

Contract Number _____

THE STATE OF TEXAS

INTERAGENCY COOPERATION CONTRACT

COUNTY OF TRAVIS

THIS CONTRACT AND AGREEMENT is entered into by and between the State agencies shown below as Contracting Parties, pursuant to the authority granted and in compliance with the provisions of "The Interagency Cooperation Act", Article 4413 (32) V.T.C.S.

I. CONTRACTING PARTIES:

The Receiving Agency: Texas Department of Transportation VID3601601601000

The Performing Agency: Texas Turnpike Authority VID7600042859000

II. STATEMENT OF SERVICES TO BE PERFORMED: (See Instructions on Page 4)

The "Performing Agency" has entered into a fixed cost Interlocal Agreement with the consulting firm of Wilbur Smith Associates to perform an Initial Feasibility Study of the extension of IH44 into Texas beginning from Wichita Falls to IH20 (Exhibit 1) as a turnpike, to determine the financial viability of the highway to be constructed and operated as a turnpike, and to identify the level of ISTEA assistance, if such is required, to establish feasibility.

III. BASES FOR CALCULATING REIMBURSABLE COSTS: (See Instructions on Page 4)

See Appendix A, Proposal of Wilbur Smith Associates to the Texas Turnpike Authority.

IV. CONTRACT AMOUNT:

The total amount of this Contract shall not exceed: Seventy-two Thousand Four Hundred Eighty-Five Dollars (\$72,485.00)
(Words and figures)

V. PAYMENT FOR SERVICES: (See Instructions on Page 4)

Receiving Agency shall pay for services received from appropriation items or accounts of the Receiving Agency from which like expenditures would normally be paid, based upon vouchers drawn by the Receiving Agency payable to Performing Agency

Payments for service performed shall be billed: Lump Sum (upon completion of work)
(Weekly, monthly, lump sum, etc.)

Payments received by the Performing Agency shall be credited to its current appropriation item(s) or account(s) from which the expenditures of that character were originally made.

SCHEDULE A

II. STATEMENT OF SERVICES TO BE PERFORMED: (Continued from Page 1)

III. BASES FOR CALCULATING REIMBURSABLE COSTS: (Continued from Page 1)

VI. TERM OF CONTRACT:

This Contract is to begin July 25, 1994, and shall terminate August 31, 1995 (Term of Contract cannot transcend the biennium.)

THE UNDERSIGNED CONTRACTING PARTIES do hereby certify that, (1) the services specified above are necessary and essential for activities that are properly within the statutory functions and programs of the effected agencies of State Government, (2) the proposed arrangements serve the interest of efficient and economical administration of the State Government, and (3) the services, supplies or materials contracted for are not required by Section 21 of Article 16 of the Constitution of Texas to be supplied under contract given to the lowest responsible bidder.

RECEIVING AGENCY further certifies that it has the authority to contract for the above services by authority granted in Article 6663 Vernon's Civil Statutes (Statute, Constitution, Special Provision of Appropriation Bill)

PERFORMING AGENCY further certifies that it has authority to perform the services contracted for by authority granted in Article 6674v Vernon's Civil Statutes (Statute, Constitution, Special Provision of Appropriation Bill)

SUBJECT TO THE APPROVAL of the State Purchasing and General Services Commission, the undersigned parties bind themselves to the faithful performance of this contract. It is mutually understood that this Contract shall not become effective until approved by the State Purchasing and General Services Commission and that such approval must be obtained prior to the beginning date of the Contract.

RECEIVING AGENCY

PERFORMING AGENCY

Texas Department of Transportation
Name of Agency
By: [Signature]
Authorized Signature
Thomas A. Griebel
Assistant Executive Director
Title
Multimodal Transportation
Date: July 21, 1994

Texas Turnpike Authority
Name of Agency
By: [Signature]
Authorized Signature
James W. Griffin
Executive Director
Title
Date: July 14, 1994

EXAMINED and APPROVED this the _____ day of _____, AD. 19 _____

STATE PURCHASING AND GENERAL SERVICES COMMISSION

By: _____

INTERAGENCY CONTRACTS, GENERAL INSTRUCTIONS

CONTRACT PREPARATION AND SUBMISSION FOR APPROVAL

1. Services amounting to Two Thousand Five Hundred Dollars (\$2,500.00) or more for the fiscal year must be in writing on State Purchasing and General Services Commission Form No. 303-03-015.* Prior approval by the State Purchasing and General Services Commission is required before effective date.

2. An original and two copies of the proposed contract, properly executed by the contracting agencies, must be submitted to the State Purchasing and General Services Commission. Upon approval, the State Purchasing and General Services Commission will execute and number the three documents and forward one copy to each contracting agency.

3. Paragraph II. The kinds and amounts of services to be rendered must be specifically listed and in sufficient detail to clearly describe the services contracted for. If additional space is needed, please prepare an attachment labeling it Schedule A.

4. Paragraph III. A basis for calculating reimbursement must be shown for each of the kinds of services listed in Paragraph II—"Statement of Services to be Performed", such as services of employees, service of materials, services of equipment, services of consultant, subcontracting cost or purchase of equipment

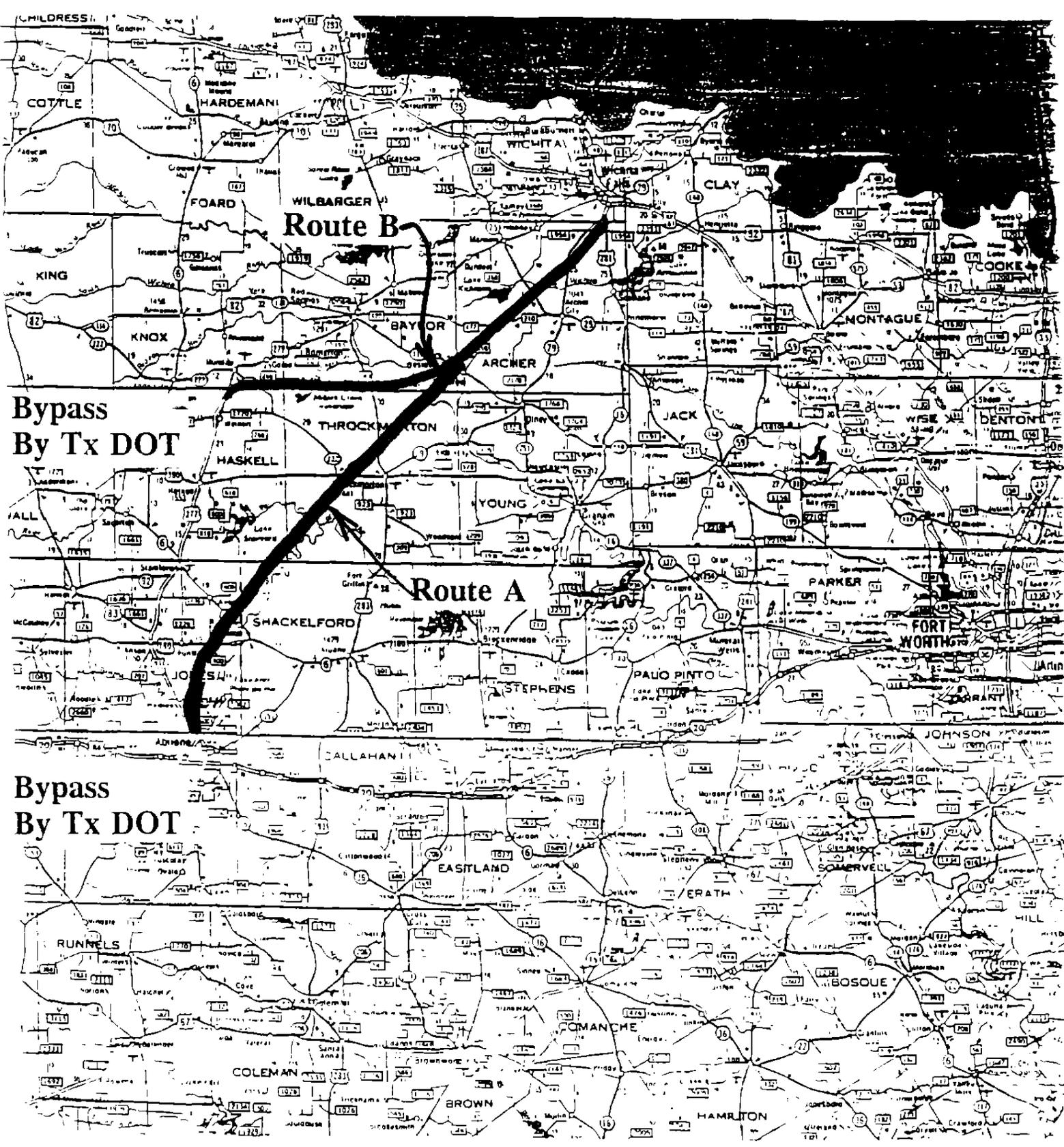
5. Paragraph V. All vouchers for reimbursement must be submitted on the Comptroller's Interagency Transaction Voucher Form No. 73-140 (Revised 1-90/2) by the performing agency, and must be submitted to and approved by the State Purchasing and General Services Commission before payment, regardless of funds used. Voucher statements must coincide or "match up" with each of the items of contract services listed in Paragraph II.

*INTERAGENCY SERVICES AMOUNTING TO LESS THAN TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500.00)

An interagency service amounting to less than Two Thousand Five Hundred Dollars (\$2,500.00) does not require a written contract or advance approval by the State Purchasing and General Services Commission. However, the reimbursement voucher must be processed through the State Purchasing and General Services Commission, itemizing the services performed and containing this statement:

"Interagency services performed as authorized in Article 4413(32), Sec. 4, V.T.C.S."

EXHIBIT 1



**INITIAL TRAFFIC & REVENUE STUDY
PROPOSED ABILENE / WICHITA FALLS TURNPIKE
CONCEPTUAL ALTERNATE ROUTES A & B**

APPENDIX A: CONSULTANT PROPOSAL

WILBUR
SMITH
ASSOCIATES

ENGINEERS • ECONOMISTS • PLANNERS

135 COLLEGE STREET • P. O. BOX 9412 • NEW HAVEN, CT 06534 • (203) 865-2191 • FAX (203) 624-0484

December 15, 1993

Texas Turnpike Authority
3015 Raleigh Street
Dallas, Texas 75219

Attention: Mr. James W. Griffin
Deputy Director

Dear Mr. Griffin:

As requested, Wilbur Smith Associates (WSA) is pleased to submit this proposed work plan and cost proposal for professional services to perform an initial feasibility assessment for the Phase 1 - Wichita Falls to Abilene Turnpike. The enclosed proposed work plan provides a more detailed description of the scope of work outlined in the WSA letter of qualifications submitted to the Texas Turnpike Authority (TTA) on October 12, 1993. In addition, Table A of this submittal presents the proposed study costs delineated by work task.

Purpose of Study

The primary purpose of this initial feasibility assessment is to investigate, inventory, research, analyze, develop and evaluate all available data to project commercial and public vehicle travel demand for the Phase 1 - Wichita Falls to Abilene Turnpike. The evaluation would include development of 30-year traffic and revenue estimates at recommended optimum toll levels as well as the next higher and lower toll rate levels.

Work Plan

The proposed work plan is comprised of the following major study tasks, as outlined below. A brief description of specific efforts included within each of these tasks is also provided.

- Task 1 - Project Mobilization and Data Collection;
- Task 2 - Field Studies;
- Task 3 - Corridor Growth/Land Use Analysis;
- Task 4 - Toll Collection Concepts;
- Task 5 - Traffic Diversion Assignment Process;
- Task 6 - Annual Traffic and Revenue Estimates; and
- Task 7 - Reports and Meetings.

Task 1: Project Mobilization and Data Collection - This task would commence immediately upon receiving notice-to-proceed from TTA. Overall study methodology, data requirements and appropriate staffing would be refined at this time. A detailed CPM chart would be prepared, identifying specific project tasks as they interrelate to one another, and anticipated individual task completion with the study period. Within the time frame anticipated for this project, this CPM will serve as a valuable management tool in continually monitoring levels of completion, leading up to delivery of the final product.

An early project initiation meeting would be held in Dallas or a designated site within the project corridor with TTA and other involved parties. At this time, WSA's refined staffing plan and CPM chart would be reviewed and discussed, in terms of the flow of work tasks and time frame allotted to each task. Project administration matters would also be discussed at this time, including the scheduling of future meetings, and identification of appropriate lines of communication, as necessary.

Another important component of the Task 1 work plan would relate to assembling all relevant traffic and socioeconomic data. Appropriate agencies would be identified and requests for the most currently available data would be made.

Future funded and committed roadway improvements would be determined through discussions with the Texas State Department of Transportation (TxDOT) and other officials, and the latest Transportation Improvement Program for the area would be reviewed. Identification of these committed improvements will be important in accurately generating the traffic network to be developed for this study.

Any available socioeconomic trends and forecasts would be assembled for the corridor and surrounding areas. Contacts would be made with Chambers of Commerce, local developers, and area planners to gather any supplemental data and obtain the benefit

of important local insight.

Task 2: Field Studies - Per the Scope of Services contained in the RFQ, no in-field origin and destination interviews or mail back questionnaire surveys will be conducted. Based on our inquiries during the development of this submission, we believe that existing O-D data does not exist for the study corridor. This data would have been desirable, however since the results of the study are only to be used to provide an initial assessment of project viability, O-D surveys are not essential. This data can be synthetically developed for use in providing estimates of demand and toll sensitivity.

It is anticipated that through traffic will be the major component of the proposed facility. Discussions with local officials suggest that local traffic will not be a major influencing factor in the success of the facility. WSA maintains an extensive data base of travel patterns as a result of our ongoing consultant services for the Oklahoma Turnpike Authority and the TTA. The Firm recently completed extensive data collection in June, 1993, for the I-35 corridor, Bailey Turnpike, and other major roadway facilities in Oklahoma. Selected survey locations with traffic potential to the proposed travel corridor would be utilized as input to this study. Data from these selected survey locations would be recoded to a geographic zone system developed specifically for this study analysis. The O-D data derived from this task would comprise a key element in determining the overall through trip component moving through the project corridor. In addition, we have a significant amount of current data from the Dallas/Fort Worth area as a result of the I-35 corridor study and our work on the Dallas North Tollway (DNT). This information will be used, along with the most current data available from TxDOT's ATR program and other sources relative to traffic counts and traffic flow maps to develop synthetic trip tables and establish broad-based estimates of traffic loadings on the facility.

A complete vehicle traffic count program at selected locations would be conducted. This count information would be used along with daily, weekly and monthly variations to update existing motorist surveys. Machine counts would be obtained at ten selected locations, in both travel directions for a continuous seven day period in order to properly reflect daily variations. In addition, manual vehicle classification counts would be conducted at four selected locations in order to determine the overall vehicle mix presently traveling on the major route passing through the study corridor.

A comprehensive program of travel time-distance studies would also be undertaken

as part of this task. In addition to observing average travel speeds and points of delay, development patterns and roadway characteristics would be noted. Travel time-distance studies would be conducted during both peak and off-peak time periods, especially on competing routes in the project corridor. A particular point of emphasis in this process would be the extent of competition to the proposed Turnpike which would be provided by the existing alternate routes. The results of the time-distance studies obtained as part of this task would be used as input in developing the traffic network which will be utilized when running traffic assignments.

Based on updated traffic counts the recoded survey data would then be refactored and expanded to represent a base year level (1993). Trip tables would then be developed and assignments run for assessing travel pattern considerations on the proposed project.

A profile of the existing project corridor would be developed. This would consist of estimating preliminary travel patterns on the facility through the corridor, by alternative. The traffic counts obtained would be summarized by hour and in terms of 24-hour average volumes for weekdays and weekend days. From this data, current route volume profile information would be developed, and traffic variations determined by day of week and hour of day. These peak period profiles would be useful in estimating opening and design year traffic operations requirements.

Task 3: Corridor Growth/Lane Use Analysis - Corridor growth potential and land use assumptions are critical parameters in estimating traffic potential on a proposed toll facility. This task will involve an analysis of different economic growth parameters, the impacts of growth on land use, and an update of energy availability.

This task would initially involve assembling any additional data needed for the socioeconomic analysis not already collected in Task 1. Data would be gathered from all available sources, such as the TxDOT, area land developers, Chambers of Commerce, etc.

Maximum use would be made of the economic data to develop forecasts to be used in the traffic diversion assignment process. Based on supplemental data collected, these forecasts would be reviewed and refined where necessary. These changes would be based on all available current growth trends and projections of planned economic activity and land use development.

Population and employment trends and projections would be developed and refined as an important step of this analysis. This information would be used in developing growth schedules for expanding the base year tables to future year analysis levels.

Area growth factors developed would also reflect any current or projected trends in property sales, development plans, and land use changes. This would involve discussions with developers, utility companies, and banks, among others.

Another element of this task would be the estimation of the potential for induced traffic on the Turnpike due to the new facility. Inducement potential relates both to increased travel from motorists currently driving the project corridor who are induced onto the new facility, as well as additional demand generated by new development in the project corridor, resulting from the presence of the new toll facility.

Estimation of traffic and revenue potential on the proposed project would be made including consideration of the North American Free Trade Agreement (NAFTA). WSA will review the most recent literature with special attention paid to the impacts on Texas commodity shipping, ports of U.S. entry and exit, and macro-economic trade patterns currently operating nationwide. Consideration would be given to any potential reorientation of commercial vehicles resulting from the passage of NAFTA.

Task 4: Toll Collection Concepts - Alternative toll collection concepts would be developed and reviewed with TTA staff, culminating in the development of a toll collection plan. This would be a function of the nature of the Turnpike, the number and spacing of the intermediate interchanges and expected vehicle mix. Ticket versus barrier systems would be considered. In addition, an abstract would be submitted summarizing the relative pros and cons of weight versus axle-based billing for commercial vehicles. In view of potential increases in international trade along this corridor, commercial vehicles may well represent a high proportion of traffic and revenue on the proposed Turnpike. The viability of integrated electronic toll collection would also be addressed, in view of the current successful ETTM operations on the DNT.

Task 5: Traffic Diversion Assignment Process - This task would relate to efforts associated with development and use of trip tables for the diversion assignment process for opening and design years. The base year trip table would include data provided by various sources, including extensive O-D information already in our files from previous

studies in Oklahoma and Texas. A traffic model would then be developed using a spreadsheet methodology before being calibrated at an existing year level, using ground counts as a measure of the method's accuracy. The model would be adjusted to more accurately reflect existing traffic counts, where necessary. Following this procedure, the assignment process would then be refined to include any future committed and funded roadway improvements, as well as the Turnpike project. This would constitute the basic study tool from which the traffic estimates will be generated.

The opening year traffic assignments would be developed at the level of toll rates considered optimum and at a level just below and above the rate with the full project in place. The facility's relative sensitivity to toll increases could then be determined.

Task 6: Annual Traffic and Revenue Estimates - This task would consist of developing traffic and revenue forecasts for the proposed Wichita Falls to Abilene Turnpike. An annual growth rate schedule would be prepared for each of the two project corridors identified by the TTA. Growth rates would be developed on an individual toll plaza basis. As discussed earlier, these would be developed on the economic and traffic growth analyses of the project corridors, as well as a careful review of the traffic assignment levels. Separate revenue forecasts would be developed for each of the project alternatives. In this manner it would be possible to determine optimum project phasing, if it is determined that the full project is not feasible from the outset.

In addition to normal corridor growth, these growth schedules would include estimated induced growth potential on the project's earlier years of operation. This induced growth would be superimposed on the normal growth rate schedule, and reflects both generated and development-related growth resulting from construction of the Turnpike.

Preliminary annual estimates of average daily traffic and toll revenue would be prepared for each of the two project alternatives from 1993 through the assumed projection year. Preliminary annual toll revenue estimates would then be related to estimated maintenance and operating expenses to yield estimated preliminary annual net revenues available for debt service. It is assumed that maintenance and operating expense estimates would be developed in consultation with the TTA.

Task 7: Reports and Meetings - Upon completion of the analysis, a comprehensive

report describing the work performed and presenting the study findings and recommendations would be prepared. This would be initially submitted in draft form. Upon receipt of review comments, the report would be refined and 150 copies will be prepared and submitted.

During the course of this study, monthly progress reports would be submitted to TTA, detailing the work efforts completed each period and the estimated percentage of study completion.

It is assumed that a total of three meetings would be required with TTA, excluding travel related to field survey work and economic field review. An initial project kickoff meeting would be scheduled shortly after receipt of notice-to-proceed. A second meeting is assumed for purposes of reviewing preliminary assumptions and findings. Finally, a third meeting is assumed to present study findings to the TTA.

Subconsultants

WSA employs more than 15 experienced professionals dedicated to toll facility studies, providing a wide range of expertise. However, over the course of this work, it is envisioned that local issues and concerns are an important part of the project. While we maintain a local fully-staffed office in Houston a unique group of subconsultants who have participated in numerous similar studies throughout Texas have been assembled. We have teamed with Sylva Engineering Corp. and Quality Counts, Inc. to assist in local data collection efforts. Both firms are Texas Certified DBE firms and they will be involved in more than 20 percent of the total work effort on this project.

Affirmative Action

WSA fully supports and maintains proactive Affirmative Action programs within the Firm. In addition, we have carefully reviewed the TTA's "Historically Underutilized Business Policy," and are fully prepared to conform to the mandates set forth in that policy statement.

Schedule and Fee

We are prepared to initiate the study immediately upon receipt of your

authorization to proceed. A four (4) month time-frame will be required to complete all elements of the study up to and including submittal of the draft report. After receipt of review comments an additional four (4) weeks would be required to submit the final report document.

The lump sum, fixed fee to undertake the study in accordance with the work program above is \$144,970. Estimated manpower breakdown and direct expense estimates are shown in Exhibit A. This includes a breakdown of costs regarding the DBE efforts associated with the project.

* * *

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 acknowledging the following provisions, executing the section at the end of this document and returning an originally signed copy:

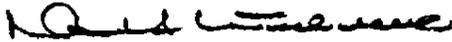
1. The proposal is valid for a period of 60 days, after which WSA reserves the right to review and revise the estimated fee, time schedule, and other terms specified herein;
2. This Contract is not assignable except with the prior written consent of WSA and no assignment shall relieve the undersigned of any obligations under this Contract.
3. The individual executing this Contract represents that he has the authority to do so.
4. Where public hearings/meetings are involved, a minimum of two weeks' notice to WSA is required for proper preparation including appropriate graphics and other visual aids.

5. Accounts rendered are due and payable within 30 days following receipt of the invoice.
6. Interest is presumed to be applicable to all unpaid accounts beginning 30 days after you receive the invoice with interest calculated at the established prime rate.

If you have any questions, we would be pleased to discuss ways in which the proposal might be made more responsive.

Respectfully submitted,

WILBUR SMITH ASSOCIATES



Norman H. Wuestefeld
Executive Vice President

NHW/mla

ACCEPTED BY TERMS AND CONTENT

Luther G. Jones, Jr.

NAME

Chairman

TITLE

Texas Turnpike Authority

ORGANIZATION



SIGNATURE

December 20, 1993

DATE

Exhibit A
STUDY COST BREAKDOWN
 Initial Feasibility Assessment - Phase I - Wichita Falls to Abilene

PERSONNEL CATEGORY	WORK TASKS(1)							AVERAGE RATE	TOTAL	
	1	2	3	4	5	6	7		Hours	Costs
SALARIES										
Executive Management Officer	8	0	0	0	0	0	8	\$68.00	16	\$1,090
Officer	4	4	8	4	8	16	24	46.00	68	3,130
Associate Engineer/Planner/Economist	16	16	12	16	16	40	80	36.00	196	7,060
Principal Engineer/Planner/Economist	8	0	140	0	16	16	40	30.00	220	6,600
Engineer/Planner/Economist	16	48	8	8	60	50	60	22.00	250	5,500
Assistant Engineer/Planner/Economist	0	0	0	0	80	16	16	18.00	112	2,020
Draftsperson	0	0	0	0	0	0	60	15.00	60	900
Technician	0	0	0	16	180	0	0	14.00	196	2,740
Technical Typist/Word Processor	8	24	10	0	0	16	80	14.00	138	1,930
Junior Analyst/Clerical	8	24	4	0	0	16	80	13.00	132	1,720
TOTAL HOURS	68	116	182	44	360	170	448		1,368	32,690
SUBTOTAL: SALARIES	\$2,110	\$2,460	\$5,370	\$1,160	\$6,700	\$4,480	\$10,410			\$32,690
OVERHEAD AND FRINGE BENEFITS (1.5662 percent of Salaries)	\$3,300	\$3,850	\$8,410	\$1,820	\$10,490	\$7,020	\$16,310	1.5662		\$51,200
FEE (15 percent of Salaries+ Overhead + Benefits)	\$810	\$950	\$2,070	\$450	\$2,580	\$1,730	\$3,990	0.15		\$12,580
DIRECT EXPENSES										
Travel	---	\$1,100	\$1,600	---	---	---	\$5,800			\$8,500
Subistence	---	500	500	---	---	---	1000			2,000
Prints/Reproduction	---	---	---	---	---	---	1000			1,000
Telephone and FAX	---	50	200	---	---	---	200			450
Postage/Federal Express	---	50	200	---	---	---	200			450
Materials and Supplies	---	---	---	---	---	---	100			100
ATR Counts (WBE)	---	10,500	---	---	---	---	---			10,500
Rte. Recon./Classification Counts (DBE)	---	16,800	8,700	---	---	---	---			25,500
SUBTOTAL: DIRECT EXPENSES	\$0	\$29,000	\$11,200	\$0	\$0	\$0	\$8,300			\$48,500
TOTAL	\$6,220	\$36,260	\$27,050	\$3,430	\$19,770	\$13,230	\$39,010			\$144,970

- (1) Work Tasks are defined as follows:
 Task 1: Project Mobilization and Data Collection
 Task 2: Field Studies
 Task 3: Corridor Growth/Land Use Analysis
 Task 4: Toll Collection Concepts
 Task 5: Traffic Diversion Assignment Process
 Task 6: Annual Traffic and Revenue Estimates
 Task 7: Reports and Meetings