**STATE OF TEXAS** 

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COUNTY OF FORT BEND

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## AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES MAJOR THOROUGHFARE PLAN UNCONSTRAINED TRAVEL DEMAND MODEL

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and WSP USA. Inc. (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

#### WITNESSETH

WHEREAS, County desires that Contractor provide certain professional engineering services, including the development of an Unconstrained Travel Demand Model based on recent growth within Fort Bend County, Texas (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, Contractor represents that it is qualified and desires to perform such services.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

#### **AGREEMENT**

#### Section 1. Scope of Services

Contractor shall render Services to County as described in the proposal dated July 7, 2017, attached hereto as Exhibit A and incorporated herein for all purposes.

#### Section 2. Personnel

- 2.1 Contractor represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.
- 2.2 All employees of Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

Agreement for Professional Engineering Services
Major Thoroughfare Plan Unconstrained Travel Demand Model
Page 1 of 10

#### Section 3. Compensation and Payment

- 3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is ninety-nine thousand eight hundred fifteen dollars and no/100 (\$99,815.00). In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without written agreement executed by the parties.
- 3.2 All performance of the Scope of Services by Contractor including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.
- 3.3 County will pay Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy and two (2) original hard copies of invoices showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

#### Section 4. Limit of Appropriation

- 4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of ninety-nine thousand eight hundred fifteen dollars and no/100 (\$99,815.00), specifically allocated to fully discharge any and all liabilities County may incur.
- 4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed ninety-nine thousand eight hundred fifteen dollars and no/100 (\$99,815.00).

#### Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2018. Contractor shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

#### Section 6. Modifications and Waivers

6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

- 6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.
- 6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

#### Section 7. Termination

7.1 Termination for Convenience – County may terminate this Agreement at any time upon forty-eight (48) hours written notice.

#### 7.2 Termination for Default

- 7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:
- 7.2.1.1 If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;
- 7.2.1.2 If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.
- 7.2.2 If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.
- 7.3 Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.
- 7.4 If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor.

#### Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

#### Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

#### Section 10. Insurance

- 10.1 Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:
- 10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed. Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.
- 10.1.2 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.
- 10.1.3 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

- 10.1.4 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.
- 10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Contractor, excluding Professional Liability, shall contain a waiver of subrogation in favor of County and members of Commissioners Court.
- 10.3 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

#### Section 11. Indemnity

CONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND COUNTY AGAINST ALL LOSSES, LIABILITIES, CLAIMS, CAUSES OF ACTION, AND OTHER EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.

#### Section 12. Confidential and Proprietary Information

- 12.1 Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.
- 12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or

use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

- 12.3 Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.
- 12.4 Contractor in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.
- 12.5 Contractor expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 et seq., as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

#### Section 13. Independent Contractor

13.1 In the performance of work or services hereunder, Contractor shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

13.2 Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

#### Section 14. Notices

- 14.1 Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).
- 14.2 Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County:

Fort Bend County Engineering Department

Attn: County Engineer 301 Jackson Street Richmond, Texas 77469

With a copy to:

Fort Bend County

Attn: County Judge

401 Jackson Street, 1<sup>st</sup> Floor Richmond, Texas 77469

Contractor:

WSP USA Inc.

Attn: Joseph Willhite, Area Manager

16200 Park Row, Suite 200 Houston, Texas 77084

- 14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:
- 14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.
- 14.3.2 If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

#### Section 15. Compliance with Laws

Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, Contractor shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

#### Section 16. Performance Warranty

- 16.1 Contractor warrants to County that Contractor has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession practicing in the greater Houston metropolitan area and Contractor will apply that skill and knowledge with care and diligence to ensure that the Services provided hereunder will be performed and delivered in accordance with the highest professional standards.
- 16.2 Contractor warrants to County that the Services will be free from material errors and will materially conform to all requirements and specifications contained in the attached Exhibit A.

#### Section 17. Assignment

- 17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.
  - 17.2 Neither party may delegate any performance under this Agreement.
- 17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

#### Section 18. Applicable Law

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

#### Section 19. Successors and Assigns

County and Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

#### Section 20. Third Party Beneficiaries

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

#### Section 21. Severability

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

#### Section 22. Publicity

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Contractor release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

#### Section 23. Captions

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

#### Section 24. Conflict

In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

WSP USA Inc.

FORT BEND COUNTY

Robert E. Hebert, County Judge	Yoseph Willhite, Area Manager
Ouly 25, 2017 Date	7-12-17 Date
ATTEST: Sama Prihad 1/6	
Laura Richard, County Clerk	<b>&gt; 程</b>
Richard W. Stolleis, P.E., County Engineer  APPROVED AS TO LEGAL FORM:	A STATE OF THE PARTY OF THE PAR
Marcus D. Spencer, First Assistant County Attorney	
mando Dioponda, i noti issistant dodney rittorney	
AUDITOR'S CER	RTIFICATE
I hereby certify that funds are available in th	the amount of $$9,815^{00}$ to accomplish and
pay the obligation of Fort Bend County under this c	Wester
Kobert	Ed Sturdivant, County Auditor

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# **EXHIBIT A**



July 07, 2017

Mr. Rick J. Staigle, PE, PTOE First Assistant County Engineer Fort Bend County 301 Jackson Street Richmond, TX 77469

Subject: Fort Bend County - Development of Unconstrained TDM

#### Background

Fort Bend County recently requested a proposal from WSP USA for the development of an Unconstrained Travel Demand Model (TDM) based on recent growth within Fort Bend County. The purpose of the study is to provide information related to the question, "What will it take to provide mobility in Fort Bend County at build-out?"

Key inputs to the TDM will be updated based on new development and land use patterns as deemed necessary by Fort Bend County. Once the TDM has been updated, two alternative scenarios (alternatives to that which has been provided in the 2015 Major Thoroughfare Plan Update) will be developed based on the county developing at the suburban levels found elsewhere in the county. The two alternatives will be same except for the following assumption:

- Alternative 1 Unconstrained network with all bridges across the Brazos River.
- Alternative 2 Unconstrained network with the only new bridge being the Fort Bend Parkway extension.

#### Services

A detailed description of each Major Task and Sub-Task is included in Attachment A. The Major Tasks include:

- Task 1 Project Management
- Task 2 Demographic and Land Use Forecasts for an Alternative Build-Out Scenario
- Task 3 Transportation Model

#### **Assumptions**

This proposal is based upon the following assumptions and clarifications:

- HGAC provides highway assignment model/scripts that can be run with the HGAC output trip tables without revision to said model/scripts
- HGAC conducts all necessary model runs to provide output trip tables to support our analysis
- WSP will provide HGAC with the socio-economic data required by the model in the format required by the model
- The scope covers model runs for the build-out land use scenario only (e.g. no base year model runs/analysis)



- The "unconstrained" condition refers to all roadway projects in the plan with no fiscal constraint.
- In-person meetings are assumed to be a maximum of 2 hours
- Airline tickets require a minimum of two weeks' notice.

#### Schedule

The following includes a summary of the expected completion of each Task:

- Task 1 On-Going throughout project
- Task 2 Six Months from Notice-to-Proceed
- Task 3 Six Months from Approval of Task 2 Deliverables.

#### **Deliverables**

The following includes a summary of the expected deliverables related to each Task:

- Task 1 Meeting Minutes, Progress Reports, Invoicing, etc.
- Task 2 Up to Ten (10) Meetings, Fort Bend County TAZ Database of Population and Employment for One (1) Alternate Build-Out Scenario, Future Land Use Maps, TSZ Level Population Density Maps, and Employment Density Maps.
- Task 3 Up to Five (5) Meetings and Draft/Final Report Describing TDM and Results

#### **Fee Proposal**

A detailed fee proposal is included in Attachment B. Each Major Task and Sub-Task has been included within the fee proposal. The proposed fee for completing the necessary tasks as outlined in Attachment A is \$99,815.

Kind regards,

Michael Trueblood, PE, PTOE

Mchel T. Trueflood

#### FORT BEND COUNTY UNCONSTRAINED MODEL

#### BACKGROUND

During the development of the assumptions for the 2015 Major Thoroughfare Plan modeling, several constraints were considered in the estimating of growth to conform to Houston-Galveston Area Council (HGAC) requirements. While these constraints were considered to be reasonable at the time of the study, recent questions have been raised regarding how much transportation infrastructure would be needed if these constraints were removed.

The purpose of this study is to provide information related to the question, "What will it take to provide mobility in Fort Bend County at build-out?" Two alternative scenarios (alternatives to that which has been provided in the 2015 Major Thoroughfare Plan Update) needs to be developed based on the county developing at the suburban levels found elsewhere in the county. The two alternatives will be same except for the following assumption:

- Alternative 1 No additional bridges across the Brazos River except for the extension of the Fort Bend Parkway Toll Road.
- Alternative 2 Additional bridges across the Brazos River at Guyler Road/Reinecker Road, Bowser Road, Johnson Road, McCrary Road, Avenue A, Golfview Drive, and the Grand Parkway.

#### TASK 1 PROJECT MANAGEMENT

Consultant shall provide overall Project Management services in support of the study, including monthly progress reports, monthly invoicing, management of subconsultant efforts (if needed), and monitoring of project schedule and quality.

## TASK 2 DEMOGRAPHIC AND LAND USE FORECASTS FOR AN ALTERNATE BUILD-OUT SCENARIO

Demographic forecasts will be developed for an alternative County build-out scenario beyond the 2040 scenario included in the 2015 Major Thoroughfare Plan Update. This task will utilize the future land use plan developed for the County and all other existing data gathered for the 2015 Major Thoroughfare Plan Update. Modifications will be made to the land use assumptions and will be reflected on an alternative county future land use plan. Population projections will be revised and will be shown by TSZ. Employment projections will be revised and divided into basic, service, and retail categories and shown by TSZ.

#### 2.1 Reconciliation of Base Data with HGAC

The consultant and the County staff will discuss with the appropriate staff at HGAC the most recent HGAC demographic projections. It is the County's desire that the information generated by HGAC complement the alternative build-out projection and any discrepancies should be resolved. However, if it is determined by the consultant and County staff that there is a sound basis for different projections than those prepared by HGAC, the consultant will use the projections generated by the consultant for this project and the reason for the difference with HGAC projections will be documented in an appendix of the main report of this project.

#### 2.2 Additional or Updated Data from Cities

The consultant will contact Fort Bend County Economic Development Corporation, Sugar Land, Missouri City, Stafford, Richmond, Rosenberg, Fulshear, Katy, Fort Bend ISD, Katy ISD, Stafford MSD, Lamar Consolidated ISD, Needville ISD, and Orchard ISD to obtain any necessary development or demographic projections. Information can be gathered through meeting or e-mail coordination. Letters informing the smaller cities of the modeling activity will need to be sent out asking if they have any pertinent information to the study.

#### 2.3 Basic Assumptions to Develop Alternate Build-Out Scenario

The task will assume that development in undeveloped sections of the County will closely resemble the density of development seen in the Sugar Land or Cinco Ranch areas. Consideration will be given to floodplain areas and adjust the projected density as needed. The

#### 2.4 Traffic Survey Zone and Database Structure

This existing data will serve as the foundation and format for the projections. The final deliverables (i.e., one alternative ultimate population scenario projection by TSZ) will match the formatting and organization of the new 2040 projections by HGAC.

#### 2.5 Fort Bend County Future Land Use Map and Build-Out Projection

The Future Land Use Map will serve as the basis for projecting what vacant land will be used for in the future. TSZs will be reviewed for how vacant areas are planned to develop (e.g., residential, commercial, institutional, or industrial). Next, planning assumptions for population density or employment density will be applied (using either existing city comprehensive plan data, planning assumptions for areas not covered by a comprehensive plan, and updated planning assumptions) to determine the ultimate build-out of each TSZ.

#### 2.6 Demographic and Land Use Database Development

Prepare an electronic database of population and employment projections for the alternate buildout scenario.

#### 2.7 Meetings about Demographic and Land Use Forecasts

This task includes consultant team participation in up to ten (10) meetings.

- Kick-off meeting with County staff to review order and timing of tasks.
- Meeting with HGAC and County staff to reconcile demographics. Review steps in developing build-out travel demand models
- · Meeting with cities and ISDs

#### 2.8 Schedule

It is anticipated that the task will be completed within six (6) months from the notice to proceed.

#### 2.9 Deliverables

Fort Bend County TSZ database of population and employment projections for one (1) alternate build-out scenario (i.e., no base year or forecast years are included in this scope of work), Future Land Use maps, TSZ level Population Density and Employment Density maps.

Following approval of the deliverables of Task 2 by Fort Bend County, the Consultant team will proceed with Task 3.

#### TASK 3 TRANSPORTATION MODEL

The services described in this task represent the activities necessary to coordinate, interpret, analyze, and supplement the travel demand model runs to be performed in coordination with HGAC. The services will be provided in close cooperation with the HGAC modeling group and the County. The goal is to expedite the modeling process and maximize the usefulness and analytical value of the travel demand model results for the two additional transportation scenarios being explored after the mobility plan update (with bridges and without bridges).

#### 3.1 Coordination with HGAC Modeling Support

It is anticipated that HGAC will provide travel demand modeling services (processing revised demographics and providing updated trip tables) for the two scenarios. The Consultant team will work with the County and HGAC to ensure that:

- HGAC Modeling Group receives input information and data inputs at a level of detail
  and in a format that will expedite the ability to apply the information within the modeling
  environment in a timely and expeditious fashion;
- Fort Bend County receives the information needed from the model to fully explore the
  various options being analyzed and to determine the best course of action to achieving
  community goals and optimizing the county transportation system; and
- Communication between the project team and the HGAC modeling group is complete and effective in producing the level of mutual understanding necessary to meet project objectives and milestones.

#### 3.2 Build-Out Scenarios Traffic Forecasts

Using the trip tables obtained from the HGAC travel demand model runs as a starting point, the Consultant team will apply the HGAC traffic assignment model to develop traffic forecasts for the build-out scenario from the build-out scenario prepared in Task 2. The travel demand model network will be updated for these scenarios to include the road network of the Thoroughfare Plan. Under this task the Consultant team will:

- a. Review travel demand model coding received from HGAC to verify that the Fort Bend County roadway network of the Thoroughfare Plan has been added, and make additional revisions to the roadway network if needed;
- **b.** Update the model to reflect the assumed roadway network needed at buildout for the County; and
- **c.** Apply the HGAC traffic assignment model to produce traffic forecasts for the two build-out scenarios for the following outputs for each scenario:
  - 1) Unconstrained condition to show what the demand is for each corridor and
  - 2) Level of service assuming the number of lanes in the Thoroughfare Plan

#### 3.3 Deliverables

- **a.** Report describing the travel demand modeling effort, the results of that effort, and the usefulness of the data; including
- b. Tables documenting and interpreting the model output.
- c. Graphic exhibits in the form of statistical charts and thematic maps; and
- d. Large scale graphic exhibits in the forms of tables, thematic maps and charts.

#### 3.4 Meetings about Model Results

This task includes consultant team participation in up to five (5) meetings (one overlapped with Task 1).

- Meet with HGAC staff to plan HGAC's travel demand model runs
- Present findings of the review of the roadway network compared to the Thoroughfare Plan to County and HGAC staff
- Present preliminary results of model runs, unconstrained and level of service to County and HGAC staff
- Present preliminary results of model runs, unconstrained and level of service to Development Advisory Council
- Present final results at a Commissioners Court Workshop

WSP Classification	Project Manager	Task Lead SE Data	Task Lead Modeling	Senior Modeler	Modeler	Total Hours By Task	Total Cost by Task	
TASK NUMBER & DESCRIPTION								
I. Project Management	32	:				32	\$2,461.76	
2. Demographic and Land Use Forecasts			·					
2.1 Reconciliation of Base Data with HGAC		24				24	\$1,388.16	
2.2 Additional or Updated Data from Cities	2	8			32	42	\$1,632.26	
2.3 Basic Assumptions to Develop Alternate Build-Out Scenario		16				16	\$925.44	
2.4 Traffic Analysis Zone and Database Structure		8				8	\$462.72	
2.5 Fort Bend County Future Land Use Map and Build-Out Projection	4	160			32	196	\$10,577.80	
2.6 Demographic and Land Use Database Development	2	16	· ·		1 800	18	\$1,079.30	
2.7 Meetings about Demographic and Land Use Forecasts	20	32				52	\$3,389.48	
3. Transportation Model								
3.1 Coordination with HGAC Modeling Support			8	8		16	\$940.00	
3.2 Build-Out Scenarios Traffic Forecasts			8	32	36	76	\$2,979.76	
3.3 Deliverables	4		12	72	1111	88	\$3,960.52	
3.4 Meetings about Model Results	16		32	16		64	\$4,392.80	
TOTAL HOURS/CATEGORY:	80	264	60	128	100	632	\$34,190.00	
RATES PER HOUR:	\$76.93	\$57.84	\$80.12	\$37.38	\$31.74	/		
PAYROLL BURDEN:	\$6,154.40	\$15,269.76	\$4,807.20	\$4,784.64	\$3,174.00	[\ /		
						\		
GENERAL OVERHEAD @ 152%:	\$9,354.69	\$23,210.04	\$7,306.94	\$7,272.65	\$4,824.48	1 \/		
FACILITIES Cost of Capital (0.4%)	\$24.62	\$61.08	\$19.23	\$19.14	\$12.70	1 Å		
SUBTOTAL (Payroll + OH):	\$15,509.09	\$38,479.80	\$12,114.14	\$12,057.29	\$7,998.48	] / \		
COMPARATIVE FEE @ 10% on Payroll +OH:	\$1,550.91	\$3,847.98	\$1,211,41	\$1,205.73	\$799.85	]/ \		
TOTAL LABOR COST:	\$17,084.61	\$42,388.85	\$13,344.79	\$13,282.16	\$8,811.02	/ \		
DIRECT EXPENSES:	\$ 4,903.25							
GRAND TOTAL Cost:	\$99,815							

	CERTIFICATE OF INTERESTED PART	TIES		FOR	м <b>1295</b>				
F	Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.			OFFICE USE ONLY					
1				Certificate Number: 2017-234363 Date Filed:					
2	Name of governmental entity or state agency that is a party to the being filed.  Fort Bend County	07/11	7/11/2017 Pate Acknowledged:						
3	Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.  Unconstrained Model Agreement Transportation Planning Services								
4				Nature of interest					
~	Name of Interested Party	City, State, Country (place of busine	ess)	(check ap					
H		A Change		Controlling	Intermediary				
W	/SP USA Inc.	New York City, NY United States		Х					
L									
	'								
5	Check only if there is NO Interested Party.								
6	I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.								
MEGAN ANNALISE REX Notory Public. State of Texas My Commission Expires August 07, 2017  AFFIX NOTARY STAMP / SEAL ABOVE  MEGAN ANNALISE REX Signature of authorized agent of contracting business entity									
		this the 11th	_	at hube					
	Sworn to and subscribed before me, by the said Frank J. Medina , this the 11th day of July .  2017 , to certify which, witness my hand and seal of office.								
1	that I all								
y	Megan Annalis Signature of officer administering oath Printed name of the second of th			Public officer administeri	ng oath				

### **CERTIFICATE OF INTERESTED PARTIES** FORM 1295 1 of 1 **OFFICE USE ONLY** Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties. **CERTIFICATION OF FILING** 1 Name of business entity filing form, and the city, state and country of the business entity's place Certificate Number: of business. 2017-234363 WSP USA Inc. Houston, TX United States Date Filed: 07/11/2017 2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed. Date Acknowledged: Fort Bend County 07/25/2017 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract. **Unconstrained Model Agreement** Transportation Planning Services Nature of interest 4 Name of Interested Party City, State, Country (place of business) (check applicable) Controlling Intermediary Х WSP USA Inc. New York City, NY United States 5 Check only if there is NO Interested Party. 6 AFFIDAVIT I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct. Signature of authorized agent of contracting business entity AFFIX NOTARY STAMP / SEAL ABOVE Sworn to and subscribed before me, by the said \_\_\_\_\_, this the \_\_\_\_\_ day of \_\_\_\_ 20\_\_\_\_\_, to certify which, witness my hand and seal of office.

Signature of officer administering oath

Printed name of officer administering oath

Title of officer administering oath