



CMS or Ordinance Number: CN4600016193

TSLGRS File Code:1000-25

Document Title:

CONT - Engineering Design Services - Traffic Congestion Study - UTSA - Office
of Sponsored Project Admin - Contracts and Industry Agreements - \$50,000

Commencement Date:

5/15/2017

Expiration Date:

4/28/2018

6/26/2017

UTSA
The University of Texas at San Antonio
**OFFICE OF VICE PRESIDENT
FOR RESEARCH**
Office of Sponsored Project Administration

May 19, 2017

City of San Antonio
Trish Wallace, AICP-CTP
Transportation Planning Manager
Transportation & Capital Improvements
114 W. Commerce Street. 6th Floor
San Antonio, TX 78205

RE: Professional Services Agreement, UTSA Principal Investigator: Dr. Samer Dessouky

Dear Trish,

Enclosed for execution you will find two partially signed originals of the Subject Agreement. Once the Agreement is fully executed, please retain one original and return the second one to my attention:

The University of Texas at San Antonio
Office of Sponsored Project Administration
Contracts and Industry Agreements
One UTSA Circle
San Antonio, Texas 78249

Thank you for your help. If I can be of further assistance regarding this or other agreements with UTSA, please contact me at 210-458-8575 or via e-mail at jessica.fernandez2@utsa.edu

Sincerely,



Director

PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §
 §
COUNTY OF BEXAR §

This Agreement is entered into by and between the City of San Antonio, a Texas Municipal Corporation (hereinafter referred to as "City") acting by and through its Director of the Transportation & Capital Improvements Department and The University of Texas at San Antonio ("UTSA"), an agency of the State of Texas and academic component of The University of Texas System, (hereinafter referred to as "Consultant"), both of which may be referred to herein collectively as the "Parties".

The Parties hereto severally and collectively agree, and by the execution hereof are bound, to the mutual obligations herein contained and to the performance and accomplishment of the tasks hereinafter described.

I. DEFINITIONS

As used in this Agreement, the following terms shall have meanings as set out below:

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"Consultant" is defined in the preamble of this Agreement and includes its successors.

"Director" shall mean the director of City's Transportation & Capital Improvements Department or his designee.

"Project Director" shall mean Consultant's employee and faculty member, Samer Dessouky, PhD, PE who will direct Consultant's activities pursuant to this Agreement.

II. TERM

2.1 Unless sooner terminated in accordance with the provisions of this Agreement, the term of this Agreement shall commence on May 15, 2017 and terminate on April 28, 2018.

2.2 If funding is not available at the time this Agreement is entered into, City retains the right to terminate at the expiration of each of City's budget periods. Subsequent contract periods shall be subject to and contingent upon funding and appropriation.

III. SCOPE OF SERVICES

3.1 Consultant agrees to provide the services described in this Article III in exchange for the compensation described in Article IV. .

3.2 Consultant shall perform work in accordance with Attachment A ("Scope of Services").

3.3 All work performed by Consultant hereunder shall be performed to the satisfaction of Director of City's Transportation & Capital Improvements Department. The determination made by Director shall be final, binding and conclusive on all Parties hereto. City shall be under no obligation to pay for any work performed by Consultant which is not satisfactory to Director. City shall have the right to terminate this Agreement in accordance with Article VII. Termination, in whole or in part, should Consultant's work not be satisfactory to Director; however, City shall have no obligation to terminate and may withhold payment for any unsatisfactory work, as stated herein, even should City elect not to terminate.

IV. COMPENSATION TO CONSULTANT

4.1 In consideration of Consultant's performance in a satisfactory and efficient manner, as determined solely by Director, of all services and activities set forth in this Agreement, City agrees to pay Consultant an amount not to exceed Fifty Thousand dollars (\$50,000) as total compensation. Consultant will submit invoices to the City on a quarterly basis, through City's PrimeLink system.

4.2 No additional fees or expenses of Consultant shall be charged by Consultant nor be payable by City. The parties hereby agree that all compensable expenses of Consultant have been provided for in the total payment to Consultant as specified in Subsection 4.1 above. Total payments to Consultant cannot exceed that amount set forth in Subsection 4.1 above, without prior approval and agreement of all parties, evidenced in writing.

4.3 Final acceptance of work products and services require written approval by City. The approval official shall be Director. Payment will be made to Consultant following written approval of the final work products and services by Director. City shall not be obligated or liable under this Agreement to any party, other than Consultant, for the payment of any monies or the provision of any goods or services.

V. OWNERSHIP OF DOCUMENTS

5.1 Any and all writings, documents or information ("Project Materials) in whatsoever form and character produced by Consultant pursuant to the provisions of this Agreement are the exclusive property of City; and no such writing, document or information shall be the subject of any copyright or proprietary claim by Consultant. Consultant, however, reserves the non-exclusive right, to use and reproduce Project Materials for academic, education and scholarly non-commercial purposes.

5.2 Consultant understands and acknowledges that as the exclusive owner of any and all such writings, documents and information, City has the right to use all such writings, documents and information as City desires, without restriction.

5.3 Notwithstanding any terms herein, Consultant and Project Director, or others of Consultant's faculty, staff, and students, shall have the right to publish any results, information, or data associated with work performed in accordance with Attachment A, and to assert copyright or proprietary claims to any results, information, studies, or reports using data related to such work, if such results, information, studies or reports were not included in the work to be delivered to the City hereunder.

5.4 Consultant and City agree that intellectual property arising through the services rendered hereunder shall be and remain the sole and exclusive proprietary property of Consultant. All intellectual property rights including, without limitation, patent, copyright, trade secret, trademark brand names, color schemes, designs, screens, displays, user interfaces, data structures, organization, sequences of operation, trade dress, and other proprietary rights (the "Intellectual Property Rights") in such work shall be solely vested in the Consultant. Subject to confidential treatment by City of Consultant's confidential Intellectual Property Rights that may be disclosed thereunder, Consultant grants City a permanent and perpetual, fully paid-up, non-exclusive license under Consultant's copyrights to reproduce, publish, use, and to make derivative works, from any written report prepared and delivered to City in accordance with this Agreement. Provided, however, nothing herein contained is intended nor shall it be construed to require Consultant to transfer any ownership interest in Consultant's best practices and benchmarking information to the City.

VI. RECORDS RETENTION

6.1 Consultant and its subcontractors, if any, shall properly, accurately and completely maintain all documents, papers, and records, and other evidence pertaining to the services rendered hereunder (hereafter referred to as "Documents"), and shall make such materials available to the City at their respective offices, at all reasonable times and as often as City may deem necessary during the Agreement period, including any extension or renewal hereof, and the record retention period established herein, for purposes of audit, inspection, examination, and making excerpts or copies of same by City and any of its authorized representatives.

6.2 Consultant shall return said Documents to City upon conclusion of this contract; however, Consultant shall have the right to retain one (1) copy of said Documents in a secure manner for the purpose of complying with the terms of this Agreement.

6.3 The Public Information Act, Texas Government Code Section 552.021, requires the City to make public information available to the public. Under Texas Government Code Section 522.002(a), public information means information that is collected, assembled or maintained under a law or ordinance or in connection with the transaction

of official business: 1) by a governmental body; or 2) for a governmental body and the governmental body owns the information or has a right of access to it. Therefore, if Consultant receives inquiries regarding documents within its possession pursuant to this Agreement, Consultant shall (a) within 24 hours of receiving the requests, forward such requests to City for notification purposes and to afford the City the opportunity to assert any applicable arguments or protections necessary to protect its information, and (b) take action as authorized under the Public Information Act to protect information that may be confidential pursuant to state or federal law. If the requested information is confidential pursuant to State or Federal law, the Consultant shall submit to the City the list of specific statutory authority mandating confidentiality no later than three business days of Consultant's receipt of such request..

6.4 Consultant agrees to comply with official records retention schedules in accordance with the Local Government Records Act of 1989, any amendments thereto, and any other applicable federal or state laws or regulations

VII. TERMINATION

7.1 Termination of this Agreement shall mean termination by expiration of the Agreement term as stated in Article II. Term, or earlier termination pursuant to any of the provisions hereof.

7.2 Termination Without Cause. This Agreement may be terminated by either party upon ten (10) business days written notice, which notice shall be provided in accordance with Article VIII. Notice.

7.3 Termination For Cause. Upon written notice, which notice shall be provided in accordance with Article VIII. Notice, City may terminate this Agreement as of the date provided in the notice, in whole or in part, upon the occurrence of one (1) or more of the following events, each of which shall constitute an Event for Cause under this Agreement:

7.3.1 The sale, transfer, pledge, conveyance or assignment of this Agreement without prior approval, as provided in Article XII. Assignment and Subcontracting.

7.4 Defaults With Opportunity for Cure. Default by Consultant in the performance of this Agreement shall be considered an event of default. City shall deliver written notice of said default specifying such matter(s) in default. Consultant shall have fifteen calendar days after receipt of the written notice, in accordance with Article VIII. Notice, to cure such default. If Consultant fails to cure the default within such fifteen-day cure period, City shall have the right, without further notice, to terminate this Agreement in whole or in part as City deems appropriate, and to contract with another consultant to complete the work required in this Agreement. Consultant shall be entitled to receive just and equitable compensation for any work satisfactorily completed prior to such termination date.

7.5 Termination By Law. If any state or federal law or regulation is enacted or promulgated which prohibits the performance of any of the duties herein, or, if any law is interpreted to prohibit such performance, this Agreement shall automatically terminate as of the effective date of such prohibition.

7.6 Regardless of how this Agreement is terminated, Consultant shall effect an orderly transfer to City or to such person(s) or firm(s) as the City may designate, at no additional cost to City, all completed or partially completed documents, papers, records, charts, reports, and any other materials or information produced as a result of or pertaining to the services rendered by Consultant, or provided to Consultant, hereunder, regardless of storage medium, if so requested by City, or shall otherwise be retained by Consultant in accordance with Article VI. Records Retention. Any record transfer shall be completed within thirty calendar days of a written request by City and shall be completed at Consultant's sole cost and expense. Payment of compensation due or to become due to Consultant is conditioned upon delivery of all such documents, if requested.

7.7 Within forty-five calendar days of the effective date of completion, or termination or expiration of this Agreement, Consultant shall submit to City its claims, in detail, for the monies owed by City for services performed under this Agreement through the effective date of termination. Failure by Consultant to submit its claims within forty-five calendar days shall negate any liability on the part of City and constitute a **Waiver** by Consultant of any and all right or claims to collect moneys that Consultant may rightfully be otherwise entitled to for services performed pursuant to this Agreement.

7.8 Upon the effective date of expiration or termination of this Agreement, Consultant shall cease all operations of work being performed by Consultant or any of its subcontractors pursuant to this Agreement.

7.9 Termination not sole remedy. In no event shall City's action of terminating this Agreement, whether for cause or otherwise, be deemed an election of City's remedies, nor shall such termination limit, in any way, at law or at equity, City's right to seek damages from or otherwise pursue Consultant for any default hereunder or other action.

VIII. NOTICE

8.1 Except where the terms of this Agreement expressly provide otherwise, any election, notice or communication required or permitted to be given under this Agreement shall be in writing and deemed to have been duly given if and when delivered personally (with receipt acknowledged), or three days after depositing same in the U.S. mail, first class, with proper postage prepaid, or upon receipt if sending the same by certified mail, return receipt requested, or upon receipt when sent by a commercial courier service (such as Federal Express or DHL Worldwide Express) for expedited delivery to be confirmed in writing by such courier, at the addresses set forth below or to such other address as either party may from time to time designate in writing.

If intended for City, to:

City of San Antonio
Director of Transportation & Capital Improvements
114 W. Commerce, 6th floor
San Antonio, Texas 78205

If intended for Consultant, to:

The University of Texas at San Antonio (UTSA)
Office of Sponsor Project Administration,
Contract and Industry Agreements
One UTSA Circle
San Antonio, Texas 78249

With a copy to:

The University of Texas at San Antonio
Civil and Environmental Engineering
Samer Dessouky, PhD, PE
One UTSA Circle, BSE Building
San Antonio, Texas 78249

IX. STANDARD OF PERFORMANCE

9.1 Services provided by Consultant under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

X. INSURANCE

10.1 Consultant and the City each maintain a self-insurance fund for general liability and worker's compensation claims and causes of action to meet their statutory obligations to each party's employees.

10.2 With respect to Consultant, it is the stated policy of the State of Texas not to acquire commercial general liability insurance for torts committed by employees of the state who are acting within the scope of their employment. Rather, Chapter 101 of the Civil Practice and Remedies Code states that a governmental unit in the state is liable for property damage, personal injury and death proximately caused by the wrongful act or omission or negligence of an employee acting within his scope of employment. Liability of the state government under this chapter is limited to money damages in a maximum amount of \$250,000.00 for each person and \$500,000.00 for each single occurrence for bodily injury or death and \$100,000.00 for each single occurrence for injury to or destruction of property. Employees of The University of Texas System are provided Workers' Compensation coverage under a self-insuring, self-managed program as authorized by the Texas Labor Code, Chapter 503.

XI. INDEMNIFICATION

11.1 Consultant and the City acknowledge they are political subdivisions of the State

of Texas and are subject to, and comply with the applicable provisions of the Texas Tort Claims Act, as set out in the Civil Practice and Remedies Code, Section 101.001, et. seq. and the remedies authorized therein regarding claims or causes of action that may be asserted by third parties for accident, injury or death. Consultant and the City shall each promptly notify the other in writing of any claim or demands that become known against them in relationship to or arising out of activities under this Agreement.

11.2 The provisions of this Subsection are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

XII. ASSIGNMENT AND SUBCONTRACTING

12.1 Consultant shall supply qualified personnel as may be necessary to complete the work to be performed under this Agreement. Persons retained to perform work pursuant to this Agreement shall be the employees or subcontractors of Consultant. Consultant, its employees or its subcontractors shall perform all necessary work.

12.2 None of the work or services covered by this Agreement shall be sub-contracted without the prior written consent of the City and, if necessary, appropriate amendment to this Agreement consistent with the requirements herein.

12.3 Except as otherwise stated herein, Consultant may not sell, assign, pledge, transfer or convey any interest in this Agreement, nor delegate the performance of any duties hereunder, by transfer, by subcontracting or any other means, without the consent of the City Council, as evidenced by passage of an ordinance. As a condition of such consent, if such consent is granted, Consultant shall remain liable for completion of the services outlined in this Agreement in the event of default by the successor Consultant, assignee, transferee or subcontractor.

12.4 Any attempt to transfer, pledge or otherwise assign this Agreement without said written approval, shall be void ab initio and shall confer no rights upon any third person. Should Consultant assign, transfer, convey, delegate, or otherwise dispose of any part of all or any part of its right, title or interest in this Agreement, City may, at its option, cancel this Agreement and all rights, titles and interest of Consultant shall thereupon cease and terminate, in accordance with Article VII. Termination, notwithstanding any other remedy available to City under this Agreement. The violation of this provision by Consultant shall in no event release Consultant from any obligation under the terms of this Agreement, nor shall it relieve or release Consultant from the payment of any damages to City, which City sustains as a result of such violation.

XIII. INDEPENDENT CONTRACTOR

13.1 Consultant covenants and agrees that it is an independent contractor and not an officer, agent, servant or employee of City; that Consultant shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all

persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondent superior shall not apply as between City and Consultant, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating the relationship of employer-employee, principal-agent, partners or joint venturers between City and Consultant. The parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the Consultant under this Agreement and that the Consultant has no authority to bind the City.

XIV. CONFLICT OF INTEREST

14.1 Consultant acknowledges that it is informed that the Charter of the City of San Antonio and its Ethics Code prohibit a City officer or employee, as those terms are defined in the Ethics Code, from having a financial interest in any contract with the City or any City agency such as city owned utilities. An officer or employee has a "prohibited financial interest" in a contract with the City or in the sale to the City of land, materials, supplies or service, if any of the following individual(s) or entities is a party to the contract or sale: a City officer or employee; his parent, child or spouse; a business entity in which the officer or employee, or his parent, child or spouse owns ten percent or more of the voting stock or shares of the business entity, or ten percent or more of the fair market value of the business entity; a business entity in which any individual or entity above listed is a subcontractor on a City contract, a partner or a parent or subsidiary business entity.

14.2 Pursuant to Subsection 14.1 , Consultant represents and certifies, and this Agreement is made in reliance thereon, that it, its officers, employees and agents are neither officers nor employees of the City. Consultant further represents and certifies that it has tendered to the City a Discretionary Contracts Disclosure Statement in compliance with the City's Ethics Code.

XV. AMENDMENTS

15.1 Except where the terms of this Agreement expressly provide otherwise, any alterations, additions, or deletions to the terms hereof, shall be effected by amendment, in writing, executed by both Director and Consultant.

XVI. SEVERABILITY

16.1 If any clause or provision of this Agreement is held invalid, illegal or unenforceable under present or future federal, state or local laws, including but not limited to the City Charter, City Code, or ordinances of the City of San Antonio, Texas, then and in that event it is the intention of the parties hereto that such invalidity, illegality or unenforceability shall not affect any other clause or provision hereof and that the remainder of this Agreement shall be construed as if such invalid, illegal or unenforceable clause or provision was never contained herein; it is also the intention of

the parties hereto that in lieu of each clause or provision of this Agreement that is invalid, illegal, or unenforceable, there be added as a part of the Agreement a clause or provision as similar in terms to such invalid, illegal or unenforceable clause or provision as may be possible, legal, valid and enforceable.

XVII. LICENSES/CERTIFICATIONS

17.1 Consultant represents and certifies that Consultant and any other person designated to provide services hereunder has the requisite training, license and/or certification to provide said services, and meets all competence standards promulgated by all other authoritative bodies, as applicable to the services provided herein.

XVIII. COMPLIANCE

18.1 Consultant shall provide and perform all services required under this Agreement in compliance with all applicable federal, state and local laws, rules and regulations.

XIX. NONWAIVER OF PERFORMANCE

19.1 Unless otherwise specifically provided for in this Agreement, a waiver by either Party of a breach of any of the terms, conditions, covenants or guarantees of this Agreement shall not be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, condition, covenant or guarantee herein contained. Further, any failure of either Party to insist in any one or more cases upon the strict performance of any of the covenants of this Agreement, or to exercise any option herein contained, shall in no event be construed as a waiver or relinquishment for the future of such covenant or option. In fact, no waiver, change, modification or discharge by either party hereto of any provision of this Agreement shall be deemed to have been made or shall be effective unless expressed in writing and signed by the party to be charged. In case of City, such changes must be approved by the City Council, as described in Article XV. Amendments. No act or omission by a Party shall in any manner impair or prejudice any right, power, privilege, or remedy available to that Party hereunder or by law or in equity, such rights, powers, privileges, or remedies to be always specifically preserved hereby.

XX. LAW APPLICABLE

20.1 THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND ALL OBLIGATIONS OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN BEXAR COUNTY, TEXAS.

20.2 Any legal action or proceeding brought or maintained, directly or indirectly, as a result of this Agreement shall be heard and determined in the City of San Antonio, Bexar County, Texas.

20.3 City acknowledges that Consultant is a state agency and institution of higher education established under Texas law and governed by the Board of Regents of the University of Texas System. Therefore, notwithstanding anything in this Agreement to the contrary, Consultant agrees to comply with state and federal laws as described herein only to the extent such laws apply to Consultant and Consultant agrees to comply with City laws and policies only to the extent such laws and policies do not conflict with federal or state laws or policies applicable to Consultant. Additionally City and Consultant agree that, notwithstanding anything in this Agreement to the contrary, (a) nothing in this Agreement shall preclude, waive or limit any claim of Consultant or the State of Texas or Consultant's or the State's right to seek redress in the courts, (b) neither Consultant's nor City's failure to act in accordance with any provision of this Agreement shall preclude, waive or limit any claim of Consultant or the State of Texas of Consultant's or the State's right to seek redress in the courts, and (c) neither the execution of this Agreement by Consultant nor any other conduct, action or inaction of any representative of Consultant to this Agreement constitutes or is intended to constitute a waiver of Consultant's or State's sovereign immunity to suit.

XXI. LEGAL AUTHORITY

21.1 The signer of this Agreement for Consultant represents, certifies, and assures that he has full legal authority to execute this Agreement on behalf of Consultant and to bind Consultant to all of the terms, conditions, provisions and obligations herein contained.

XXII. PARTIES BOUND

22.1 This Agreement shall be binding on and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, and successors and assigns, except as otherwise expressly provided for herein.

XXIII. CAPTIONS


23.1 The captions contained in this Agreement are for convenience of reference only, and in no way limit or enlarge the terms and/or conditions of this Agreement.

XXIV. ENTIRE AGREEMENT

24.1 This Agreement, together with its authorizing ordinance and its exhibits, if any, constitute the final and entire agreement between the parties hereto and contain all of the terms and conditions agreed upon. No other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind the parties hereto, unless same be in writing, dated subsequent to the date hereto, and duly executed by the parties, in accordance with Article XV. Amendments.

EXECUTED and AGREED to as of the dates shown below.

**CITY:
CITY OF SAN ANTONIO**

A black ink signature, appearing to be 'MF', written over a horizontal line.

Mike Frisbie, P.E.
Director/City Engineer

Date: 6-12-17

**CONSULTANT:
UNIVERSITY OF TEXAS AT SAN
ANTONIO (UTSA)**

A blue ink signature, appearing to be 'John Saygin', written over a horizontal line.

Can (John) Saygin, Ph.D.
Associate Vice President for Sponsored
Project Administration

Date: 5/17/2017

Attachment A Scope of Services

Introduction

The City of San Antonio (COSA) population continues to grow due to the strong economic development and other factors. This growth has led to congested traffic and increased crashes. With limited resources, the Transportation & Capital Improvement Department (TCI) of the COSA is in charge of finding solutions to eliminate the root causes of these crashes in the roadway network. This proposal describes the tentative tasks offered by the consultants to assist the COSA engineers and planners promoting safety and reducing crashes in the City's roadways. The proposed tasks below are examples of the services offered by the consultants in this agreement:

Task 1: Identifying critical roadway sections with high crashes

The consultants will use analysis already performed by TCI and the CRIS database to identify critical roadway sections and intersections in San Antonio that experience high rates of crashes. The consultants will perform detailed analysis and identify primary and secondary factors on the causes of the crashes. The consultants will perform Statistical Analysis to quantify the significance of these factors and identify the most critical ones.

Task 2: Site visits and data collection

- A. The consultants will perform site visits at the located identified from Task 1. Traffic and roadway data will be collected to supplement the CRIS database information. Video recording of the traffic stream and pattern of potential causes of crashes will be collected.
- B. Reference sites with historical low records of crashes will also be reviewed and included in the analysis.

Task 3: Identifying root causes of crashes and recommending countermeasures

Based on the findings from Tasks 1 and 2, the consultants will identify the root causes of crashes at the critical sites. Information of the root causes will be presented to the COSA for evaluation and feedback. An assessment of previously implemented solutions at locations studied will also be provided. Finally, feasible and implementable solutions targeting these causes will be recommended.

Benefits to COSA

The proposed technical assistance will deliver high value to the COSA through the following benefits:

1. Conclusive data mining and statistical analysis to investigate the factors contribute to crash occurrence and severity in the COSA roadway network.
2. Identifying the critical crash sites will accelerate the engineering and planning process to find prompt effective solutions in timely manner.
3. Detailed assessment of previously implemented solutions will guide COSA engineers and planners on the effectiveness of the solutions for future implementation.
4. COSA engineers and planners will be able to update the current records of crashes simultaneously as they are updated in the database and instantly extract the police crash reports for the COSA engineers.

Deliverable

1. Detailed reports and presentations on the findings of Tasks 1-3.
2. Meetings with the traffic engineers and planners to present findings.
3. Recommendations on safety countermeasures including review of countermeasure implemented elsewhere.

Schedule of Tasks

The duration of this agreement is May 15, 2017 through April 28, 2018.

Staffing

The study will be conducted by Dr. Samer Dessouky, PE, Dr. Haim Sharif, PE, and UTSA graduate/undergraduate students.

Budget

The upper limit budget of this phase is \$50,000.

Consultant Biography:

Samer Dessouky, PhD, PE (Ohio and Texas) is currently an Associate Professor in Civil Engineering at University of Texas San Antonio. He has more than 20 years of experience in infrastructure sustainability, pavement management and safety. His current research projects are sponsored by federal, state and private sector. His funding at UTSA exceeds \$3.70 million from FHWA, TxDOT, City of San Antonio, Hewlett Packard, and SWRI. He is a current panelist and reviewer for the NCHRP program, Air Force Faculty Fellowship Program, Fulbright and NASA graduate fellowship program. Dr. Dessouky has 90 refereed technical publications on bituminous materials, computational micromechanics of asphalt mixtures, pavement sustainability, geogrid reinforcement, energy harvesting from roadways and motorists safety. He is the recipient of the Grant Mickle best paper award by the TRB in 2006, and his recent Energy harvesting innovation won the best innovative green engineering technology by ASCE in 2016 and the best paper award by ASEE in 2015 with his students. Dr. Dessouky serves on the

board members of the bituminous committee of the ASCE construction institute and the Middle East Society of Asphalt Technologists. He sits on the Editorial Boards of the Transportation and Transit Systems and serves as Associate Editor for the International Journal of Engineering.

Hatim Sharif, Ph.D., P.E., MPH. is a professor at the University of Texas at San Antonio. His research interests include transportation safety, hydrometeorology, geographic information systems (GIS), natural hazards, and the interaction between climate, water, and health. His research projects (totaling more than \$6 million) in these areas are supported by Texas Department of Transportation and national and state funding agencies, including NASA, National Science Foundation, Army Corps of Engineers, and National Weather Service. Ongoing research projects are focused on large truck crashes in South Texas, reducing crash at rural intersection, wild-life traffic encounters, impact of weather on transportation safety, and fatigue related crashes. Dr. Sharif is well-versed in statistical methods, big data analytics, GIS, crash reduction factors analysis, crash diagram review, traffic impact studies, and case-control analysis. Dr. Sharif has been invited as senior specialist to perform research at international institutions in France, Taiwan, and Middle East.