## PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §
COUNTY OF GALVESTON §

This agreement ("Agreement") entered into by and between Kimley-Horn and Associates, Inc., (hereinafter "Professional") and the City of League City, Texas (the "City"), a Texas home-rule city.

# 1. Scope of Services/Professional Fees/Reimbursable Costs

This Agreement authorizes the Professional to perform professional engineering services for the **Signal Timing Services** – **Four Corridors Totaling 21 Signals**, (Work") for and on behalf of the City. The following exhibits and appendix are attached to this Agreement and made a part hereof for all purposes.

Exhibit "A" - Professional's General Overview & Scope of Services, Fee and Rate Schedule

Professional shall not exceed the estimated cost or fees for any phase of the Work, including reimbursable costs, without written authorization from the City.

# 2. <u>Professional's Personnel and Sub-Consultants</u>

### a. Project Manager

Professional shall designate Manu Isaac, P.E. to serve as Project Manager for the Work performed under this Agreement. Any change of Project Manager shall require thirty days' advance written approval from the City's Representative. Professional certifies that the Project Manager identified in the preceding sentence is a licensed Professional Engineer in the State of Texas.

### b. Licensed and Registered Engineers

Professional shall keep a full-time registered engineer licensed in the state of Texas on staff for the duration of its performance of the Work.

# c. Professional's Employees

Prior to beginning the Work, Professional shall forward to the City, detailed resumes of the personnel to be assigned to the Work. Such personnel includes, but not be limited to, engineers.

### d. Rejection of Professional's Employees

The City reserves the right to approve or reject from the Work any employees of the Professional.

### e. Professional's sub-consultants

Copies of all proposed contracts with sub-consultants and/or subcontractors shall be given to the City before execution of such contracts.

# 3. <u>Designation and Duties of the City's Representative</u>

- a. The City's Deputy City Manager, or his designee, shall act as the City's Representative.
- b. This City's Representative shall use his best efforts to provide non-confidential City records for Professional's usage on the Work and to provide access to City's property and easements.

# 4. Standards of Performance

a. The Professional shall perform all services under this Agreement in accordance with the generally accepted engineering practice per specialized discipline.

### b. Codes and Standards

- (1) All references to codes, standards, environmental regulations and/or material specifications shall be to the latest revision, including all effective supplements or addenda thereto, as of the date that the order for any necessary equipment is made by the City or that the construction specified is bid by the City.
- (2) If any such equipment is specially manufactured, it shall be identified to the City, and the Contractor and the Seller shall present sufficient data to the City to support the design and the suitability of the equipment.
- (3) All materials furnished on any City project shall be in accordance with ASTM specifications, or with other recognized standards. Proprietary material or other materials for which no generally recognized standards exist may be used provided there has been at least five years of proven experience in the field, and such satisfactory documentation has been approved by the City's Representative.
- (4) The Work shall be designed and furnished in accordance with the most current codes and/or standards adopted by City, State or Federal government or in general custom and usage by the profession.
- (5) The codes and standards used in the profession set forth minimum requirements. These may be exceeded by the Contractor or the Professional if superior designs or materials are available for successful operation of

equipment and/or for the construction project on which the Work is performed. Any alternative codes or regulations used shall have requirements that are equivalent or better than those in the above listed codes and regulations. The Professional shall state the alternative codes and regulations used.

- (6) Professional agrees the services it provides as an experienced and qualified professional engineer will reflect the professional standards, procedures and performances common in the industry for this project. Professional further agrees that the design, preparation of drawings, the designation or selection of materials and equipment, the selection and supervision of personnel and the performance of other services under this contract, will be pursuant to the standard of performance common in the profession.
- (7) Professional shall promptly correct any defective designs or specifications caused by Professional at no cost to City. The City's approval, acceptance, use of or payment for all or any part of Professional's services hereunder or of the Work itself shall in no way alter Professional's obligations or the City's rights under this Agreement.

# 5. Notice to Proceed

Professional shall not proceed with the Work or any stage thereof until written notice to proceed is provided by the City's Representative.

# 6. <u>Insurance</u>

a. Professional shall procure and maintain insurance in the amounts listed below for protection from claims under workers' compensation, claims for damages because of bodily injury, including personal injury, sickness or disease or death of any and all employees or of any person other than such employees and from claims or damages because of injury to or destruction of property including lose of use resulting therefrom.

	era					

### **Limit of Liability**

Workers' Compensation Statutory for Worker's Compensation

Employer's Liability Bodily Injury by Accident: \$500,000 (Each Accident)

Bodily Injury by Disease: \$500,000 (Policy Limit) \$500,000 (Each Employee)

Commercial General: Bodily Injury and Property

odily injury and rioperty

(Including Broad Form Coverage, Contractual Liability, Bodily and Personal Injury, and Completed Operations) Damage, Combined: Limits of \$500,000 each Occurrence and \$1,000,000 aggregate (defense costs excluded from face amount of policy)

- b. Professional shall maintain professional liability (errors and omissions/malpractice) insurance in the amount of \$1,000,000. Professional shall provide a copy of its Certificate of Insurance to the City within ten days of contract execution or this contract shall be null and void. A deductible is acceptable for professional liability insurance and the deductible limits shall not exceed \$20,000.
- c. Professional shall give the City thirty days' written notice prior to any change or cancellation of these insurance policies.

# 7. <u>INDEMNIFICATION</u>

PROFESSIONAL AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE CITY, ITS EMPLOYEES, AGENTS, OFFICERS AND ASSIGNS FROM ANY AND ALL SUITS, ACTIONS, CLAIMS, CAUSES OF ACTION, DAMAGES AND LOSSES, INCLUDING, WITHOUT LIMITATION, REASONABLE ATTORNEYS' FEES AND EXPENSES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES, REAL OR ASSERTED, RECEIVED OR SUSTAINED BY ANY PERSON OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENCE OR GROSS NEGLIGENCE, OR ANY NEGLIGENT ACT OR OMISSION OF PROFESSIONAL, ITS CONTRACTORS, SUBCONTRACTORS, SUB-CONSULTANTS, AGENTS OR EMPLOYEES ARISING DIRECTLY OR INDIRECTLY OR IN ANY WAY CONNECTED WITH THE WORK PERFORMED BY PROFESSIONAL UNDER THIS AGREEMENT.

# 8. Ethics Acknowledgement

Any vendor or contractor entering into this contract or agreement with the City of League City, Texas expressly acknowledges that it has familiarized itself with the provisions of Section 2-34(i) of the Code of Ordinances of the City of League City which provides, among other things, that if within two years after the commencement of this contract or agreement the vendor or contractor hires a city official, former city official, appointed city officer, former appointed city officer,

appointed city executive employee, or former appointed city executive employee or a city employee who, while acting in such capacity, had substantial and personal involvement with the negotiation of this contract or agreement, then this contract or agreement shall, at the option of the City Manager, be cancelled and/or the vendor or contractor shall be barred from additional contracting with the City of League City for a period of three years.

# 9. Termination of Professional

The City retains the right to terminate this Agreement "at will" and to pay only for the professional services and sub-consultant's and subcontractor's costs that were provided for and/or committed to and to that the City approved of prior to the date of termination. All engineering drawings, specifications and files shall be given to the City at the time of termination. Professional shall not be responsible for the City's misuse of completed drawings, specifications and files; nor shall Professional be responsible for any work by others used to complete partial documents.

# 10. Records

At the City's request, the City will be entitled to review and receive a copy of all documents that indicate work on the project that is the subject of this Agreement.

## 11. Supervision of Professional

Professional shall be subject to the direction and supervision of the City's Representative. However, it is agreed and stipulated that Professional is an independent contractor and that the City neither reserves not possesses any right to control the details of the Work performed by Professional under the terms of this Agreement.

## 12. Billings

The City shall have thirty (30) days to pay Professional's bills from the date of receipt of such bills. All bills must identify with specificity the work or services performed and the date(s) of such work or services.

# 13. Reputation in the Community

Professional shall retain a high reputation in the community for providing professional engineering services. Professional shall forward a copy of any current petition or complaint in any court of law against Professional's League City Office which (a) asserts a claim for \$50,000 or more for errors or omissions in providing engineering services and/or (b) seeks to deny the Professional the right to practice engineering services or to perform any other services in the state of Texas.

### 14. Payroll and Basic Records

- a. Professional shall maintain payrolls and basic payroll records during the course of the work performed under this Agreement and shall preserve them for a period of three years from the completion of the work called for under this Agreement for all personnel working on such work. Such records shall contain the name and address of each such employee, social security number, correct classification, hourly rates of wages paid, daily and weekly number of hours worked, deductions made and actual wages paid.
- b. Professional shall make the records required to be maintained under the preceding subsection (a) of this section available to the City for inspection, copying or transcription or its authorized representatives. Professional shall permit such representatives to interview Professional's employees during working hours on the job.

# 15. Default of Professional

- a. If Professional refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this Agreement (including any extension) or fails to complete the work within that time period, the City may, by written notice to Professional, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In such an event, the City reserves the right to take over the work and complete it by contract or otherwise, and may take possession of and use any records necessary for completing the work. Professional shall be liable for any damage to the City resulting from Professional's refusal or failure to complete the work within the specified time, whether or not Professional's right to proceed with the work is terminated. This liability includes any increased costs incurred by the City in completing Professional's work.
- b. Professional shall not be charged with damages under the preceding subsection if:
  - (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the professional. Examples of ouch causes include (I) acts of God or of the public enemy, (ii) acts of the Government in either its sovereign or contractual capacity, (iii) acts of another Contractor or Professional in the performance of a contract with the Government, and/or extended review or approvals by government agencies out of the-control of the Professional, (iv) acts of fire, (v) floods, (vi) epidemics, (vii) quarantine restrictions (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of the professional; and

- (2) Professional, within ten days from the beginning of any delay (unless extended by the City's Representative), notifies the City's Representative in writing of the causes of delay. The City's Representative shall ascertain the facts and the extent of delay. If, in the judgment of the City's Representative, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the City's Representative shall be final and conclusive on the parties, but subject to appeal to the City's City Council.
- c. The rights and remedies of the City in this section are in addition to any other rights and remedies provided by law or under this Agreement.

## 16. Governing Law

This Agreement has been made under and shall be governed by the laws of the state of Texas. The parties further agree that performance and all matters related thereto shall be in Galveston County, Texas.

# 17. Notices

Notices required under this Agreement shall be mailed to the addresses designated below or such other addresses as the either of the parties may designate in writing from time to time, and unless otherwise indicated in this Agreement, shall be deemed received when sent postage prepaid U.S. Mail to the following addresses:

For the City:

City of League City, Texas 300 West Walker Street League City, Texas 77573 Attention: John Baumgartner, P.E.

For the Professional: Kimley-Horn and Associates 12012 Wickchester Lane, Suite 500 Houston, Texas 77079 Attention: Manu Isaac, P.E.

### 18. Waiver

No waiver by either party to this Agreement of any term or condition of this Agreement shall be deemed or construed to be a waiver of any other term or condition or subsequent waiver of the same term or condition.

## 19. Complete Agreement

Professional in regard to the s representations or agreements, ei	subject matter hereof and ther whether written or ora d by written instrument ap	ed agreement between the City and I supersedes all prior negotiations, al, on the subject matter hereof. This proved and executed by both of the terms.
FOR THE CITY OF LEAGUE C	ITY:	
SIGNED ON THE	day of	, 2018.
	John Ba City Ma	umgartner inager
ATTEST:		
Diana M. Stapp City Secretary		
APPROVED AS TO FORM:		
Nghiem V. Doan City Attorney		

KIMLEY-HORN AND ASSOCIATES, INC.

Name: Eric Z. Smith

Title: Assistant Secretary

ATTEST



July 3, 2018

Mr. David Tickell Traffic Operations Supervisor City of League City 144 Park Ave Ste 100 League City, Texas 77573

RE:

City of League City – Signal Timing Services Professional Engineering Services Proposal

Dear Mr. Tickell,

We are pleased to submit this scope of services and fee schedule to the City of League City for Signal Timing Services, primarily along four corridors totaling 21 signals. We have prepared this scope of services based on our knowledge of the City's traffic signal infrastructure and the current traffic needs conveyed to us by the City.

We look forward to working with you on this project. If you have any further questions regarding this scope or fee, please don't hesitate to contact me.

Sincerely yours,

Manu Isaac, P.E.

Associate/ Project Manager



# City of League City Signal Timing Services – Four Corridors Totaling 21 Signals

Kimley-Horn and Associates, Inc. ("Kimley-Horn") is pleased to submit this scope and fee proposal to the City of League City ("the Client") for professional engineering services which consist of signal timing services, primarily along four corridors within the City. Our project understanding, scope of services and fees are presented below.

#### INFORMATION PROVIDED BY CLIENT

The City of League City will provide the following:

- 1. Any previous traffic data for the intersections.
- 2. Existing timings.
- 3. Any information about current citizen complaints, problem areas, etc.

Kimley-Horn shall be entitled to rely on the completeness and accuracy of materials supplied by others in the completion of their services under this agreement.

#### SCOPE OF SERVICES

#### TASK 1: - FIELD VISIT/ SIGNAL OPERATIONS REVIEW

Kimley-Horn will conduct one field visit of the signalized intersections and document traffic signal control, intersection geometry, traffic operations, and existing traffic patterns in the form of field notes and sketches that will be for Kimley-Horn's use only as part of the information used to complete subsequent tasks of this proposal. If Kimley-Horn observes deficiencies or potential improvements that can be implemented by the City related to existing traffic controls, intersection geometry, and signal operations during the field visits, Kimley-Horn will communicate those observations to Client. The information gathered during the field visit will form the basis for preparing recommendations for traffic signal modifications or geometric improvements at these locations, if any.

### TASK 2: - SIGNAL TIMING OPTIMIZATION

Kimley-Horn will conduct the following scope of signal timing optimization for 21 study intersections listed below. Using the TMC data collected and/or field observations, Kimley-Horn will determine the AM, Off, and PM peak periods for the corridor. Kimley-Horn will perform capacity analyses at each intersection to determine the existing saturation flow rates and Level of Service (LOS). Kimley-Horn will then perform Synchro optimization analysis to determine cycle lengths for the AM, Off, PM and Weekend peak periods. We will select the recommended cycle lengths for each peak period, and evaluate the overall level of service (LOS), delay and volume to capacity (v/c) ratio for each intersection to enable efficient intersection conditions. We will then endeavor to further optimize intersection offsets and lead-lag sequences using TSPPD (Tru-Traffic) in an effort to further improve green bands and progression patterns along the corridor. During this task, Kimley-Horn may also identify intersections which may operate more efficiently running free instead of coordinated timings.



#### FM 518 Corridor:

- 1. FM 518 at Williamsport/Newport Blvd
- 2. FM 518 at Hobbs/Lafayette Lane
- 3. FM 518 at IH 45 (Diamond Intersection)
- 4. FM 518 at N. Wesley Drive
- 5. FM 518 at Calder Drive
- 6. FM 518 at Interurban Street
- 7. FM 518 at SH 3

#### SH 96 / League City Parkway (LCP):

- 1. SH 96 at Hobbs Road
- 2. SH 96 at Kroger/YMCA
- 3. SH 96 at Butler Road
- 4. SH 96 at IH 45 (Diamond Intersection)
- 5. SH 96 at W Walker Street
- 6. SH 96 at SH 3
- 7. SH 96 at South Shore Blvd

Due to roadway and signal improvements at SH 96 and South Shore Blvd, the signal phase splits, sequences, offset and basic timings will be revised and updated. A cycle length analysis will not be performed for this intersection, as the cycle lengths will match the adjacent coordinated signal system.

### FM 646 Corridor:

- 1. FM 646 at Brookport Drive
- 2. FM 646 at W Walker Street

#### 5-Corners Corridor/Area:

- 1. FM 518/FM 270/FM 518 E/FM 2094
- 2. FM 518/E Main St at Texas Avenue
- 3. FM 2094 at Davis Road
- 4. FM 2094 at Stadium Drive
- 5. FM 518 E. at Clear Creek ISD

Due to recent reconstruction of FM 518/FM 270/FM 518 E/FM 2094 (5-Corners) intersection, traffic operations at this location and four nearby signals will need be evaluated. Kimley-Horn will study and determine if these signals would benefit from having peer-to-peer logic statements. If required, peer-to-peer logic statements will be developed to provide fully actuated coordination between adjacent signals. Kimley-Horn may use the services of a signal timing sub-consultant to enable peer-to-peer operations.



### TASK 3: - SIGNAL TIMING IMPLEMENTATION

Upon approval of the proposed cycle lengths and timing plans developed under Task 2 by City staff, Kimley-Horn will input the new timing plans into the signal controllers. As part of the signal timing implementation, we will reprogram the existing Signal Controllers with the new proposed signal timings. Using a laptop and the Centracs® system, we will reprogram the Basic Phase Data, Unit Data, Coordination Data, Time Base Data, and review various controller settings for optimum timing performance in the field. In the initial phases of traffic signal implementation, the City's traffic signal technician should be present when new timings are input or modified at these controllers. After the new timing plans have been installed, Kimley-Horn will observe the actual operation of the new timing plans and Kimley-Horn may recommend field adjustments that could improve traffic operations. A critical aspect of signal coordination is the ability of the controller clocks to be in sync. Kimley-Horn assumes that there would be communication between controllers to accomplish this and assist with the Time-Based Coordination. The final timings will be uploaded onto the City's laptop in the field when the timing implementation is complete. A hard copy of the final timings will also be placed in each cabinet for reference. Listed below are the intersections for which Signal Timing Optimization/Implementation will be performed.

#### TASK 4: - TRAVEL TIME RUNS

Kimley-Horn will conduct travel time runs for the FM 518 and SH 96/LCP. Upon completion of both before and after travel time runs, a comparison of the data will be used to evaluate the result of signal timing optimization.

### **Before Travel Times**

Kimley-Horn will conduct three (3) "before" travel time runs in each direction during the AM, Off and PM peak periods for each corridor. Such runs will be made during the same two-hour time interval selected as the peak period for AM, Off, and PM. The initial travel time runs will be made prior to the implementation of the new signal timing plans. The data will be analyzed and presented to the City in the form of tables and/or graphs.

### After Travel Times

Following the implementation and fine-tuning of the new timing plans, Kimley-Horn will conduct three (3) "after" travel time runs in each direction during the AM, Off, and PM peak periods. The times and geographical limits will be the same as for the "before" travel time runs. The data will be analyzed and presented to the City in the form of tables and/or graphs.

### TASK 5: - DOCUMENTATION

Kimley-Horn will prepare the proposed preliminary timing plans and time-space diagrams developed under Task 2 and submit to the City for review and approval as a Preliminary Technical Memorandum. Kimley-Horn will address one round of reasonable comments received from the City prior to Signal Timing Optimization/Implementation.

Kimley-Horn will summarize cycle length analyses, timing plan generation, time-space diagrams, and final implemented timings in a final memo. This memo will include the final timing plan data (cycle lengths, splits, offsets, and phase sequences) in tabular form. In addition, the memo will provide the results of the before and after travel time comparisons. Recommendations for potential improvements



to the signalized intersections or the corridor, if any as identified by Kimley-Horn in our completion of this scope, will also be a part of this memo. One bound copy of the final memo and an electronic copy in pdf format will be submitted to the City.

#### TASK 6: - TRAFFIC DATA COLLECTION

At the request of League City, Kimley-Horn will use the services of a traffic data collection subconsultant to complete 24-hour ATR counts and/or Turning Movement Counts (TMC). The scope of these two types of data collection are as below:

#### 24-hour ATR counts

24-hour bi-directional traffic counts in 15-minute intervals will be collected for one typical weekday or a Saturday for each direction on the major roadway. Typical cost for a bi-direction 24-hour ATR count is \$400.

### Turning Movement Counts (TMC)

TMC's will be conducted during a typical weekday (Tuesday, Wednesday or Thursday) at intersections and will include 12-hour counts that comprise the AM, PM and Off-peak periods. No TMC's will be collected on the weekend. TMC data will be accomplished either using video cameras or manual data collection and the data file will be provided to the City. Typical cost for a 12-hour TMC at a minor intersection is \$750 and is \$1500 for a major intersection.

City will notify Kimley-Horn regarding the locations to be collected. Kimley-Horn will then provide a budget estimate for City approval prior to data collection. Data collection under this task will be limited to a maximum amount of \$9,750.

#### TASK 7: - SIGNAL TIMING SERVICES (HOURLY)

The City has requested that Kimley-Horn provide "on-call" traffic signal timing services on an on-call basis. When such services are requested, Kimley-Horn would provide an initial assessment of the effort required for each assignment. Traffic signal timing services would be performed only upon authorization of said effort by City.

Kimley-Horn will coordinate the work with City staff and upon completion of a work assignment provide the City with an email documenting the work performed.

On-call signal timing assignments would primarily include:

- Traffic signal timing observations
- Signal timing optimization
- Signal timing plan implementation
- Address traffic signal timing complaints

The services rendered under each work assignment will be billed based on the attached Standard Rate Schedule which would be effective for two years from date of this agreement.



#### FEE AND BILLING

Kimley-Horn will perform the scope of services for Tasks 1 through 6 as described above for a total lump sum fee of \$87,000 (see detail below). All project-related direct expenses are included in these lump sum fees.

Task 1	Field Investigation / Signal Operations Review	\$ 6,000
Task 2	Signal Timing Optimization	\$ 22,000
Task 3	Signal Timing Implementation	\$ 36,000
Task 4	Travel Time Runs	\$ 4,250
Task 5	Documentation	\$ 9,000
Task 6	Traffic Data Collection	\$ 9,750
Total L	ump Sum Labor Fee	\$ 87,000

Task 7 Signal Timing Services (Hourly) \$ 12,500 (NTE)

Kimley-Horn will perform the scope of services under Task 7 on an hourly basis and will be billed based on the Standard Rate Schedule attached for a not-to-exceed (NTE) amount of \$12,500.

For lump sum tasks, fees will be invoiced monthly based upon the percentage of services performed as of the invoice date. Payment will be due within 30 days of your receipt of the invoice.

#### **SCHEDULE**

The work identified under Tasks 1 through 5 shown above is anticipated to be complete within 5 months from receiving notice to proceed. However, the schedule could be impacted due to City reviews or other circumstances beyond Kimley-Horn's control.

Times for performance shall be extended as necessary for delays due to circumstances that Kimley-Horn does not control. Kimley-Horn shall not be liable for or be deemed in breach because of delays caused by any factor outside of its reasonable control.

### ADDITIONAL SERVICES

Any services beyond the Scope of Services described in the tasks above shall be considered additional services. The Consultant can provide these services, if needed, upon the City's issuance of a written Task Order. Any additional amounts paid to the Consultant as a result of the material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed.



# Kimley-Horn and Associates, Inc.

# Standard Rate Schedule

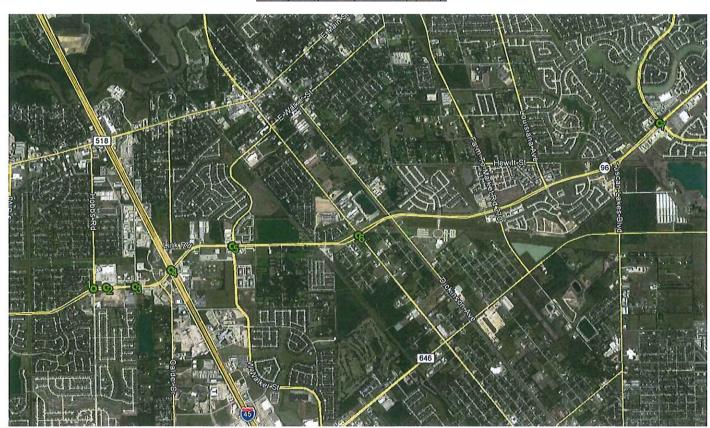
Senior Professional I	\$220 - \$240
Senior Professional II	\$180 - \$230
Professional	\$145 - \$195
Analyst	\$140 - \$155
Designer	\$105 - \$170
Technical Support	\$75 - \$155
Clerical/Administrative Support	\$65 - \$120

Effective July 2017

# FM 518 Corridor:



SH 96/League City Parkway (LCP):



# FM 646 Corridor:



5-Corners Corridor/Area:

