interactive video interview technique, designed and conducted by a qualified sub-consultant. Under this approach, the sub-consultant's survey representatives would operate in shopping malls, major employer locations or other appropriate locations to conduct intercept surveys where participants would be initially screened for general usage potential of the corridor.

By using interactive computer-assisted technology, the survey participants would first be asked to provide information about their typical trip in the corridor. Based on their responses to this, the survey would adapt a series of "trade off" questions that would specifically be appropriate given the nature of the particular trip being made by the survey participant. These trade-off questions, each of which would be posed on a separate "screen" would ask motorists to indicate their preference under a variety of differing scenarios, with travel times, delays, toll rates and other factors being varied between each option. Typically, at least nine trade-off questions would be asked; based on motorists responses the analysis would be able to provide information regarding value of time and information regarding preferences about electronic toll collection.

In addition to the intercept approach, it may also be possible to obtain some survey participation directly on line via the Internet. A total of 1,000 fully-completed surveys will be targeted.

The results of the surveys would be analyzed by the sub-consultant and documented in a separate report. This would provide important input into the detailed modeling analysis to be conducted in subsequent tasks.

In addition, WSA will use the following information to determine appropriate values of time to be used for modeling sensitivity to paying tolls:

- recent value of time studies both in the Houston region and elsewhere in Texas;
- the 'revealed' sensitivity to actual toll increases observed on the HCTRA system;
- local income distributions and other socio-economic factors; and
- information obtained from the travel pattern surveys.

An alternative approach had been recommended for the stand-alone study. The above scope and budget provided at the end of this proposal assume multi-county efficiencies.

TASK 4: INDEPENDENT ECONOMIC REVIEW

An essential element of any investment-grade traffic and revenue study is a detailed independent review of socioeconomic forecasts for the corridor and the region. As part of the study, as we have done successfully on a number of studies in the past, WSA would retain the services of a noted expert on the Houston economy, to perform this analysis.

This expert would review the overall reasonableness of the latest H-GAC socioeconomic forecasts in the project corridor. He would identify development patterns which may influence growth in corridor travel demand in the future and compare these to assumptions in the underlying H-GAC forecasts.

The independent economic review will analyze the H-GAC data and compare H-GAC and his own prior socioeconomic forecasts at the TAZ level throughout the GP/D project corridor and, for the entire region, at a macro level.

A detailed independent report will be provided discussing any proposed suggested changes and/or re-benchmarking of socioeconomic forecasts as a result of the comparison with H-GAC's forecasts. The independent report would be available for possible use in support of project financing, if needed.

Multi-county cost efficiencies have been assumed. The appointed expert would also be available for financing team inputs and related assistance should this be needed subsequent to completion of the work, at additional cost.

TASK 5: REGIONAL MODEL UPDATE

As part of this task, WSA would obtain the latest H-GAC regional model. We are already in possession of a fairly recent version; discussions would be held with H-GAC to determine if any later information is available, including any later socioeconomic forecasts, trip tables, or network. Zonal disaggregation will be conducted in the corridor area to enable more accurate representation of future land use development and estimated demand usage for interchanges along Segment D.

The origin-destination data collected in Task 2 would be integrated into the H-GAC model, retaining within the model trip tables those trips which would not be expected to pass through one or more of the survey station locations. This approach will properly recognize the "total universe" of trips while obtaining the benefit of the "real world" measurement of observed travel patterns conducted as part of this study.

After incorporation of the survey data, the base year model would then be "calibrated" in the GP/D corridor to reflect the detailed current operations profile. This would include refinement of a.m. peak, p.m. peak, off-peak and night trip tables against the specific counts conducted in Tasks 1 and 2 and across a series of screenlines in the study area.

As part of this task, adjustments would also be made to trip tables to reflect any socioeconomic changes which arise from the independent economic review. WSA would run the full H-GAC model recognizing the adjusted socioeconomic files or solicit the assistance of H-GAC in the trip table adjustment process. Alternatively, WSA could develop changes to the trip tables using a fratar process.

TASK 6: TOLL COLLECTION CONCEPT

Previous studies of the Grand Parkway have not benefitted from the most detailed actual information about potential customers and their travel patterns. In this task, WSA would review and if necessary refine the general concept of the electronic toll collection plan for this project based on the detailed information collected and analysis undertaken for the previous study tasks.

In particular WSA would review the toll collection concept to ensure that revenue is collected in a most efficient manner given customer preferences and actual travel patterns. It will also be necessary to determine compliance with any overall Grand Parkway toll rate policy and "rules of the road" as specified by relevant agencies and stakeholders.

TASK 7: TRAFFIC AND REVENUE ANALYSIS

With the toll collection concept developed in Task 6, and the refined regional travel demand model developed in Task 5, Task 7 would involve an overall traffic and revenue analysis for GP/D. Traffic assignments would be made at the proposed opening year (2013) and several future years (likely 2015, 2020, 2025 and 2035) taking account of the opening schedule of other segments.

For each analysis year, traffic assignments would be run under a "no-build," toll free and alternative toll rate level conditions. It is anticipated that five alternative toll rates would be tested to determine optimum levels. This series of assignments would be performed in each analysis year, allowing development of toll sensitivity curves at opening and future-year levels.

Traffic assignments would be made at A.M. peak, P.M. peak and off-peak conditions separately. Results of the traffic assignments would be carefully reviewed for reasonableness, using corridor share, select link and capture rate analyses. Post-model adjustments would be made to reflect any changes due to calibration errors, and a review would be made of capacity constraints on the facility, and adjacent roads, if necessary.

Based on the controlled traffic and revenue estimates in the assignment years, annual traffic and revenue forecasts would be developed by interpolating intermediate years. Revenue estimates would be adjusted in the early years to reflect an assumed "ramp-up." Revenues would be based on average toll assumptions, which would recognize the anticipated proportion of traffic between passenger cars and commercial vehicles as well as the specific characteristics of the selected toll collection system.

As requested, initial draft traffic and revenue estimates would be available at the beginning of the fifth month in the study schedule based on whatever data and analysis is available at that time. This is required to assist in completing the design process.

This task would conclude near the completion of the study schedule with the development of final "base case" investment-grade traffic and revenue estimates for Grand Parkway Segment D.

TASK 8: SENSITIVITY TESTS

Since the product of this study is intended to be used in support of project financing, it will be important to conduct a series of "sensitivity tests" for use by rating agencies in the financial community in assessing financial risk on the project. Any traffic and revenue study is based, in part, on certain key assumptions regarding future growth, motorists' perceived value of time, highway improvement assumptions and so on. The sensitivity tests would be intended to estimate the "sensitivity" of the revenue estimates to potential changes in basic assumptions.

For budget purposes, we have assumed up to five sensitivity test scenarios would be required, each of which would be run at up to three analysis years. While the specific tests to be performed would be defined later in the study, typical tests might include:

- Reduced growth scenarios;
- Reduced value of time scenarios;
- Modified assumptions regarding the timing of other Grand Parkway Segments;
- Modified assumptions on ETC penetration and utilization over space and time; and/or
- Modified assumptions regarding highway or transit improvement scenarios.

TASK 9: DOCUMENTATION AND MEETINGS

This task would extend from the beginning of the work throughout the course of the study and would include most of the efforts related to development of documentation and various meetings during the course of the study. This would include a series of technical memoranda to be submitted by WSA at the conclusions of Tasks 2 and 3, and the Initial T&R Estimates in Task 7. In addition, task level submittals would be made by the independent economist for Task 4.

Documentation would also, of course, include a detailed traffic and revenue report, suitable in content and format for ultimate direct inclusion in an Official Statement, if desired in support of actual financing. The traffic and revenue report would initially be submitted in draft form. After receipt of comments, 15 final copies of the report would be provided, together with "camera-ready" originals in hard copy and electronic form.

This task would also include various project meetings and coordination efforts throughout the course of the work. In addition to the kick-off meeting under Task 1, there would be monthly meetings, which would also be used for coordination and communication with FBGPTRA and their consultants during the course of the work.

A major presentation of the results would be held at the end of Task 7, and a final presentation of study findings and the draft report can be conducted at the conclusion of the work. In total, our budget assumes up to six local meetings including the kick-off meeting, final presentation of findings and all the various intermediate meetings as part of the study. It is assumed that some meetings will be joint meetings with the stakeholders of other Grand Parkway segments, however due to differing schedules some meetings are assumed to be FBGPTRA-only.

FINANCING TEAM INPUTS

While not included in the base study budget, the WSA Team would continue to remain available to provide additional support to the FBGPTRA financing team if needed. Potential efforts in this regard might include, but not necessarily be limited to:

- Rating agency presentations;
- Bond insurer presentations;
- Bond document review;
- Traffic engineer certifications, as needed;
- Financing team meetings; and
- Potential investor presentations, etc.

Since the specific nature and level of effort required under this task cannot be determined at this time, no budget is provided for this in the lump-sum fee indicated below. It is proposed that compensation for these supplemental services if, and when needed, be made on the basis of our standard schedule of hourly rates.

This would also apply to any efforts following the Segment D study, should any refinements or adjustments be needed later.

SCHEDULE AND FEE

WSA is prepared to initiate the study immediately upon receipt of your notice-to-proceed. The schedule would permit completion of all study efforts within approximately six months of notice-to-proceed, up to and including submittal of the draft final report. A schedule summary is shown in Exhibit 1. The final report would be submitted within two to three weeks following receipt of comments from FBGPTRA (and other stakeholders).

Financing team inputs, if required, would be provided if and when needed subsequent to submittal of the draft report.

The lump-sum, fixed-fee for conduct of the study in accordance with the above work program is \$624,990. A detailed breakdown of this cost is provided in Exhibit 2. This includes significant efforts by an independent economic consultant and survey sub-consultants. It also includes extensive costs related to origin-destination surveys and other significant data collection efforts given the unique nature of this project. This compares to a cost estimate of \$699,995 for a standalone study (not including a stated preference study). Should this study need to proceed as a standalone study we would be pleased to provide a revised proposal.

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. The lump-sum fee does not include efforts related to follow-on Financing Team Inputs.

The study fee also assumes it can obtain prior reports, any available traffic count information, updated modeling inputs from H-GAC and permission to undertake traffic surveys without cost to WSA. Estimated operating costs of the surveys, both the stated preference and origin-destination are included in the budget estimate.

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We sincerely appreciate the opportunity to submit this proposal for professional services, and thank you for considering WSA for this important assignment. If the proposal adequately meets your needs, it may serve as the basis of a study agreement/contract by executing the section at the end of the document and returning an originally signed copy. If the proposal does not meet your needs, we would be pleased to discuss ways in which this proposal can be made more responsive.

Respectfully submitted,

WILBUR SMITH ASSOCIATES

Scott A. Allaire

Scott Allaire
Division Manager – TFT New Haven

ACCEPTED BY CONTENT AND TERMS:

James D. Condrey DDS.
NAME

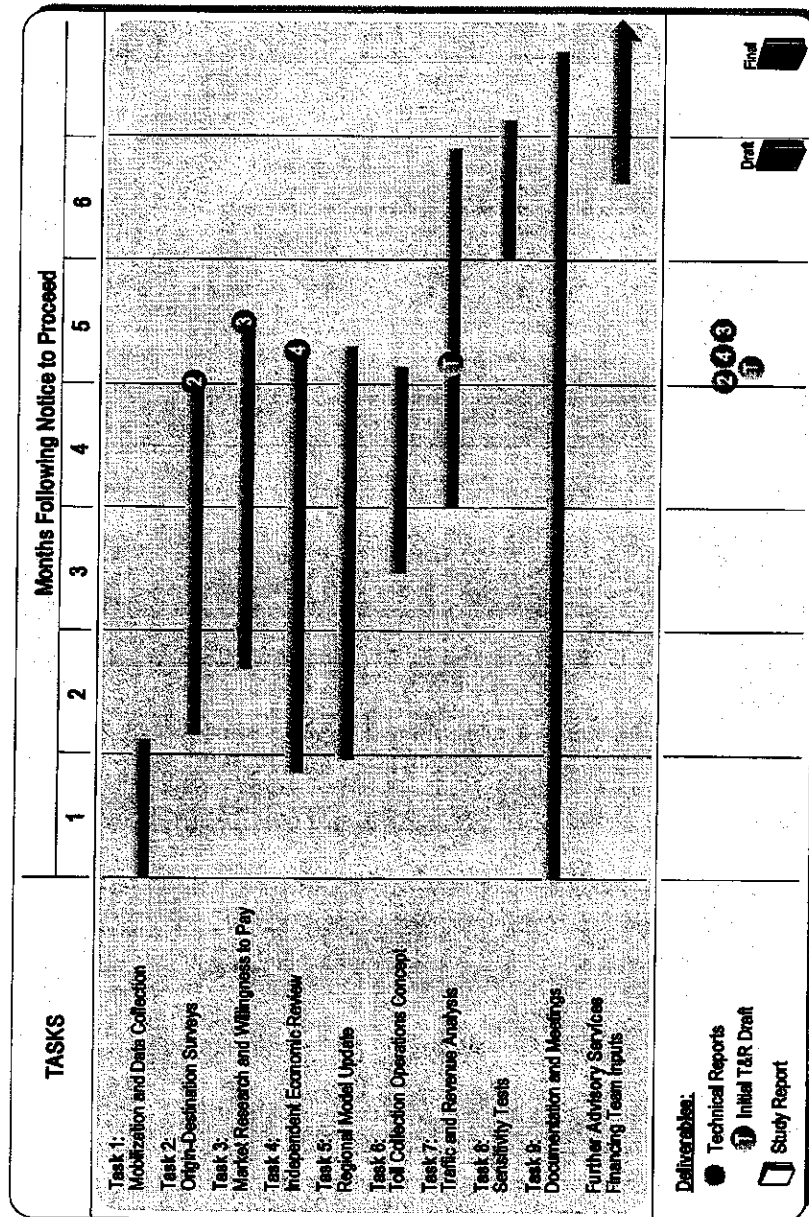
Chairman, Board of Directors
TITLE

Fort Bend Grand Parkway Toll Road Authority
ORGANIZATION

[Signature]
SIGNATURE

6/16/10
DATE

Proposal – Investment Grade Traffic and Revenue Study
Grand Parkway Segment D



Proposal - Investment Grade Traffic and Revenue Study - Grand Parkway Segment D

Personnel Category	1	2	3	4	5	6	7	8	9	Total Hours	Average Rate	Salary Cost
Principal	6	4	4	2	2	0	16	2	8	68	\$90.00	\$6,120
Project Manager	88	32	20	20	40	12	120	24	96	432	\$65.00	\$28,080
Associate	0	0	0	0	40	56	0	0	0	96	\$55.00	\$5,280
Senior Engineer/Planner	32	64	0	24	0	20	0	30	14	184	\$48.00	\$8,832
Engineer / Planner	0	0	0	0	160	0	176	64	32	432	\$40.00	\$17,280
Assistant Engineer / Planner	88	280	40	30	200	0	176	56	32	902	\$32.00	\$28,864
Technician	96	80	20	0	40	0	120	16	32	404	\$28.00	\$11,312
Other Support Staff	10	12	4	0	2	8	32	12	64	144	\$26.00	\$3,744
Total Hours	300	472	88	76	484	86	640	204	302	2,662		
Total Salary	\$12,280	\$17,024	\$3,604	\$3,592	\$18,852	\$5,028	\$28,104	\$6,292	\$14,656			\$109,512
Overhead (163% of Salary)	\$20,027	\$27,809	\$5,887	\$5,868	\$30,958	\$8,213	\$42,641	\$13,545	\$23,941			\$178,888
Profit	\$3,228	\$4,483	\$948	\$946	\$4,891	\$1,324	\$6,874	\$2,184	\$3,880			\$28,840
Subtotal	\$35,515	\$49,316	\$10,440	\$10,405	\$54,901	\$14,565	\$75,618	\$24,021	\$42,456			\$317,240
Direct Expenses												
Travel	\$1,900	\$7,000	-	-	-	-	-	-	\$5,000			\$13,900
Subsistence	\$1,500	\$3,600	-	-	-	-	-	-	\$1,600			\$6,600
Reproduction	-	\$20,000	-	-	-	-	-	-	\$500			\$20,500
Postage and Express	-	\$1,300	-	-	-	-	-	-	\$50			\$1,350
Telephone and Fax	-	-	-	-	-	-	-	-	\$0			\$0
Survey Software License	-	-	-	-	-	-	-	-	\$0			\$0
Temporary Personnel	-	-	-	-	-	-	-	-	\$0			\$0
Survey Printing	-	\$8,400	-	-	-	-	-	-	\$8,400			\$8,400
Survey Coding	-	\$12,000	-	-	-	-	-	-	\$12,000			\$12,000
Survey Postage	-	\$35,000	-	-	-	-	-	-	\$35,000			\$35,000
Traffic Counts	-	\$21,000	-	-	-	-	-	-	\$21,000			\$21,000
Police	-	\$4,000	-	-	-	-	-	-	\$4,000			\$4,000
Subconsultants	-	\$80,000	-	-	-	-	-	-	\$80,000			\$165,000
Total Direct Expenses	\$3,400	\$172,200	\$80,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000			\$307,750
Total Cost	\$38,915	\$221,516	\$90,440	\$55,405	\$54,901	\$14,565	\$75,618	\$24,021	\$49,808			\$624,990
Work Tasks												
Task 1: Mobilization and Data Collection												
Task 2: Origin-Destination Surveys												
Task 3: Stated Preference and Market Research												
Task 4: Independent Economic Review												
Task 5: Regional Model Update												
Task 6: Toll Collection Operations Concept												
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WILBURSMITH ASSOCIATES ESTIMATED BASIC STUDY FEE EXHIBIT 2