

AN ORDINANCE 2014 - 10 - 30 - 0 8 2 2

**AUTHORIZING A CONTRACT WITH KIMLEY-HORN AND ASSOCIATES, INC. FOR THE PURCHASE, CONFIGURATION, IMPLEMENTATION, TRAINING AND ONGOING SUPPORT FOR SOFTWARE TO REPLACE THE CURRENT ADVANCED TRAFFIC MANAGEMENT SYSTEM USED TO MANAGE THE CITY'S TRAFFIC SIGNAL SYSTEM INFRASTRUCTURE FOR A TOTAL COST NOT TO EXCEED \$1,244,000.00, FUNDED WITH PREVIOUSLY APPROPRIATED FUNDS IN MARCH 2008 FOR THE TRAFFIC SIGNAL SYSTEM MODERNIZATION PROGRAM.**

\* \* \* \* \*

**WHEREAS**, in FY 2008, the City began implementing a five-year, \$33 million Traffic Signal System Modernization and Synchronization Project to provide for a comprehensive communications network, an upgraded ATMS, and the development of optimized traffic signal timings; and

**WHEREAS**, the system has reached the end of its useful life and is in need of replacement in order to maintain the robustness of this critical service; and

**WHEREAS**, On April 1, 2014, the City issued a Request for Competitive Sealed Proposals (RFCSP) for software and implementation services to replace the City's existing Advanced Traffic Management System, Kimley-Horn and Associates, Inc. was selected by the committee and recommended for award; **NOW THEREFORE**,

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:**

**SECTION 1.** A contract with Kimley-Horn and Associates, Inc., for the purchase, configuration, implementation, training and ongoing support for software to replace the current Advanced Traffic Management System (ATMS) used to manage the City's traffic signal system Infrastructure, for a total cost not to exceed \$1,244,000.00, is hereby approved. A copy of the contract is attached hereto and is incorporated by reference as **Attachment 1**. The Chief Technology Officer or his designee is authorized to execute all documents related to this agreement.

**SECTION 2.** Payment in the amount of \$1,244,000.00 in SAP Fund 43099000, Certificates Of Obligation Capital Projects, SAP Project Definition 23-01085, Traffic System Modernization/Synchronization, is authorized to be encumbered and made payable to Kimley-Horn and Associates, Inc., for the purchase, configuration, implementation, training and ongoing support for software to replace the current Advanced Traffic Management System (ATMS).

**SECTION 3.** The financial allocations in this Ordinance are subject to approval by the Director of Finance, City of San Antonio. The Director of Finance, may, subject to concurrence by the

JK  
10/30/14  
Item #9

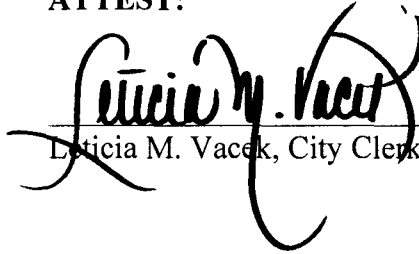
City Manager or the City Manager's designee, correct allocations to specific SAP Fund Numbers, SAP Project Definitions, SAP WBS Elements, SAP Internal Orders, SAP Fund Centers, SAP Cost Centers, SAP Functional Areas, SAP Funds Reservation Document Numbers, and SAP GL Accounts as necessary to carry out the purpose of this Ordinance.

**SECTION 4.** This ordinance shall be effective immediately upon passage by eight affirmative votes; otherwise it shall be effective on the tenth day after passage hereof.


**PASSED and APPROVED** this 29<sup>th</sup> day of October, 2014.

  
M A Y O R  
Ivy R. Taylor

**ATTEST:**

  
\_\_\_\_\_  
Leticia M. Vacek, City Clerk

**APPROVED AS TO FORM:**

B7:   
\_\_\_\_\_  
Robert F. Greenblum, City Attorney

<b>Agenda Item:</b>	9 ( in consent vote: 6, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 28, 29, 31A, 31B )						
<b>Date:</b>	10/30/2014						
<b>Time:</b>	02:38:40 PM						
<b>Vote Type:</b>	Motion to Approve						
<b>Description:</b>	An Ordinance authorizing a contract with Kimley-Horn and Associates, Inc. for the purchase, configuration, implementation, training and ongoing support for software to replace the current Advanced Traffic Management System used to manage the City's traffic signal system infrastructure for a total cost not to exceed \$1,244,000.00, funded in the Capital Improvement Program for the Traffic Signal System Modernization Program. [Ben Gorzell, Chief Financial Officer; Troy Elliott, Director, Finance]						
<b>Result:</b>	Passed						
Voter	Group	Not Present	Yea	Nay	Abstain	Motion	Second
Ivy R. Taylor	Mayor		x				
Diego Bernal	District 1		x			x	
Keith Toney	District 2		x				x
Rebecca Viagran	District 3		x				
Rey Saldaña	District 4		x				
Shirley Gonzales	District 5		x				
Ray Lopez	District 6		x				
Cris Medina	District 7		x				
Ron Nirenberg	District 8		x				
Joe Krier	District 9		x				
Michael Gallagher	District 10		x				

**INTEGRATION AGREEMENT FOR  
ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS) REPLACEMENT  
REQUEST FOR COMPETITIVE SEALED PROPOSAL ("RFCSP")  
RFCSP NO.: 6100004287**

**BETWEEN THE CITY OF SAN ANTONIO, TEXAS ("CITY")  
AND  
KIMLEY-HORN AND ASSOCIATES, INC.**

STATE OF TEXAS           §  
  §  
COUNTY OF BEXAR       §

This Agreement is entered into by and between the City of San Antonio, Texas, a home-rule municipal corporation (City), and Kimley-Horn and Associates, Inc., (Kimley-Horn), both of which may be referred to herein collectively as the "Parties" in this Agreement.

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.

**1.0 CONTRACT DOCUMENTS**

1.1 The terms and conditions for performance and payment of compensation for this Agreement are set forth in the following contract documents, true and correct copies of which are attached hereto and fully incorporated herein for all purposes, and shall be interpreted in the order of priority as appears below:

- a. This Integration Agreement;
- b. City's Request for Competitive Sealed Proposal No.: 6100004287 (Exhibit A), including all attachments, addendums and clarification statements thereto;
- c. Price and Schedule of Payments (Exhibit B);
- d. Kimley-Horn Statement of Work (SOW) (Exhibit C);
- e. Kimley-Horn ATMS Functional Requirements (Exhibit D);
- f. Kimley-Horn Baseline System Project Plan (Exhibit E);
- g. Kimley-Horn proposal submitted in response to City's RFCSP (Exhibit F);

**2.0 INSURANCE**

2.1 Prior to the commencement of any work under this Contract, **Kimley-Horn** shall furnish copies of all required endorsements and a completed Certificate(s) of Insurance to the

City's Finance Department, which shall be clearly labeled "Advanced Traffic Management System (ATMS) Replacement" in the Description of Operations block of the Certificate. The Certificate(s) shall be completed by an agent and signed by a person authorized by that insurer to bind coverage on its behalf. The CITY will not accept Memorandum of Insurance or Binders as proof of insurance. The Certificate(s) or form must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative to the CITY. The CITY shall have no duty to pay or perform under this Contract until such Certificate and endorsements have been received and approved by the City's Finance Department. No officer or employee, other than the City's Risk Manager, shall have authority to waive this requirement.

2.2 CITY reserves the right to review the insurance requirements of this Article during the effective period of this Contract and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City's Risk Manager based upon changes in statutory law, court decisions, or circumstances surrounding this Contract. In no instance will CITY allow modification whereupon CITY may incur increased risk.

2.3 KIMLEY-HORN's financial integrity is of interest to the CITY; therefore, subject to KIMLEY-HORN'S right to maintain reasonable deductibles in such amounts as are approved by the CITY, KIMLEY-HORN shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at KIMLEY-HORN's sole expense, insurance coverage written on an occurrence basis, unless otherwise indicated, by companies authorized to do business in the State of Texas and with an A.M Best's rating of no less than A- (VII), in the following types and for an amount not less than the amount listed below:

TYPE	AMOUNTS
1. Workers' Compensation	Statutory
2. Employers' Liability	\$500,000/\$500,000/\$500,000
3. Broad form Commercial General Liability Insurance to include coverage for the following: a. Premises operations b. Independent Contractors c. Products/completed operations d. Personal Injury e. Contractual Liability f. Damage to property rented by you	For Bodily Injury and Property Damage of \$1,000,000 per occurrence; \$2,000,000 General Aggregate, or its equivalent in Umbrella or Excess Liability Coverage  \$100,000
4. Business Automobile Liability a. Owned/leased vehicles b. Non-owned vehicles c. Hired Vehicles	Combined Single Limit for Bodily Injury and Property Damage of \$1,000,000 per occurrence
5. Professional Liability	\$1,000,000 per claim, to pay on behalf of

To be maintained and in effect for no less than two years subsequent to the completion of the professional services	the insured all sums which the insured shall become legally obligated to pay as damages by reason of any act, malpractice, error, or omission in professional services.
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- 2.4 **KIMLEY-HORN's** agrees to require, by written contract, that all subcontractor providing goods or services hereunder obtain the same insurance coverages required of **Kimley-Horn** herein, and provide a Certificate of Insurance and endorsement that names **Kimley-Horn** and **CITY** as additional insureds. **Kimley-Horn** shall provide **CITY** with said Certificate and endorsement prior to the commencement of any work by the subcontractor. This provision may be modified by City's Risk Manager, without subsequent City Council approval, when deemed necessary and prudent, based upon changes in statutory law, court decisions, or circumstances surrounding this Contract. Such modification may be enacted by letter signed by City's Risk Manager, which shall become a part of the contract for all purposes.
- 2.5 **CITY** shall be entitled, upon request and without expense, to receive copies of the policies, declaration page and all endorsements thereto as they apply to the limits required by the **CITY**, and may require the deletion, revision, or modification of particular policy terms, conditions, limitations or exclusions (except where policy provisions are established by law or regulation binding upon either of the parties hereto or the underwriter of any such policies). **Kimley-Horn** shall be required to comply with any such requests and shall submit a copy of the replacement Certificate of Insurance to **CITY** at the address provided below within 10 days of the requested change. **Kimley-Horn** shall pay any costs incurred resulting from said changes.

City of San Antonio  
 Attn: Finance Department  
 P.O. Box 839966  
 San Antonio, Texas 78283-3966

- 2.6 **Kimley-Horn** agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following provisions:
- Name the **CITY**, its officers, officials, employees, volunteers, and elected representatives as additional insured by endorsement, as respects operations and activities of, or on behalf of, the named insured performed under contract with the **CITY**, with the exception of the workers' compensation and professional liability policies;
  - Provide for an endorsement that the "other insurance" clause shall not apply to the City of San Antonio where the **CITY** is an additional insured shown on the policy;

- Workers' compensation, employers' liability, auto liability and general liability policies will provide a waiver of subrogation in favor of the **CITY**; and
  - Provide advance written notice directly to **CITY** of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance notice for nonpayment of premium.
- 2.7 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, **Kimley-Horn** shall provide a replacement Certificate of Insurance and applicable endorsements to **CITY**. **CITY** shall have the option to suspend **Kimley-Horn's** performance should there be a lapse in coverage at any time during this Contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this Contract.
- 2.8 In addition to any other remedies the **CITY** may have upon **Kimley-Horn's** failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the **CITY** shall have the right to order **Kimley-Horn** to stop work hereunder, and/or withhold any payment(s) which become due to **Kimley-Horn** hereunder until **Kimley-Horn** demonstrates compliance with the requirements hereof.
- 2.9 Nothing herein contained shall be construed as limiting in any way the extent to which **Kimley-Horn** may be held responsible for payments of damages to persons or property resulting from **Kimley-Horn's** or its subcontractors' performance of the work covered under this Contract.
- 2.10 It is agreed that **Kimley-Horn's** insurance shall be deemed primary and non-contributory with respect to any insurance or self insurance carried by the City of San Antonio for liability arising out of operations under this Contract.
- 2.11 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this Contract and that no claim or action by or on behalf of the **CITY** shall be limited to insurance coverage provided.
- 2.12 **Kimley-Horn** and any subcontractors are responsible for all damage to their own equipment and/or property.

### 3.0 INDEMNIFICATION AND RELATED PROVISIONS

- 3.1 **Kimley-Horn** covenants and agrees to **FULLY INDEMNIFY, DEFEND and HOLD HARMLESS**, the **CITY** and the elected officials, employees, officers, directors, volunteers and representatives of the **CITY**, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury, death and property damage, made upon the **CITY** directly or indirectly arising out of, resulting from or

related to Kimley-Horn's activities under this Contract, including any acts or omissions of Kimley-Horn, any agent, officer, director, representative, employee, Kimley-Horn or subcontractor of Kimley-Horn, and their respective officers, agents employees, directors and representatives while in the exercise of the rights or performance of the duties under this Contract. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of CITY, its officers or employees, in instances where such negligence causes personal injury, death, or property damage. **IN THE EVENT KIMLEY-HORN AND CITY ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY SHALL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS FOR THE STATE OF TEXAS, WITHOUT, HOWEVER, WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.**

- 3.2 The provisions of this INDEMNITY 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. Kimley-Horn shall advise the CITY in writing within 24 hours of any claim or demand against the CITY or Kimley-Horn known to Kimley-Horn related to or arising out of Kimley-Horn's activities under this Contract and shall see to the investigation and defense of such claim or demand at Kimley-Horn's cost. The CITY shall have the right, at its option and at its own expense, to participate in such defense without relieving Kimley-Horn of any of its obligations under this paragraph.
- 3.3 **KIMLEY-HORN** shall retain defense counsel within seven (7) business days of CITY'S written notice that CITY is invoking its right to indemnification under this Contract. Failure of the CITY to provide a written rejection of **KIMLEY-HORN'S** counsel, including reasonable cause, within (3) days of receipt of **KIMLEY-HORN'S** notice shall constitute acceptance of **KIMLEY-HORN'S** counsel. If **KIMLEY-HORN** fails to retain Counsel within such time period, CITY shall have the right to retain defense counsel on its own behalf, and **KIMLEY-HORN** shall be liable for all costs incurred by CITY. CITY shall also have the right, at its option, to be represented by advisory counsel of its own selection and at its own expense, without waiving the foregoing.
- 3.4 Employee Litigation – In any and all claims against any party indemnified hereunder by any employee of **KIMLEY-HORN**, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for **KIMLEY-HORN** or any subcontractor under worker's compensation or other employee benefit acts.

#### **4.0 LAW APPLICABLE**

- 4.1 **THIS CONTRACT 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.**

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

**5.0 ENTIRE AGREEMENT**


This Agreement, together with its exhibits, if any, constitutes the final and entire agreement between the parties hereto and contains 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 the same are in writing, dated subsequent to the date hereto, and duly executed by the parties.

**EXECUTED** and **AGREED** to as of the dates indicated below. This Agreement may be executed in multiple copies, each of which shall constitute an original.

**CITY OF SAN ANTONIO**

**KIMLEY-HORN, INC.**

\_\_\_\_\_  
Hugh Miller  
Chief Technology Officer  
Date: \_\_\_\_\_

  
\_\_\_\_\_  
Print Name: **Michael J. Hermann**  
Title: \_\_\_\_\_  
Date: **Senior Vice President**

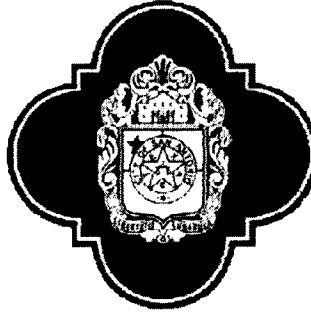
*24 OCT 2014*

Approved as to Form:

\_\_\_\_\_  
City Attorney

# CITY OF SAN ANTONIO

Transportation & Capital Improvements



## REQUEST FOR COMPETITIVE SEALED PROPOSAL ("RFCSP")

for

Advanced Traffic Management System (ATMS) Replacement

RFCSP 14-035, 6100004287

Release Date: APRIL 1, 2014

Proposals Due: MAY 2, 2014

**This solicitation has been identified as High-Profile.**

**Notice Regarding Prohibition on Campaign or Officeholder Contributions for Individuals and Entities Seeking High-Profile Contracts.** Under Section 2-309 of the Municipal Campaign Finance Code, the following are prohibited from making a campaign or officeholder contribution to any member of City Council, candidate for City Council or political action committee that supports or opposes a city council member or candidate from the 10th business day after a contract solicitation has been released until 30 calendar days after the contract has been awarded ("black out" period):

- 1 legal signatory of a high-profile contract;
- 2 any individual seeking a high-profile contract;
- 3 any owner or officer of an entity seeking a high-profile contract;
- 4 the spouse of any of above individuals;
- 5 any attorney, lobbyist or consultant retained to assist in seeking contract.

**A high-profile contract cannot be awarded to the individual or entity if a prohibited contribution has been made by any of these individuals during the "black out" period.**

Exhibit A

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## 003 BACKGROUND

The City of San Antonio, Transportation and Capital Improvements Department (Department) seeks proposals for professional services and software to replace the existing **Advanced Traffic Management System (ATMS)** and provide outer year support services for the new system. The City of San Antonio is the seventh largest city in the country and is responsible for maintaining over 4,000 miles of roadway and over 1300 traffic intersections. The Traffic Management Section of the City's Traffic and Capital Improvements (TCI) Department utilizes its Advanced Traffic Management System (ATMS) to improve traffic operations, minimize congestion, and improve maintenance response times at those intersections.

### 003.1. Desired Future State

The Transportation and Capital Improvements Department seeks a software system for both central control and local intersection control that is capable of managing a large scale traffic signal system comprised of a maximum of 2,000 signalized intersections and ancillary equipment to replace the existing Siemens i2 management software that the City of San Antonio has been utilizing for the past 5 years. The new software system will be, at a minimum, required to function at the same level of the existing system with additional capabilities which provide for improved automatic notification of communication system failures at the signalized intersections, better integration of other devices used to monitor/evaluate traffic flow, and allow for better engineering analysis in regard to the operation of signals on a corridor so that anomalies in operation can be automatically detected by the system. The proposed solution shall provide the City with:

- a software system that allows the City to improve the overall operation of its traffic signal network through real-time communications
- a more proactive management system via automated system queries and alerts
- respondent-managed seamless transition from the old software system to the new software system
- a high level of security
- operation within the existing network and intersection hardware infrastructure
- enablement of future integration with advanced or emerging devices, other government agencies, and geospatial intelligence
- on-going application administration and Tier-3 support services following initial installation.

### 003.2. Current-State Process

Because the scope calls for the continued current level of operations, the current-state information is included to provide context for respondents. A high-level current-state context diagram is provided in Figure 1. The City of San Antonio is currently responsible for the maintenance and operation of approximately 1350 signalized intersections located in San Antonio and neighboring jurisdictions and 26 Lane Control Signals (LCS) along two major arterials to support traffic flow during events at the AT&T Center. Other equipment and devices that are currently utilized by San Antonio include:

- Model 2070L controllers (various manufacturers),
- EDI 2018KClip conflict monitors,
- Remote monitoring of other traffic equipment including:
  - Video Imaging Vehicle Detections Systems (VIVDS)
  - Radar detection (both forward facing at intersections and side-fire for arterials)
  - Closed Circuit TV cameras for monitoring traffic flow
  - Bluetooth travel time and speed sensors

The current solution utilized by the City includes:

#### Central Monitoring and Control

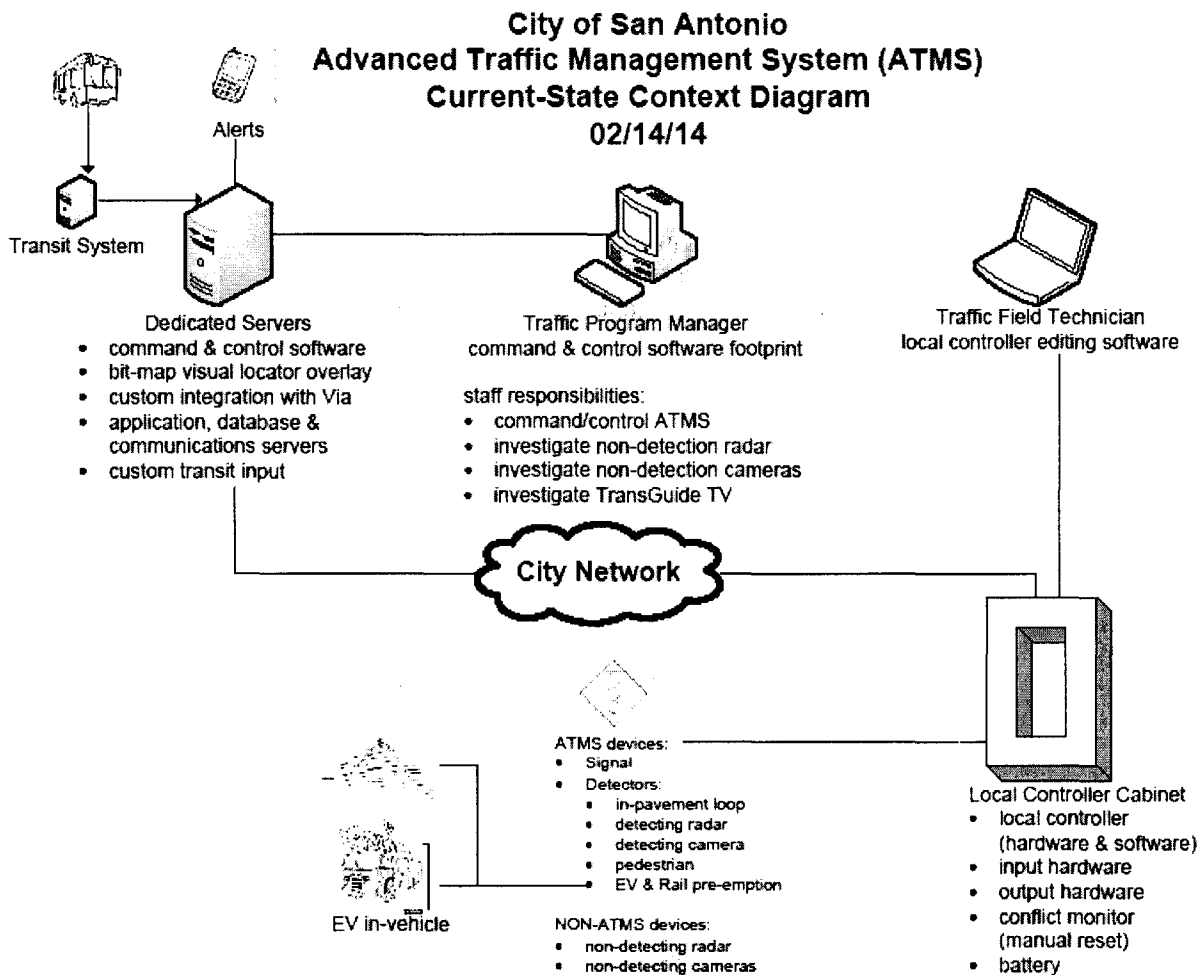
- Growth up to 2,000 intersections and 1000 control sections (corridors)
- Growth up to 15,000 detection devices (input and output)
- multiple users in multiple locations
  - 15 permanent workstations (desktop PCs) at the City's Traffic Management Center
  - 1 additional workstation at the Signal Shop
- remote monitoring of local intersection/corridor operations, including
  - graphical representation
  - real-time and polled signal communications feedback
  - detection, alarm, notification, and communication of field device malfunctions
  - user-documented explanations of unusual intersection/corridor operations
  - alerts sent to mobile devices
- remote control of local intersection/corridor operations, including
  - controller inputs (control and configuration), including timing plans and other controller data
  - configuration of detector devices

- manual overrides
- discrepancy resolution with signal controllers
- custom integration of transit preemption (Transit Signal Priority (TSP)), in which central control software and local intersection software receive priority requests from VIA Metropolitan Transit Authority servers
- central data collection and reporting (for example, logs, VOS, MOEs, and traffic engineering analysis)

**Local Intersection Control**

- 24/7/365 operating traffic signal controllers
  - traffic and pedestrian control
  - receive commands from central system
  - independent-level and corridor-level execution
  - safeguards to preclude dangerous or undesirable intersection operation
  - Emergency Vehicle (EV) and rail pre-emption
  - using the Model 2070L hardware platform
- 20 mobile maintenance resources (laptop PCs) for reading/writing controller data

Figure 1: Current-State Context



## 004 SCOPE OF SERVICE

The City desires to implement a new ATMS that provides improved management, monitoring capabilities and operation of the City's thoroughfare (roadways) system. The ATMS will take advantage of advances in system hardware and software, communication technologies and advanced traffic management strategies.

**004.1. In Scope.** The Contractor shall manage the replacement and furnish, install, integrate, test and make operational the proposed system including:

- Application. Respondent must include all software necessary to meet all functional and technical requirements included herein.
- Server(s). The City intends to provide, configure, and host in a datacenter operated by the City; if Respondent requires a server configuration that differs from the City's technology standards Respondent will configure and provide the servers to be hosted in a datacenter operated by the City; Respondent must include ongoing support and maintenance for any hardware provided by Respondent,
- On-going Support. Respondent must include ongoing management of the central system software commencing upon first productive use, including managed security, software upgrades and patch management, vulnerability management, availability management, Tier 3 support, and any other technical support the solution may require.
- Project Management. Respondent will plan and manage the implementation, coordinate with all City resources (TCI, ITSD), schedule and manage all external resources (Respondent and others), and participate in transition of all local controllers to the proposed system.
- Transition. Respondent will assist City Traffic Management staff as they convert existing (or add new) intersections and corridors to the proposed solution. The current Siemens i2 application and system will remain in use until all field controllers have been converted to the proposed solution at which time the servers supporting the Siemens server software may be decommissioned by the City.
- Knowledge Transfer. Respondent will provide training to prepare Traffic Management personnel to:
  - use and implement application, including improved monitoring functionality
  - understand and plan for using software for potential future enhancements

**004.2. Not in Scope:**

- Network. The City will provide communication "to the wire," and the solution will not replace or enhance the existing communications.
- Hardware/Circuitry. The City wishes to maintain its existing local controller hardware, including cabinets, hardware, and circuitry.
- Devices. The City wishes to maintain its existing traffic signal equipment at intersections. The solution does NOT include:
  - replacing traffic signal or detection devices
  - installation of devices not currently supported
- Local Controller application support. City traffic personnel will install and maintain application(s) on the local controllers.
- Implementation of potential future enhancements are not in scope, though the City invites proforma proposals.

**004.3. Business Requirements**

Detailed requirements are included in exhibits listed below. Instructions for describing how the proposed solution meets the requirements are included in Section 008 within this CSP document.

- Exhibit 7: ATMS Functional Requirements
- Exhibit 8: Computing Technical Requirements
- Exhibit 9: Implementation Services Requirements
- Exhibit 10: City of San Antonio Hardware Standards
- Exhibit 11: City of San Antonio Security Standards and Administrative Directives
- Exhibit 12: Ongoing Support Services Requirements
- Exhibit 13: Future-State Enhancement Opportunities

## 005 ADDITIONAL REQUIREMENTS

Statutory Requirements. Exceptions to the following provisions and exhibits by Respondent and/or their agent will lead to automatic disqualification of Respondent's proposal from consideration.

### Sections:

Venue, Jurisdiction and Arbitration  
Intellectual Property  
Undisclosed Features  
Ownership and Licenses  
Certifications  
Restrictions on Communication  
Acceptance Criteria (if required)

### Exhibits:

Insurance Requirements  
Indemnification Requirements

Venue, Jurisdiction and Arbitration. For any dispute or claim arising under the award of a contract for this proposal, venue shall be in Bexar County, Texas, and the laws of the State of Texas shall apply. The City will not contractually agree to engage in binding arbitration and will not contractually agree to relinquish its right to a trial by jury.

Intellectual Property. If selected, Respondent agrees to abide by the following regarding intellectual property rights:

Respondent shall pay all royalties and licensing fees. Respondent shall hold the City harmless and indemnify the City from the payment of any royalties, damages, losses or expenses including attorney's fees for suits, claims or otherwise, growing out of infringement or alleged infringement of copyrights, patents, trademarks, trade secrets, materials and methods used in the project. It shall defend all suits for infringement of Intellectual Property rights. Further, if Respondent has reason to believe that the design, service, process or product specified is an infringement of an Intellectual Property right, it shall promptly give such information to the City.

Upon receipt of notification that a third party claims that the program(s), hardware or both the program(s) and the hardware or any other intellectual property infringe upon any United States or International patent, copyright or trademark, Respondent will immediately:

Either:

Obtain, at Respondent's sole expense, the necessary license(s) or rights that would allow the City to continue using the programs, hardware, both the programs and hardware or any other intellectual property as the case may be, or,

Alter the programs, hardware, or both the programs and hardware so that the alleged infringement is eliminated, and

Reimburse the City for any expenses incurred by the City to implement emergency backup measures if the City is prevented from using the programs, hardware, or both the programs and hardware while the dispute is pending.

Respondent further agrees to:

Assume the defense of any claim, suit, or proceeding brought against the City for infringement of any United States patent, copyright, trademark or any other intellectual property rights arising from the use and/or sale of the equipment or software under this Agreement,

Assume the expense of such defense, including costs of investigations, reasonable attorneys' fees, expert witness fees, damages, and any other litigation-related expenses, and

Indemnify the City against any monetary damages and/or costs awarded in such suit;

Provided that:

Respondent is given sole and exclusive control of all negotiations relative to the settlement thereof, but that Respondent agrees to consult with the City Attorney of the City during such defense or negotiations and make good faith effort to avoid any position adverse to the interest of the City,

The Software or the equipment is used by the City in the form, state, or condition as delivered by Respondent or as modified without the permission of Respondent, so long as such modification is not the source of the infringement claim,

The liability claimed shall not have arisen out of the City's negligent act or omission, and

The City promptly provide Respondent with written notice within 15 days following the formal assertion of any claim with respect to which the City asserts that Respondent assumes responsibility under this section.

Undisclosed Features. Respondent warrants that the code and software provided to the City of San Antonio under this agreement does not contain any undisclosed features or functions that would impair or might impair the CITY'S use of the equipment, code or software. Specifically, but without limiting the previous representation, Respondent warrants there is no "Trojan Horse," lock, "time bomb," backdoor or similar routine. This Agreement shall not now nor will it hereafter be subject to the self-help provisions of the Uniform Computer Information Transactions Act or any other law. Respondent specifically disclaims any unilateral self-help remedies.

#### Ownership and Licenses.

In accordance with Texas law, Respondent acknowledges and agrees that all local government records created or received in the transaction of official business or the creation or maintenance of which were paid for with public funds are declared to be public property and subject to the provisions of Chapter 201 of the Texas Local Government Code and Subchapter J, Chapter 441 of the Texas Government Code. Thus, no such local government records produced by or on the behalf of Respondent pursuant to this Contract shall be the subject of any copyright or proprietary claim by Respondent.

The term "local government record" as used herein shall mean any document, paper, letter, book, map, photograph, sound or video recording, microfilm, magnetic tape, electronic medium, or other information recording medium, regardless of physical form or characteristic and regardless of whether public access to it is open or restricted under the laws of the state, created or received by local government or any of its officials or employees pursuant to law including an ordinance, or in the transaction of official business.

Respondent acknowledges and agrees that all local government records, as described in herein, produced in the course of the work required by any contract awarded pursuant to this RFCSP, will belong to and be the property of City. Respondent, if awarded this contract, will be required to turn over to City, all such records as required by said contract. Respondent, if awarded this contract, shall not, under any circumstances, release any records created during the course of performance of the contract to any entity without City's written permission, unless required to do so by a Court of competent jurisdiction.

In accordance herewith, Respondent, if selected, agrees to comply with all applicable federal, state and local laws, rules and regulations governing documents and ownership, access and retention thereof.

Certifications. Respondent warrants and certifies that Respondent 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.

### **006 TERM OF CONTRACT**

A contract awarded in response to this RFCSP will be for an initial two (2) year period. The City shall have the option to renew for one (1) additional, two (2) year period at the City's discretion and as approved by the Director or Transportation & Capital Improvements, without further Council action.

### **007 PRE-SUBMITTAL CONFERENCE**

A Pre-Submittal Conference will be held at TransGuide, Executive Conference Room, 2<sup>nd</sup> Floor, 3500 NW Loop 410, San Antonio, Texas 78229 at 10:00 a.m. Central Time, on Wednesday, April 9, 2014. Respondents are encouraged to prepare and submit their questions in writing 3 calendar days in advance of the Pre-Submittal Conference in order to expedite the proceedings. City's responses to questions received by this due date may be distributed at the Pre-Submittal



Conference and posted with this solicitation. Attendance at the Pre-Submittal Conference is optional, but highly encouraged.

A call-in number has been set up for the Pre-Submittal Conference. If you choose to dial in, please refer to the below contact information for participation in the conference.

Local Access: 210-207-8000

Toll-Free: 855-850-2672

Meeting ID: 3973

Meeting Password: 2672

This meeting place is accessible to disabled persons. The TransGuide Building at 3500 NW Loop 410, San Antonio, Texas 78229 is wheelchair accessible. The accessible entrance is located at the front of the building. Accessible parking spaces are located in the front row of the parking lot. Auxiliary aids and services are available upon request. Interpreters for the Deaf must be requested at least 48 hours prior to the meeting. For assistance, call (210) 207-7245 Voice/TTY.

Any oral response given at the Pre-Submittal Conference that is not confirmed in writing and posted with this solicitation shall not be official or binding on the City. Only written responses shall be official and all other forms of communication with any officer, employee or agent of the City shall not be binding on the City. Respondents are encouraged to resubmit their questions in writing, to the City Staff person identified in the Restrictions on Communication section, after the conclusion of the Pre-Submittal Conference.

### **008 PROPOSAL REQUIREMENTS**

Respondent's Proposal shall include the following items in the following sequence, noted with the appropriate heading as indicated below. If Respondent is proposing as a team or joint venture, provide the same information for each member of the team or joint venture.

Please submit one (1) original, signed in ink, seven (7) hard copies, and one (1) copy of the proposal on compact disk (CD) containing an Adobe PDF version of the entire proposal. Each of the items listed below must be labeled with the heading indicated below as a separate file on the CD.

If submitting electronically through City's portal, scan and upload these documents with your proposal. Each of the items listed below must be uploaded as a separate attachment, labeled with the heading indicated below.

#### TABLE OF CONTENTS

RESPONDENT QUESTIONNAIRE. Use the Form found in this RFCSP as Attachment A, Part One.

EXPERIENCE, BACKGROUND AND QUALIFICATIONS. Use the Form found in this RFP as Attachment A, Part Two.

PROPOSAL PLAN AND SOLUTION. Use the Form found in this RFP as Attachment A, Part Three. Prepare and submit the proposal based on the requirements stated in the RFCSP.

PRICING SCHEDULE. Use the Pricing Schedule that is found in this RFCSP as Attachment B.

CONTRACTS DISCLOSURE FORM. Use the Form in RFCSP Attachment C which is posted separately or Respondent may download a copy at:

<https://www.sanantonio.gov/eforms/atty/ContractsDisclosureForm.pdf>.

Instructions for completing the Contracts Disclosure form:

Download form and complete all fields. All fields must be completed prior to submitting the form.

Click on the "Print" button and place the copy in your proposal as indicated in the Proposal Checklist.

LITIGATION DISCLOSURE FORM. Complete and submit the Litigation Disclosure Form, found in this RFCSP as Attachment D. If Respondent is proposing as a team or joint venture, then all persons or entities who will be parties to the contract (if awarded) shall complete and return this form.

VETERAN-OWNED SMALL BUSINESS (VOSB) PREFERENCE PROGRAM TRACKING FORM. Complete, sign, and submit VOSB Tracking form found in this RFCSP as Attachment E.

**PROOF OF INSURABILITY.** Submit a letter from insurance provider stating provider's commitment to insure the Respondent for the types of coverages and at the levels specified in this RFCSP if awarded a contract in response to this RFCSP. Respondent shall also submit a copy of their current insurance certificate.

**FINANCIAL INFORMATION.** Submit a recent copy of a Dun and Bradstreet financial report, or other credit report, on Respondent and its partners, affiliates and subtenants, if any.

**SIGNATURE PAGE.** Respondent must complete, sign and submit the Signature Page found in this RFCSP as Attachment F. The Signature Page must be signed by a person, or persons, authorized to bind the entity, or entities, submitting the proposal. Proposals signed by a person other than an officer of a corporate respondent or partner of partnership respondent shall be accompanied by evidence of authority.

**PROPOSAL CHECKLIST.** Complete and submit the Proposal Checklist found in this RFCSP as Attachment I.

Respondent is expected to examine this RFCSP carefully, understand the terms and conditions for providing the services listed herein and respond completely. **FAILURE TO COMPLETE AND PROVIDE ANY OF THESE PROPOSAL REQUIREMENTS MAY RESULT IN THE RESPONDENT'S PROPOSAL BEING DEEMED NON-RESPONSIVE AND THEREFORE DISQUALIFIED FROM CONSIDERATION.**

### **009 CHANGES TO RFCSP**

Changes to the RFCSP, made prior to the due date for proposals shall be made directly to the original RFCSP. Changes are captured by creating a replacement version each time the RFCSP is changed. It is Respondent's responsibility to check for new versions until the proposal due date. City will assume that all proposals received are based on the final version of the RFCSP as it exists on the day proposals are due.

No oral statement of any person shall modify or otherwise change or affect the terms, conditions or specifications stated in the RFCSP.

### **010 SUBMISSION OF PROPOSALS**

Proposals may be submitted electronically through the portal or in hard copy format.

#### **Submission of Hard Copy Proposals.**

Respondent shall submit one (1) original, signed in ink, seven (7) hard copies, and one (1) copy of the proposal on compact disk (CD) containing an Adobe PDF version of the entire proposal in a sealed package clearly marked with the project name, "Advanced Traffic Management System (ATMS) Replacement" on the front of the package.

Proposals must be received in the City Clerk's Office no later than 2:00 p.m., Central Time, on Friday, May 2, 2014 at the address below. Any proposal or modification received after this time shall not be considered, and will be returned, unopened to the Respondent. Respondents should note that delivery to the P.O. Box address in a timely manner does not guarantee its receipt in the City Clerk's Office by the deadline for submission. Therefore, Respondents should strive for early submission to avoid the possibility of rejection for late arrival.

#### **Mailing Address:**

City Clerk's Office  
Attn: TCI  
P.O. Box 839966  
San Antonio, Texas 78283-3966

#### **Physical Address:**

City Clerk's Office  
Attn: TCI  
100 Military Plaza  
2nd Floor, City Hall San Antonio, Texas 78205

Proposals sent by facsimile or email will not be accepted.

Submission of Electronic Proposals. Submit one proposal electronically by the due date provided on the Cover Page. All times stated herein are Central Time. Any proposal or modification received after the time and date stated on the Cover Page shall be rejected. All forms in this solicitation which require a signature must have a signature affixed thereto, either by manually signing the document, prior to scanning it and uploading it with your submission, or affixing it electronically.

Proposal Format. Each proposal shall be typewritten, single spaced and submitted on 8 ½" x 11" white paper. If submitting a hard copy, place proposal inside a three ring binder or other securely bound fashion. The use of recycled paper and materials is encouraged. Unnecessarily elaborate brochures, artwork, bindings, visual aides, expensive paper or other materials beyond that sufficient to present a complete and effective submission are not required. Font size shall be no less than 12-point type. All pages shall be numbered and, in the case of hard copy submissions, printed two-sided. Margins shall be no less than 1" around the perimeter of each page. A proposal response to RFCSP Attachment A, Part Three may not exceed 150 pages in length. Websites, or URLs shall not be submitted in lieu of the printed proposal or electronic submission through City's portal. Each proposal must include the sections and attachments in the sequence listed in the RFCSP Section 008, Proposal Requirements, and each section and attachment must be indexed and, for hard copy submissions, divided by tabs and indexed in a Table of Contents page. For electronic submissions, whether through the portal or on a CD, each separate section should be attached as a separate file. Failure to meet the above conditions may result in disqualification of the proposal or may negatively affect scoring.

Modified Proposals. Proposals may be modified provided such modifications are received prior to the due date for submission of proposals and submitted in the same manner as original proposal. For hard copy proposals, provide a cover letter with the proposal, indicating it is a modified proposal and that the Original proposal is being withdrawn. For electronic proposals, a modified proposal will automatically replace a prior proposal submission.

Correct Legal Name.

Respondents who submit proposals to this RFCSP shall correctly state the true and correct name of the individual, proprietorship, corporation, and /or partnership (clearly identifying the responsible general partner and all other partners who would be associated with the contract, if any). No nicknames, abbreviations (unless part of the legal title), shortened or short-hand, or local "handles" will be accepted in lieu of the full, true and correct legal name of the entity. These names shall comport exactly with the corporate and franchise records of the Texas Secretary of State and Texas Comptroller of Public Accounts. Individuals and proprietorships, if operating under other than an individual name, shall match with exact Assumed Name filings. Corporate Respondents and limited liability company Respondents shall include the 11-digit Comptroller's Taxpayer Number on the Respondent Questionnaire form found in this RFCSP as Attachment A, Part One.

If an entity is found to have incorrectly or incompletely stated its name or failed to fully reveal its identity on the General Information form, the Director of Transportation and Capital Improvements shall have the discretion, at any point in the contracting process, to suspend consideration of the proposal.

Firm Offer. All provisions in Respondent's proposal, including any estimated or projected costs, shall remain valid for one-hundred twenty (120) days following the deadline date for submissions or, if a proposal is accepted, throughout the entire term of the contract.

Confidential or Proprietary Information. All proposals become the property of the City upon receipt and will not be returned. Any information deemed to be confidential by Respondent should be clearly noted; however, City cannot guarantee that it will not be compelled to disclose all or part of any public record under the Texas Public Information Act, since information deemed to be confidential by Respondent may not be considered confidential under Texas law, or pursuant to a Court order.

Cost of Proposal. Any cost or expense incurred by the Respondent that is associated with the preparation of the Proposal, the Pre-Submittal conference, if any, or during any phase of the selection process, shall be borne solely by Respondent.

**011 RESTRICTIONS ON COMMUNICATION**

Respondents are prohibited from communicating with: 1) elected City officials and their staff regarding the RFCSP or proposals from the time the RFCSP has been released until the contract is posted as a City Council agenda item; and 2) City employees from the time the RFCSP has been released until the contract is awarded. These restrictions extend to "thank you" letters, phone calls, emails and any contact that results in the direct or indirect discussion of the RFCSP and/or proposal submitted by Respondent. Violation of this provision by Respondent and/or its agent may lead to disqualification of Respondent's proposal from consideration.

Exceptions to the Restrictions on Communication with City employees include:

Respondents may ask verbal questions concerning this RFCSP at the Pre-Submittal Conference.

Respondents may submit written questions concerning this RFCSP to the Staff Contact Person listed below until **10:00 a.m.**, Local Time, on **Wednesday, April 16, 2014**. Questions received after the stated deadline will not be answered. All questions shall be sent by e-mail or through the portal.

**Rebecca A. Garza, Procurement Specialist II**  
**City of San Antonio, Finance Department – Purchasing Division**  
**rebecca.garza@sanantonio.gov**

Questions submitted and the City's responses will be posted with this solicitation.

Respondents may provide responses to questions asked of them by the Staff Contact Person after responses are received and opened. During interviews, if any, verbal questions and explanations will be permitted. If interviews are conducted, Respondents shall not bring lobbyists. The City reserves the right to exclude any persons from interviews as it deems in its best interests.

Upon completion of the evaluation process, Respondents shall receive a notification letter indicating the recommended firm and anticipated City Council agenda date. Respondents desiring a review of the solicitation process may submit a written request no later than seven (7) calendar days from the date letter was sent. The letter will indicate the name and address for submission of requests for review.

## **012 EVALUATION CRITERIA**

The City will conduct a comprehensive, fair and impartial evaluation of all Proposals received in response to this RFCSP. The City may appoint a selection committee to perform the evaluation. Each Proposal will be analyzed to determine overall responsiveness and qualifications under the RFCSP. Criteria to be evaluated may include the items listed below. The selection committee may select all, some or none of the Respondents for interviews. If the City elects to conduct interviews, Respondents may be interviewed and re-scored based upon the same criteria. The City may also request additional information from Respondents at any time prior to final approval of a selected Respondent. The City reserves the right to select one, or more, or none of the Respondents to provide services. Final approval of a selected Respondent is subject to the action of the City of San Antonio City Council.

Evaluation criteria:

Experience, Background, Qualifications (30 points)

Proposed Plan and Solution (50 points)

Pricing (20 points)

## **013 AWARD OF CONTRACT AND RESERVATION OF RIGHTS**

City reserves the right to award one, more than one or no contract(s) in response to this RFCSP.

The Contract, if awarded, will be awarded to the Respondent(s) whose Proposal(s) is deemed most advantageous to City, as determined by the selection committee, upon approval of the City Council.

City may accept any Proposal in whole or in part. If subsequent negotiations are conducted, they shall not constitute a rejection or alternate RFCSP on the part of City. However, final selection of a Respondent is subject to City Council approval.

City reserves the right to accept one or more proposals or reject any or all proposals received in response to this RFCSP, and to waive informalities and irregularities in the proposals received. City also reserves the right to terminate this RFCSP, and reissue a subsequent solicitation, and/or remedy technical errors in the RFCSP process.

City will require the selected Respondent(s) to execute a contract with the City, prior to City Council award. No work shall commence until City signs the contract document(s) and Respondent provides the necessary evidence of insurance as

required in this RFCSP and the Contract. Contract documents are not binding on City until approved by the City Attorney. In the event the parties cannot negotiate and execute a contract within the time specified, City reserves the right to terminate negotiations with the selected Respondent and commence negotiations with another Respondent.

This RFCSP does not commit City to enter into a Contract, award any services related to this RFCSP, nor does it obligate City to pay any costs incurred in preparation or submission of a proposal or in anticipation of a contract.

If selected, Respondent will be required to comply with the Insurance and Indemnification Requirements established herein.

The successful Respondent must be able to formally invoice the City for services rendered, incorporating the SAP-generated contract and purchase order numbers that shall be provided by the City.

Conflicts of Interest. Respondent 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 City or any City agency such as City-owned utilities. An officer or employee has a "prohibited financial interest" in a contract with City or in the sale to City of land materials, supplies or service, if any of the following individual(s) or entities is a party to the contract or sale: the City officer or employee; his parent, child or spouse; a business entity in which he or his parent, child or spouse owns ten (10) percent or more of the voting stock or shares of the business entity, or ten (10) percent or more of the fair market value of the business entity; or 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.

Respondent is required to warrant and certify that it, its officers, employees and agents are neither officials nor employees of the City, as defined in Section 2-42 of the City's Ethics Code. (Discretionary Contracts Disclosure – form may be found online at <https://www.sanantonio.gov/eforms/atty/DiscretionaryContractsDisclosure.pdf>.)

Independent Contractor. Respondent agrees and understands that, if selected, it and all persons designated by it to provide services in connection with a contract, are and shall be deemed to be an independent contractors, responsible for their respective acts or omissions, and that City shall in no way be responsible for Respondent's actions, and that none of the parties hereto will have authority to bind the others or to hold out to third parties, that it has such authority.

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that persons, or their agents, who seek to contract for the sale or purchase of property, goods, or services with the City, shall file a completed conflict of interest questionnaire with the City Clerk not later than the 7th business day after the date the person: (1) begins contract discussions or negotiations with the City; or (2) submits to the City an application, response to a request for proposals or bids, correspondence, or another writing related to a potential agreement with the City. The conflict of interest questionnaire form is available from the Texas Ethics Commission at <http://www.ethics.state.tx.us/forms/CIQ.pdf>. Completed conflict of interest questionnaires may be mailed or delivered by hand to the Office of the City Clerk. If mailing a completed conflict of interest questionnaire, mail to: Office of the City Clerk, P.O. Box 839966, San Antonio, TX 78283-3966. If delivering a completed conflict of interest questionnaire, deliver to: Office of the City Clerk, City Hall, 2nd floor, 100 Military Plaza, San Antonio, TX 78205. Respondent should consult its own legal advisor for answers to questions regarding the statute or form.

## 014 BONDS

### Payment Bond.

Contractor shall provide a payment bond as security for all persons supplying labor and material in the performance of this contract. Said bond shall be executed by a corporate surety acceptable to City, licensed pursuant to the Texas Insurance Code and listed on the United States Department of Treasury's Listing of Approved Sureties (Dept. Circular 570) in the full amount of the contract price. If this is an annual contract with estimated quantities, **the bond shall be in the full amount of the estimated contract price for a one year period.** Said bond must be in a form acceptable to City. Said bond must have attached thereto a Power of Attorney as evidence of the authority of the person executing the bond to bind the surety. This bond must be furnished in compliance with the statutory requirements of the Texas Government Code, chapter 2253 and the Texas Property Code, chapter 53. This bond must be executed and delivered to City prior to commencement of work under this contract.

### Performance Bond.

If selected, Respondent shall provide a performance bond made payable to the City of San Antonio, executed by a corporate surety acceptable to City who is licensed pursuant to the Texas Insurance Code and listed on the United States Department of the Treasury's Listing of Approved Sureties (Dept. Circular 570) in the full amount of the contract price. Said bond must be in a form acceptable to City. Said bond shall further provide that the surety shall indemnify the obligee for all damages or losses resulting from the principal's default. Said bond shall further guarantee the principal's performance of all terms and obligations under this contract. Said performance bond must have attached thereto a Power of Attorney as evidence of the authority of the person executing the bond to bind the surety. The performance bond must clearly and prominently display on the bond or on an attachment to the bond: (1) the name, mailing address, physical address, and telephone number, including the area code, of the surety company to which any notice of claim should be sent; or (2) the toll-free telephone number maintained by the Texas Department of Insurance pursuant to §521.051, Texas Insurance Code, and a statement that the address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the toll-free telephone number. This bond must be executed and delivered to City prior to commencement of work under this contract.

### 015 SOFTWARE ESCROW REQUIREMENT

To ensure that the City will have access to the Respondent's source code in the event that the Contractor is unable to support the software, a copy of the Contractor's source code shall be kept by a trusted third party agreeable to the City. A Software Escrow Agreement, attached as RFCSP EXHIBIT 4 shall be submitted to evidence the deposit of the source code and the maintenance of the escrow account. The Contractor may submit its own Software Escrow Agreement, provided it is in substantially similar form to the attached RFCSP EXHIBIT 4, in the determination of the City.

### 016 SCHEDULE OF EVENTS

Following is a list of **projected dates/times** with respect to this RFCSP:

RFCS P Release Date	Tuesday, April 1, 2014
Pre-Submittal Conference	Wednesday, April 9, 2014 at 10:00 a.m.
Final Questions Accepted	Wednesday, April 16, 2014 at 10:00 a.m.
Proposal Due	Friday, May 2, 2014 at 2:00 p.m.

**RFCSP EXHIBIT 1**

**INSURANCE REQUIREMENTS**

If selected to provide the services described in this RFCSP, Respondent shall be required to comply with the insurance requirements set forth below:

**INSURANCE**

Prior to the commencement of any work under this Agreement, Respondent shall furnish copies of all required endorsements and an original completed Certificate(s) of Insurance to the City's Transportation and Capital Improvements Department, which shall be clearly labeled "Advanced Traffic Management System (ATMS) Replacement" in the Description of Operations block of the Certificate. The Certificate(s) shall be completed by an agent and signed by a person authorized by that insurer to bind coverage on its behalf. City will not accept a Memorandum of Insurance or Binder as proof of insurance. The certificate(s) must have the agent's signature and phone number, and be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative to City. City shall have no duty to pay or perform under this Agreement until such certificate and endorsements have been received and approved by City's Transportation and Capital Improvements Department. No officer or employee, other than City's Risk Manager, shall have authority to waive this requirement.

City reserves the right to review the insurance requirements of this Article during the effective period of this Agreement and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City's Risk Manager based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will City allow modification whereupon City may incur increased risk.

A Respondent's financial integrity is of interest to City; therefore, subject to Respondent's right to maintain reasonable deductibles in such amounts as are approved by City, Respondent shall obtain and maintain in full force and effect for the duration of this Agreement, and any extension hereof, at Respondent's sole expense, insurance coverage written on an occurrence basis, by companies authorized to do business in the State of Texas and with an A.M Best's rating of no less than A- (VII), in the following types and for an amount not less than the amount listed below:

<u>TYPE</u>	<u>AMOUNTS</u>
1. Workers' Compensation 2. Employers' Liability	Statutory \$500,000/\$500,000/\$500,000
3. Broad form Commercial General Liability Insurance to include coverage for the following: a. Premises/Operations b. Independent Contractors c. Products/Completed Operations  d. Personal Injury e. Contractual Liability f. Damage to property rented by you	For Bodily Injury and Property Damage of \$1,000,000 per occurrence; \$2,000,000 General Aggregate, or its equivalent in Umbrella or Excess Liability Coverage     f. \$100,000
4. Business Automobile Liability a. Owned/leased vehicles b. Non-owned vehicles c. Hired Vehicles	Combined Single Limit for Bodily Injury and Property Damage of \$1,000,000 per occurrence
5. Professional Liability –[Technology Errors and Omissions] (Claims-made basis) To be maintained and in effect for no less than two years subsequent to the completion of the professional service.	\$1,000,000 per claim, to pay on behalf of the insured all sums which the insured shall become legally obligated to pay as damages by reason of any act, malpractice, error, or omission in professional services.

Respondent agrees to require, by written contract, that all subcontractors providing goods or services hereunder obtain the same insurance coverages required of Respondent herein, and provide a certificate of insurance and endorsement that names Respondent and City as additional insureds. Respondent shall provide City with said certificate and endorsement prior to the commencement of any work by the subcontractor. This provision may be modified by City's Risk

Manager, without subsequent City Council approval, when deemed necessary and prudent, based upon changes in statutory law, court decisions, or circumstances surrounding this agreement. Such modification may be enacted by letter signed by City's Risk Manager, which shall become a part of the contract for all purposes.

As they apply to the limits required by City, City shall be entitled, upon request and without expense, to receive copies of the policies, declaration page and all endorsements thereto and may require the deletion, revision, or modification of particular policy terms, conditions, limitations or exclusions (except where policy provisions are established by law or regulation binding upon either of the parties hereto or the underwriter of any such policies). Respondent shall be required to comply with any such requests and shall submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Respondent shall pay any costs incurred resulting from said changes.

City of San Antonio  
Attn:TCI Department  
P.O. Box 839966  
San Antonio, Texas 78283-3966

Respondent agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following provisions:

Name the City, its officers, officials, employees, volunteers, and elected representatives as additional insured by endorsement, as respects operations and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation and professional liability policies;

Provide for an endorsement that the "other insurance" clause shall not apply to the City of San Antonio where City is an additional insured shown on the policy;

Workers' compensation and employers' liability, general liability and automobile liability policies will provide a waiver of subrogation in favor of the City; and

Provide advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance notice for nonpayment of premium.

Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Respondent shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Respondent's performance should there be a lapse in coverage at any time during this Agreement. Failure to provide and to maintain the required insurance shall constitute a material breach of this Agreement.

In addition to any other remedies the City may have upon Respondent's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Respondent to stop work hereunder, and/or withhold any payment(s) which become due to Respondent hereunder until Respondent demonstrates compliance with the requirements hereof.

Nothing herein contained shall be construed as limiting in any way the extent to which Respondent may be held responsible for payments of damages to persons or property resulting from Respondent's or its subcontractors' performance of the work covered under this Agreement.

It is agreed that Respondent's insurance shall be deemed primary and non-contributory with respect to any insurance or self insurance carried by the City of San Antonio for liability arising out of operations under this Agreement.

It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this Agreement and that no claim or action by or on behalf of City shall be limited to insurance coverage provided.

Respondent and any subcontractors are responsible for all damage to their own equipment and/or property.



## RFCSP EXHIBIT 2

### INDEMNIFICATION REQUIREMENTS

If selected to provide the services described in this RFCSP, Respondent shall be required to comply with the indemnification requirements set forth below:

#### INDEMNIFICATION

**RESPONDENT** covenants and agrees to **FULLY INDEMNIFY, DEFEND and HOLD HARMLESS**, the **CITY** and the elected officials, employees, officers, directors, volunteers and representatives of the **CITY**, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury, death and property damage, made upon the **CITY** directly or indirectly arising out of, resulting from or related to **RESPONDENT'S** activities under this Agreement, including any acts or omissions of **RESPONDENT**, any agent, officer, director, representative, employee, consultant or subcontractor of **RESPONDENT**, and their respective officers, agents employees, directors and representatives while in the exercise of the rights or performance of the duties under this Agreement. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of **CITY**, its officers or employees, in instances where such negligence causes personal injury, death, or property damage. **IN THE EVENT RESPONDENT AND CITY ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY SHALL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS FOR THE STATE OF TEXAS, WITHOUT, HOWEVER, WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.**

The provisions of this **INDEMNITY** 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. **RESPONDENT** shall advise the **CITY** in writing within 24 hours of any claim or demand against the **CITY** or **RESPONDENT** known to **RESPONDENT** related to or arising out of **RESPONDENT'S** activities under this **AGREEMENT** and shall see to the investigation and defense of such claim or demand at **RESPONDENT'S** cost. The **CITY** shall have the right, at its option and at its own expense, to participate in such defense without relieving **RESPONDENT** of any of its obligations under this paragraph.

Optional Provisions:

Defense Counsel - **CITY** shall have the right to select or to approve defense counsel to be retained by **RESPONDENT** in fulfilling its obligation hereunder to defend and indemnify **CITY**, unless such right is expressly waived by **CITY** in writing. **RESPONDENT** shall retain **CITY** approved defense counsel within seven (7) business days of **CITY'S** written notice that **CITY** is invoking its right to indemnification under this Contract. If **RESPONDENT** fails to retain Counsel within such time period, **CITY** shall have the right to retain defense counsel on its own behalf, and **RESPONDENT** shall be liable for all costs incurred by **CITY**. **CITY** shall also have the right, at its option, to be represented by advisory counsel of its own selection and at its own expense, without waiving the foregoing.

Employee Litigation - In any and all claims against any party indemnified hereunder by any employee of **RESPONDENT**, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for **RESPONDENT** or any subcontractor under worker's compensation or other employee benefit acts.

### **RFCSP EXHIBIT 3**

#### **INTERLOCAL PARTICIPATION**

The City may, from time to time, enter into Interlocal Cooperation Purchasing Agreements with other governmental entities or governmental cooperatives (hereafter collectively referred to as "Entity" or "Entities") to enhance the City's purchasing power. At the City's sole discretion and option, City may inform other Entities that they may acquire items listed in this Request for Offer (hereafter "RFCSP"). Such acquisition(s) shall be at the prices stated herein, and shall be subject to vendor's acceptance. Entities desiring to acquire items listed in this RFCSP shall be listed on a rider attached hereto, if known at the time of issuance of the RFCSP. City may issue subsequent riders after contract award setting forth additional Entities desiring to utilize this contract. VENDOR shall sign and return any subsequently issued riders within ten calendar days of receipt.

In no event shall City be considered a dealer, remarketer, agent or other representative of Vendor or Entity. Further, City shall not be considered and is not an agent; partner or representative of the Entity making purchases hereunder, and shall not be obligated or liable for any such order.

Entity purchase orders shall be submitted to Vendor by the Entity.

Vendor authorizes City's use of Vendor's name, trademarks and Vendor provided materials in City's presentations and promotions regarding the availability of use of this contract. The City makes no representation or guarantee as to any minimum amount being purchased by City or Entities, or whether Entity will purchase utilizing City's contract.

**CITY WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY OBLIGATIONS, INCLUDING, BUT NOT LIMITED TO, PAYMENT, AND FOR ANY ITEM ORDERED BY AN ENTITY OTHER THAN CITY.**

## RFCSP EXHIBIT 4

### ESCROW AGREEMENT

This agreement ("Agreement") is effective \_\_\_\_\_, 20\_\_ among \_\_\_\_\_ ("Custodian"), Respondent's Name ("Depositor") and the City of San Antonio ("Preferred Beneficiary"), who collectively may be referred to in this Agreement as the parties ("Parties").

A. Depositor and Preferred Beneficiary have entered or will enter into an Annual Contract for Name of Project between the City of San Antonio and Respondent's Name, regarding certain proprietary technology of Depositor (referred to in this Agreement as "the License Agreement").

B. Depositor desires to avoid disclosure of its proprietary technology except under certain limited circumstances.

C. The availability of the proprietary technology of Depositor is critical to Preferred Beneficiary in the conduct of its business and, therefore, Preferred Beneficiary needs access to the proprietary technology under certain limited circumstances.

D. Depositor and Preferred Beneficiary desire to establish an escrow with Custodian to provide for the retention, administration and controlled access of the proprietary technology materials of Depositor.

E. The parties desire this Agreement to be supplementary to the Annual Contract for Name of Project between the City of San Antonio and Respondent's Name, pursuant to 11 United States [Bankruptcy] Code, Section 365(n).

#### ARTICLE 1 -- DEPOSITS

1.1 Obligation to Make Deposit. Upon the signing of this Agreement by the parties, Depositor shall deliver to Custodian the proprietary technology and other materials ("Deposit Materials") required to be deposited by the License Agreement. Custodian shall have no obligation to either party with respect to the preparation, accuracy, execution or delivery of Deposit Materials.

1.2 Identification of Tangible Media. Prior to the delivery of the Deposit Materials to Custodian, Depositor shall conspicuously label for identification each document, magnetic tape, disk, or other tangible media upon which the Deposit Materials are written or stored. Additionally, Depositor shall complete a copy of Exhibit A to this Agreement by listing each such tangible media by the item label description, the type of media and the quantity. Each Exhibit A shall be signed by Depositor and delivered to Custodian with the Deposit Materials. Unless and until Depositor makes the initial deposit with Custodian, Custodian shall have no obligation with respect to this Agreement, except the obligation to notify the parties regarding the status of the account as required in Section 2.2 below.

1.3 Acceptance of Deposit. Custodian will conduct a deposit inspection upon receipt of any Deposit Material and associated Exhibit A by visually matching the labeling of the tangible media containing the Deposit Materials to the item descriptions and quantity listed on Exhibit A. Depositor shall provide notice by electronic mail, telephone, or regular mail to the Depositor and Beneficiary of all Deposit Material that is accepted and deposited into the escrow account under this Agreement. If Custodian determines that the Deposit Material does not match the description provided by Depositor represented in Exhibit A attached hereto, Custodian will provide Depositor with notice by electronic mail, telephone, or regular mail of such discrepancies. Custodian will work directly with the Depositor to resolve any such discrepancies prior to accepting Deposit Material. Other than Custodian's inspection of the Deposit Materials, Custodian shall have no obligation to the accuracy, completeness, functionality, performance or non-performance of the Deposit Materials.

1.4 Depositor's Representations. Depositor represents as follows:

a. Depositor lawfully possesses all of the Deposit Materials deposited with Custodian;

b. With respect to all of the Deposit Materials, Depositor has the right and authority to grant to Custodian and Preferred Beneficiary the rights as provided in this Agreement;

c. As of the effective date of this Agreement, the Deposit Materials are not the subject of a lien or encumbrance, however, any liens or encumbrances made after the execution of this Agreement will not prohibit, limit, or alter the rights and obligations of Custodian under this Agreement;

d. The Deposit Materials consist of the proprietary technology and other materials identified in the License Agreement; and

e. The Deposit Materials are readable and useable in the appropriate technical environment their current form or, if any portion of the Deposit Materials is encrypted, the decryption tools and decryption keys have also been deposited.

f. The Deposit Materials include the source code corresponding to the computer software licensed by Depositor to Preferred Beneficiary under the License Agreement, except for third-party software that Depositor has no right to provide to Custodian or to Preferred Beneficiary in source code form. Either the License Agreement or Exhibit A properly identifies all third-party software embedded in or associated with the computer software licensed by Depositor to Preferred Beneficiary under the License Agreement that is not included in the Deposit Materials. The Deposit Materials include any pertinent commentary or explanation that may be necessary to render the source code understandable and useable by a trained computer-programming expert who is generally familiar with Fire Incident Report Systems and program code. The Deposit Materials include system documentation, statements of principles of operation and schematics, all as necessary or useful for the effective understanding and use of the source code. Insofar as the "development environment" employed by Depositor for the development, maintenance, and implementation of the Source Code includes any device, programming, or documentation not commercially available to Preferred beneficiary on reasonable terms through readily known sources other than Depositor, the Deposit Materials shall include all such devices, programming, or documentation. The foregoing reference to such "development environment" is intended to apply to any programs, including compilers, "workbenches," tools, and higher-level (or "proprietary") languages, used by Depositor for the development, maintenance and implementation of the Source Code.

1.5 Deposit Updates. Unless otherwise provided by the License Agreement, Depositor shall update the Deposit Materials within sixty (60) days of each release of a new version, release, addition, modification or update of the licensed software, which is subject to the License Agreement; provided that Depositor shall not be required to make updates more often than once every four (4) months, nor less frequently than once per year. Such updates will be added to the existing deposit. All deposit updates shall be listed on a new Exhibit A and Depositor shall sign the new Exhibit A. Each Exhibit A will be held and maintained separately within the escrow account. An independent record will be created which will document the activity for each Exhibit A. The processing of all deposit updates shall be in accordance with Sections 1.2 and 1.3 above. All references in this Agreement to the Deposit Materials shall include the initial Deposit Materials and any updates.

For purposes of this Agreement, Depositor may accomplish such updates by having the new version of the product added to the existing deposit or, alternatively and upon written instruction to Custodian and Preferred Beneficiary, exchanging the new version of the product for the old version of the product within the existing deposit.

1.6 Removal of Deposit Materials. The Deposit Materials may be removed and/or exchanged only on written instructions signed by Depositor and Preferred Beneficiary, or as otherwise provided in this Agreement.

1.7 Verification. Preferred Beneficiary shall have the right, at Preferred Beneficiary's expense, to cause a verification of any Deposit Materials once within the first 90 days after execution of this Agreement by Preferred Beneficiary, and thereafter twice in any 12-month period. Preferred Beneficiary shall notify Depositor and Custodian of Preferred Beneficiary's request for verification. Depositor shall have the right to be present at the verification. A verification determines, in different levels of detail, the accuracy, completeness, sufficiency and quality of the Deposit Materials as well as to confirm that it compiles to the pertinent object code of the licensed software. If verification is elected after the Deposit Materials have been delivered to Custodian, then Custodian, or at Preferred Beneficiary's election, an independent person or company selected by Preferred Beneficiary who is reasonably acceptable to Depositor will perform the verification. The Preferred Beneficiary shall be

responsible for all costs of the verification, including, without limitation, Custodian's fees associated with the verification, the costs incurred by Depositor relating to such verification (including, without limitation, travel and living expenses for Depositor personnel required to assist with the verification and fees for the services of such personnel, at Depositor's standard daily rates, as applicable).

## ARTICLE 2 -- CONFIDENTIALITY AND RECORD KEEPING

2.1 Confidentiality. Custodian shall have the obligation to reasonably protect the confidentiality of the Deposit Materials by maintaining the Deposit Materials in a secure, environmentally safe, locked facility which is accessible only to authorized representatives of Custodian. Except as provided in this Agreement or any subsequent agreement between the Parties, Custodian shall not disclose, transfer, make available to any party, or use the Deposit Materials. Custodian shall not disclose the terms of this Agreement to any third party. If Custodian receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Materials, Custodian will immediately notify the parties to this Agreement of same in writing, unless prohibited by law. It shall be the responsibility of Depositor and/or Preferred Beneficiary to challenge any such order; provided, however, that Custodian does not waive its rights to present its position with respect to any such order. Custodian will not be required to disobey any order from a court or other judicial tribunal, including, but not limited to, notices delivered pursuant to Section 7.6 below. Custodian will not be required to disobey any order from a court or other judicial tribunal.

2.2 Status Reports. Custodian shall provide to Depositor and Preferred Beneficiary access to the Custodian's real-time, on-line portal to view data and documentation relative to this Agreement. Upon request, Custodian will provide ad hoc status reports to Depositor and Preferred Beneficiary.

2.3 Audit Rights. During the term of this Agreement, Depositor and Preferred Beneficiary shall each have the right to inspect the written records of Custodian pertaining to this Agreement. Any such inspection shall occur during normal business hours and following reasonable prior notice.

## ARTICLE 3 -- RIGHT TO MAKE COPIES

Custodian may make copies of the Deposit Materials as necessary to meet its obligations under this Agreement, while retaining a copy to carry out its obligations for other licensees who may benefit from the same arrangement. Custodian shall include in any copies all copyright, non-disclosure and other proprietary notices and titles contained on the Deposit Materials. With all Deposit Materials submitted to Custodian, Depositor shall provide any and all instructions as may be necessary to duplicate the Deposit Materials, including, without limitation, instructions as to necessary hardware or software. In all other respects, Custodian shall not make copies of the Deposit Materials except to fulfill an order of a court of competent jurisdiction (see Section 2.1).

If for any reason Custodian should make any copy of the Deposit Materials, Custodian shall promptly give written notice to Depositor of such action and shall explain the reason for such copying in the notice.

## ARTICLE 4 -- RELEASE OF DEPOSIT

4.1 Release Conditions. As used in this Agreement, "Release Condition" shall mean the occurrence and continuance of any of the following:

a. Entry of an order for relief regarding Depositor under Title 11 (bankruptcy) of the United States Code, the making by Depositor of a general assignment for the benefit of its creditors, the appointment of a general receiver or trustee in bankruptcy of Depositor's business or property, or the commencement of similar proceedings under the bankruptcy, insolvency, liquidation or reorganization laws of any state or any other country or province (except that were entry of an order, appointment of a receiver or trustee in bankruptcy, or commencement of bankruptcy or insolvency proceedings is effected on an involuntary basis, then Depositor shall have 60 days to have such case or proceeding dismissed);

- b. Depositor's failure to continue to do business in the ordinary course;
- c. Any decision by Depositor to withdraw maintenance services in support of the Depositor software licensed by Depositor to Preferred Beneficiary under the License Agreement;
- d. The occurrence of a breach as defined in the License Agreement;
- e. The occurrence of any condition (whether or not qualifying as a breach) having a critical impact on necessary business functions (such as a continuing loss of service or data), which Depositor cannot or will not assure Preferred Beneficiary will be corrected so to restore necessary business functions using all reasonable means, and the release of the Deposit Materials is reasonably believed to enable Preferred Beneficiary to remedy such condition critically impacting Preferred Beneficiary's use of the licensed software to meet necessary business functions; and, for purposes of this Agreement, if a Release Condition is claimed by Preferred Beneficiary to exist on this basis, then, notwithstanding Sections 4.2 and 4.3 hereof, Custodian will, without delay, release the Deposit Materials to Preferred Beneficiary immediately upon Custodian's receipt of written notice of such Release Condition in which Preferred Beneficiary shall explain why it believes the Deposit Materials will enable Preferred Beneficiary to resolve such critical impact condition and why an immediate release is required, but Preferred Beneficiary shall commit to surrender the Deposit Materials to Custodian or Depositor promptly after the correction has occurred to restore necessary business functions.]

4.2 Filing For Release. If Preferred Beneficiary believes in good faith that a Release Condition has occurred and is continuing, then Preferred Beneficiary, at any time, may provide to Custodian written notice of the occurrence of the Release Condition and a request for the release of the Deposit Materials. Within five (5) business days of receipt of a written notice, Custodian shall provide a copy of the notice to Depositor. Custodian will promptly notify the Parties unless Custodian acknowledges or discovers independently, or through the Parties, its need for additional documentation or information in order to comply with this Section. Such need for additional documentation or information may extend the time period for Custodian's performance under this section.

4.3 Contrary Instructions. From the date Custodian mails the notice by overnight express mail requesting release of the Deposit Materials, Depositor shall have ten (10) business days to deliver to Custodian contrary instructions ("Contrary Instructions"). Contrary Instructions shall mean the written representation by Depositor that a Release Condition has not occurred or has been cured. Upon receipt of Contrary Instructions, Custodian shall send a copy of Contrary Instructions to Preferred Beneficiary by overnight commercial express mail. Additionally, Custodian shall notify both Depositor and Preferred Beneficiary that there is a dispute to be resolved pursuant to Section 7.4 of this Agreement. Subject to Section 5.2 and 4.1(e) of this Agreement, Custodian will continue to store the Deposit Materials without release pending (a) joint instructions from Depositor and Preferred Beneficiary; or (b) dispute resolution pursuant to Section 7.4; or (c) an order from a court of competent jurisdiction.

4.4 Release of Deposit. If Custodian does not receive Contrary Instructions from the Depositor, or if the Preferred Beneficiaries request to release is based on 4.1(e), Custodian is authorized to release the Deposit Materials to the Preferred Beneficiary. However, Custodian is entitled to receive any fees due Custodian before making the release. This Agreement will terminate upon the release of the Deposit Materials held by Custodian.

4.5 Right to Use Following Release. Unless otherwise provided in the License Agreement, upon release of the Deposit Materials in accordance with this Article 4, Preferred Beneficiary shall have the right to use the Deposit Materials for the sole purpose of continuing the benefits afforded to Preferred Beneficiary by the License Agreement. Preferred Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Materials.

## ARTICLE 5 -- TERM AND TERMINATION

5.1 Term of Agreement. The initial term of this Agreement is for a period of one year. Thereafter, this Agreement shall automatically renew from year-to-year unless (a) Depositor and Preferred Beneficiary jointly instruct Custodian in writing that the Agreement is terminated; (b) Custodian instructs Depositor and Preferred Beneficiary in writing ninety (90) days after its renewal date, that the Agreement is terminated for nonpayment in

accordance with Section 5.2; or (c) Custodian reserves the right to terminate this Agreement, for any reason, other than for nonpayment, by providing Depositor and Preferred Beneficiary sixty (60) days written notice of its intent to terminate this Agreement. If the Deposit Materials are subject to another escrow agreement with Custodian, Custodian reserves the right, after the initial one year term, to adjust the anniversary date of this Agreement to match the then prevailing anniversary date of such other escrow arrangements.

**5.2 Termination for Nonpayment.** In the event of the nonpayment of fees owed to Custodian, Custodian shall provide written notice of delinquency to all parties to this Agreement. Any party to this Agreement shall have the right to make the payment to Custodian to cure the default. If the past due payment is not received in full by Custodian within one (1) month of the date of such notice, then Custodian shall have the right to terminate this Agreement at any time thereafter by sending written notice of termination to all parties. Custodian shall have no obligation to take any action under this Agreement so long as any payment due to Custodian remains unpaid.

**5.3 Disposition of Deposit Materials Upon Termination.** Subject to the foregoing termination provisions, and upon termination of this Agreement, Custodian shall destroy, return to Depositor, or otherwise deliver the Deposit Materials in accordance with Depositor's instructions. If there are no instructions, Custodian may, at its sole discretion, destroy the Deposit Materials or return them to Depositor. Custodian shall have no obligation to destroy or return the Deposit Materials if the Deposit Materials are subject to another escrow agreement with Custodian or have been totally released to the Preferred Beneficiary in accordance with Section 4.4.

**5.4 Survival of Terms Following Termination.** Upon termination of this Agreement, the following provisions of this Agreement shall survive:

- a. Depositor's Representations (Section 1.4);
- b. The obligations of confidentiality with respect to the Deposit Materials;
- c. The obligation to pay Custodian any fees and expenses due;
- d. The provisions of Article 7;
- e. Section 4.5 to the extent applicable; and
- f. Any provisions in this Agreement which specifically state they survive the termination of this Agreement.

## **ARTICLE 6 -- CUSTODIAN'S FEES**

**6.1 Fee Schedule.** Custodian is entitled to be paid its agreed fees and expenses applicable to the services provided by Depositor. Custodian shall notify Depositor of Custodian's fees at least sixty (60) days prior to any increase in fees. For any service not listed on Custodian's standard fee schedule, Custodian will provide a quote prior to rendering the service, if requested.

**6.2 Payment Terms.** Custodian shall not be required to perform any service, including release of any Deposit Materials under Article 4, unless the payment for such service and any outstanding balances owed to Custodian are paid in full. Fees are due upon receipt of a signed contract or receipt of the Deposit Materials whichever is earliest. If invoiced fees are not paid, Custodian may terminate this Agreement in accordance with Section 5.2.

## **ARTICLE 7 -- LIABILITY AND DISPUTES**

**7.1 Right to Rely on Instructions.** Custodian may act in reliance upon any instruction, instrument, or signature reasonably believed by Custodian to be genuine. Custodian may assume that any employee of a party to this Agreement who gives any written notice, request, or instruction has the authority to do so. Custodian will not be required to inquire into the truth or evaluate the merit of any statement or representation contained in any notice or document. Custodian shall not be responsible for failure to act as a result of causes beyond the reasonable control of Custodian.

7.2 Indemnification. Depositor agrees to indemnify, defend and hold harmless Custodian from any and all claims, actions, damages, arbitration fees and expenses, costs, reasonable attorney's fees and other liabilities ("Liabilities") incurred by Custodian directly resulting from this escrow arrangement, except where it is adjudged that Custodian acted with gross negligence or willful misconduct.

7.3 Limitation of Liability and Waiver of Consequential Damages.

(a) Notwithstanding anything else herein, all liability, if any, whether arising in contract, tort (including negligence) or otherwise, of Custodian under this Agreement shall be limited to the amount equal to ten times the then annual fees owed or paid to Custodian under this Agreement. If claim or loss is made in relation to a specific deposit or deposits, such liability shall be limited to the fees related specifically to such deposits. This limit shall not apply for: (I) any claims of infringement of any patent, copyright, trademark or other proprietary right; (II) liability for death or bodily injury; (III) damage to tangible property (excluding the Deposit Material); (IV) theft; or (V) proven gross negligence or willful misconduct.

(b) In no event will Custodian be liable for any incidental, indirect, special, exemplary, punitive or consequential damages, including, but not limited to, damages (including loss of data, revenue, and/or profits) costs or expenses (including legal fees and expenses), whether arising in contract, tort (including negligence) or otherwise even if the possibility thereof may be known in advance to one or more parties and whether foreseeable or unforeseeable, that may arise out of or in connection with this Agreement.

7.5 Controlling Law. This Agreement is to be governed and construed in accordance with the laws of the State of Texas, without regard to its conflict of law provisions.

7.6 Notice of Requested Order. If any party intends to obtain an order from the arbitrator or any court of competent jurisdiction, which may direct Custodian to take, or refrain from taking any action, that party shall:

a. Give notice to Custodian at least five (5) business days prior to the hearing; and

b. Include in any such order that, as a precondition to Custodian's obligation, Custodian be paid in full for any past due fees and be paid for the reasonable value of the services to be rendered pursuant to such order.

## ARTICLE 8 -- GENERAL PROVISIONS

8.1 Entire Agreement. This Agreement, which includes Exhibits described herein, embodies the entire understanding among the parties with respect to its subject matter and supersedes all previous communications, representations or understandings, either oral or written. Custodian is not a party to the License Agreement between Depositor and Preferred Beneficiary and has no knowledge of any of the terms or provisions of any such License Agreement. Custodian's only obligations to Depositor or Preferred Beneficiary are as set forth in this Agreement. No amendment or modification of this Agreement shall be valid or binding unless signed by all the parties hereto, except that Exhibit A need not be signed by Preferred Beneficiary and Exhibit B need not be signed.

8.2 Notices. All notices, invoices, payments, deposits and other documents and communications shall be given to the parties at the addresses specified in the attached Exhibit B. It shall be the responsibility of the parties to notify each other as provided in this Section in the event of a change of address. The parties shall have the right to rely on the last known address of the other parties. Any correctly addressed notice or last known address of the other parties that is relied on herein that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified as provided herein shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by the postal authorities by registered mail, or through messenger or commercial express delivery services. Unless otherwise provided in this Agreement, all non-critical documents (such as invoices) and non-critical communications may be delivered by First Class mail.



8.3 Severability. In the event any provision of this Agreement is found to be invalid, voidable or unenforceable, the parties agree that unless it materially affects the entire intent and purpose of this Agreement, such invalidity, voidability or unenforceability shall affect neither the validity of this Agreement nor the remaining provisions herein, and the provision in question shall be deemed to be replaced with a valid and enforceable provision most closely reflecting the intent and purpose of the original provision.

8.4 Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties. However, Custodian shall have no obligation in performing this Agreement to recognize any successor or assign of Depositor or Preferred Beneficiary unless Custodian receives clear, authoritative and conclusive written evidence of the change of parties.

8.5 Waiver. Any term of this Agreement may be waived by the party entitled to the benefits thereof, provided that any such waiver must be in writing and signed by the party against whom the enforcement of the waiver is sought. No waiver of any condition, or breach of any provision of this Agreement, in any one or more instances, shall be deemed to be a further or continuing waiver of such condition or breach. Delay or failure to exercise any right or remedy shall not be deemed the waiver of that right or remedy.

8.6 Regulations. Depositor and Preferred Beneficiary are responsible for and warrant compliance with all applicable laws, rules and regulations, including but not limited to customs laws, import, export, and re-export laws and government regulations of any country from or to which the Deposit Materials may be delivered in accordance with the provisions of this Agreement.

8.7 Attorney's Fees. Each party shall be responsible for its own attorney fees to enforce this agreement.

8.8 No Third Party Rights. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective permitted successors and assigns, and no other person or entity shall have or acquire any right by virtue of this Agreement unless otherwise agreed to by all the parties hereto.

8.9 Authority to Sign. Each of the Parties herein represents and warrants that the execution, delivery, and performance of this Agreement has been duly authorized and signed by a person who meets statutory or other binding approval to sign on behalf of its business organization as named in this Agreement.

8.10 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

\_\_\_\_\_  
Depositor

By: \_\_\_\_\_

\_\_\_\_\_  
Name:

\_\_\_\_\_  
Title:

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Preferred Beneficiary

By: \_\_\_\_\_

\_\_\_\_\_  
Name:

\_\_\_\_\_  
Title:

\_\_\_\_\_  
Date:

**Custodian**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ESCROW AGREEMENT**

**EXHIBIT A**

**DESCRIPTION OF DEPOSIT MATERIALS**

Depositor Company Name \_\_\_\_\_

Account Number \_\_\_\_\_

Product Name \_\_\_\_\_

**DEPOSIT MATERIAL DESCRIPTION:**

Quantity	Media Type & Size	Label Description of Each Separate Item
_____	Disk 3.5" or _____	
_____	DAT tape _____ mm	
_____	CD-ROM	
_____	Data cartridge tape _____	
_____	TK 70 or _____ tape	
_____	Magnetic tape _____	
_____	Documentation	
_____	Other	

**PRODUCT DESCRIPTION:**

Environment \_\_\_\_\_

**DEPOSIT MATERIAL INFORMATION:**

Is the media or are any of the files encrypted? If yes, please include any passwords and the decryption tools.

Encryption tool name \_\_\_\_\_ Version \_\_\_\_\_

Hardware required \_\_\_\_\_

Software required \_\_\_\_\_

Other required information \_\_\_\_\_

I certify for <b>Depositor</b> that the above described <b>Custodian</b> has accepted the above.	
Deposit Materials have been transmitted to Custodian: _____	
<b>Materials</b>	<i>(any exceptions are noted above):</i>

Signature  
Print Name  
Date

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Signature  
Print Name  
Date Accepted

Exhibit A#

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**ESCROW AGREEMENT**

**EXHIBIT B**

**DESIGNATED CONTACT**

Account Number	
<b>Notices, deposit material returns and communications to <u>Depositor</u> should be addressed:</b>	<b>Notices and communications to <u>Preferred Beneficiary</u> should be addressed to:</b>
Company Name:	Company Name:
Address:	Address:
Designated Contact:	Designated Contact:
Telephone:	Telephone:
Facsimile:	Facsimile:
E-mail:	E-mail:
Verification Contact:	Verification Contact:
Telephone/E-mail:	
Fees for this agreement will be paid by	
<b>Depositor.</b>	
<b>Invoices to <u>Depositor</u> should be addressed to:</b>	
Company Name:	Company Name:
Address: Attn:	Address:
Billing Contact:	Billing Contact:
Telephone:	Telephone:
Facsimile:	Facsimile:
E-mail:	E-mail:
P.O.#	P.O.#:

Requests from Depositor or Preferred Beneficiary to change the designated contact should be given in writing by the designated contact or an authorized employee of Depositor or Preferred Beneficiary.

<b>Agreements, Deposit Materials and notices to <u>Custodian</u> should be addressed to:</b>	<b>All invoice fee remittances to <u>Custodian</u> should be addressed to:</b>
Custodian	Custodian

Telephone:	
Facsimile:	Date:
<b>E-mail:</b>	

RFCSP EXHIBIT 5

NTCIP PROTOCOL DESCRIPTION

NTCIP 1202 Conformance Groups and Data Elements required by the City of San Antonio

Conformance Group/Data Element	Reference
<b>Configuration</b>	<b>NTCIP 1201</b>
<b>Database Management</b>	<b>NTCIP 1201</b>
<b>Time Management</b>	<b>NTCIP 1201</b>
<b>Timebase Event Schedule</b>	<b>NTCIP 1201</b>
<b>Report</b>	<b>NTCIP 1201</b>
<b>STMP</b>	<b>NTCIP 1201</b>
<b>PMPP</b>	<b>NTCIP 1201</b>
Phase	NTCIP 1202
maxPhases	NTCIP 1202
phaseTable	NTCIP 1202
phaseNumber	NTCIP 1202
phaseWalk	NTCIP 1202
phasePedestrianClear	NTCIP 1202
phaseMinimumGreen	NTCIP 1202
phasePassage	NTCIP 1202
phaseMaximum1	NTCIP 1202
phaseMaximum2	NTCIP 1202
phaseYellowChage	NTCIP 1202
phaseRedClear	NTCIP 1202
phaseRedRevert	NTCIP 1202
phaseAddedInitial	NTCIP 1202
phaseMaximumInitial	NTCIP 1202
phaseTimeBeforeReduction	NTCIP 1202
phaseCarsBeforeReduction	NTCIP 1202
phaseTimeToReduce	NTCIP 1202
phaseReduceBy	NTCIP 1202
phaseMinimumGap	NTCIP 1202
phaseDynamicMaxLimit	NTCIP 1202
phaseDynamicMaxStep	NTCIP 1202
phaseStartup	NTCIP 1202
phaseOptions	NTCIP 1202
phaseRing	NTCIP 1202
phaseConcurrency	NTCIP 1202
maxPhaseGroups	NTCIP 1202
phaseStatusGroupTable	NTCIP 1202
phaseStatusGroupNumber	NTCIP 1202
phaseStatusGroupReds	NTCIP 1202
phaseStatusGroupYellows	NTCIP 1202
phaseStatusGroupGreens	NTCIP 1202
phaseStatusGroupDontWalks	NTCIP 1202
phaseStatusGroupPedClears	NTCIP 1202
phaseStatusGroupWalks	NTCIP 1202
phaseStatusGroupVehCalls	NTCIP 1202
phaseStatusGroupPedCalls	NTCIP 1202
phaseStatusGroupPhaseOns	NTCIP 1202
phaseStatusGroupPhaseNexts	NTCIP 1202
phaseControlGroupTable	NTCIP 1202
phaseControlGroupNumber	NTCIP 1202
phaseControlGroupPhaseOmit	NTCIP 1202
phaseControlGroupPedOmit	NTCIP 1202
phaseControlGroupHold	NTCIP 1202
phaseControlGroupForceOff	NTCIP 1202
phaseControlGroupVehCall	NTCIP 1202
phaseControlGroupPedCal	NTCIP 1202

**Exhibit 5: (continued) NTCIP Conformance Groups and Data Elements required by the City of San Antonio**

<b>Conformance Group/Data Element</b>	<b>Reference</b>
Detector	NTCIP 1202
maxVehicleDetectors	NTCIP 1202
vehicleDetectorTable	NTCIP 1202
vehicleDetectorNumber	NTCIP 1202
vehicleDetectorOptions	NTCIP 1202
vehicleDetectorCallPhase	NTCIP 1202
vehicleDetectorSwitchPhase	NTCIP 1202
vehicleDetectorDelay	NTCIP 1202
vehicleDetectorExtend	NTCIP 1202
vehicleDetectorQueueLimit	NTCIP 1202
vehicleDetectorNoActivity	NTCIP 1202
vehicleDetectorMaxPresence	NTCIP 1202
vehicleDetectorErraticCounts	NTCIP 1202
vehicleDetectorFailTime	NTCIP 1202
vehicleDetectorAlarms	NTCIP 1202
vehicleDetectorReportedAlarms	NTCIP 1202
vehicleDetectorReset	NTCIP 1202
maxVehicleDetectorStatusGroups	NTCIP 1202
vehicleDetectorStatusGroupTable	NTCIP 1202
vehicleDetectorStatusGroupNumber	NTCIP 1202
vehicleDetectorStatusGroupActive	NTCIP 1202
vehicleDetectorStatusGroupAlarms	NTCIP 1202
maxPedestrianDetectors	NTCIP 1202
pedestrianDetectorTable	NTCIP 1202
pedestrianDetectorNumber	NTCIP 1202
pedestrianDetectorCallPhase	NTCIP 1202
pedestrianDetectorNoActivity	NTCIP 1202
pedestrianDetectorMaxPresence	NTCIP 1202
pedestrianDetectorErraticCounts	NTCIP 1202
pedestrianDetectorAlarms	NTCIP 1202
Volume Occupancy Report	NTCIP 1202
volumeOccupancySequence	NTCIP 1202
volumeOccupancyPeriod	NTCIP 1202
activeVolumeOccupancyDetectors	NTCIP 1202
volumeOccupancyTable	NTCIP 1202
detectorVolume	NTCIP 1202
detectorOccupancy	NTCIP 1202
Unit	NTCIP 1202
unitStartUpFlash	NTCIP 1202
unitAutoPedestrianClear	NTCIP 1202
unitBackupTime	NTCIP 1202
unitRedRevert	NTCIP 1202
unitControlStatus	NTCIP 1202
unitFlashStatus	NTCIP 1202
unitAlarmStatus2	NTCIP 1202
unitAlarmStatus1	NTCIP 1202
shortAlarmStatus	NTCIP 1202
unitControl	NTCIP 1202
maxAlarmGroups	NTCIP 1202
alarmGroupTable	NTCIP 1202
alarmGroupNumber	NTCIP 1202
alarmGroupState	NTCIP 1202
Special Function	NTCIP 1202
maxSpecialFunctionOutputs	NTCIP 1202
specialFunctionOutputTable	NTCIP 1202
specialFunctionOutputNumber	NTCIP 1202
specialFunctionOutputState	NTCIP 1202



**Exhibit 5: (continued) NTCIP Conformance Groups and Data Elements required by the City of San Antonio**

<b>Conformance Group/Data Element</b>	<b>Reference</b>
Coordination coordOperationalMode coordCorrectionMode coordMaximumMode coordForceMode maxPatterns patternTableType patternTable patternNumber patternCycleTime patternOffsetTime patternSplitNumber patternSequenceNumber maxSplits splitTable splitNumber splitPhase splitTime splitMode splitCoordPhase coordPatternStatus localFreeStatus coordCycleStatus coordSyncStatus systemPatternControl systemSyncControl	NTCIP 1202 NTCIP 1202
Time Base Time Management Conformance Group timebasePatternSync maxTimebaseAscActions timebaseAscActionTable timebaseAscActionNumber timebaseAscActionPattern timebaseAscActionAuxillaryFunction timebaseAscActionSpecialFunction timebaseAscActionStatus	NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202
Preempt maxpreempts preemptTable preemptNumber preemptControl preemptLink preemptDelay preemptMinimumDuration preemptMinimumGreen preemptMinimumWalk preemptEnterPedClear preemptTrackGreen preemptDwellGreen preemptMaximumPresence preemptTrackPhase preemptDwellPhase preemptDwellPed preemptExitPhase preemptState preemptControlTable preemptControlNumber preemptControlState	NTCIP 1202 NTCIP 1202

**Exhibit 5: (continued) NTCIP Conformance Groups and Data Elements required by the City of San Antonio**

Conformance Group/Data Element	Reference
Ring maxRings maxSequences sequenceTable sequenceNumber sequenceRingNumber sequenceData maxRingControlGroups ringControlGroupTable ringControlGroupNumber ringControlGroupStopTime ringControlGroupForceOff ringControlGroupMax2 ringControlGroupMaxInhibit ringControlGroupPedRecycle ringControlGroupRedRest ringControlGroupOmitRedClear	NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202
Channel maxChannels channelTable channelNumber channelControlSource channelControlType channelFlash channelDim maxChannelStatusGroups channelStatusGroupTable channelStatusGroupNumber channelStatusGroupReds channelStatusGroupYellows channelStatusGroupGreens	NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202
Overlap maxOverlaps overlapTable OverlapNumber OverlapType overlapIncludedPhases overlapModifierPhases overlapTrailGreen overlapTrailYellow overlapTrailRed maxOverlapStatusGroups overlapStatusGroupTable overlapStatusGroupNumber overlapStatusGroupReds overlapStatusGroupYellows overlapStatusGroupGreens	NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202 NTCIP 1202

**Exhibit 5: Data Element Range Values for Actuated Traffic Signal Controller Units Required by the City of San Antonio**

<b>Data Element</b>	<b>Minimum Project Requirements</b>
<b>NTCIP 1201- Global Object Definitions</b>	
moduleType	Value 3
dBCreateTransaction dBErrorType	All Values All Values
globalDaylightSaving	Values 2 and 3
maxTimeBaseScheduleEntries	32
maxDayPlans	20
maxDayEvents	16
maxEventLogConfigs eventConfigMode eventConfigAction maxEventLogSize MaxEventClasses	50 Values 2 thru 5 Values 2 and 3 255 7
maxGroupAddress	2
<b>NTCIP 1202- Actuated Traffic Signal Controller Units</b>	
maxPhases phaseStartup phaseOptions maxPhaseGroups	16 Values 2 thru 6 All Values 2
maxVehicleDetectors vehicleDetectorOptions maxPedestrianDetectors vehicleDetectorAlarms pedestrianDetectorAlarms	64 All Values 8 Values 0 thru 4 Values 0 thru 4
unitAutoPedestrianClear unitControlStatus unitFlashStatus unitAlarmStatus2 unitAlarmStatus1 shortAlarmStatus unitControl maxAlarmGroups	All Values All Values All Values All Values All Values All Values All Values 1
maxSpecialFunctionOutputs	8
coordCorrectionMode coordMaximumMode coordForceMode maxPatterns patternTableType maxSplits splitMode localFreeStatus	Values 2 thru 4 Values 2 thru 4 Values 2 and 3 27 2 24 Values 2 thru 7 Values 2 thru 11
maxTimebaseAscActions	48
maxPreempts preemptControl preemptState	8 All Values Values 2 thru 9
maxRings maxSequences	4 16
maxChannels channelControlType channelFlash channelDim maxChannelStatusGroups	16 Values 2 thru 4 Values, 0, 2, 4, 6, 8, 10, 12 and 14 Values 0 thru 15 2
maxOverlaps overlapType maxOverlapStatusGroups	16 Values 2 and 3 2

**RFCSP EXHIBIT 6**

**TRANSIT SIGNAL PRIORITY REQUEST MESSAGE FORMAT**

The system and local software must be able to receive a transit signal priority (TSP) request message via a communications socket from the VIA Metropolitan Transit Authority servers and correctly act on the message to apply a check in or check out detector call at the appropriate signalized intersection. It shall be possible to define transit detection zones within the system software such that when a TSP message is received, the appropriate detector on the appropriate approach and direction and for the specified bus route is triggered.

The message from VIA is provided using the following XML message format:

**TSP\_MESSAGE**

Type: Class

The XML root type for TSP messages received from the TransitMaster system.

Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TSP_CHECKOUTMESSAGE	Public TSP_MESSAGE	"is a" relationship
<b>Generalization</b> Source -> Destination	Public TSP_CHECKINMESSAGE	Public TSP_MESSAGE	"is a" relationship

Attributes

Attribute	Notes	Constraints and tags
<b>GUID</b> string Public  «XSDelement»	Microsoft Global Unique Identifier, format hex 8-4-4-4-12; Unique id per each priority request; the same id will be shared by the corresponding check out message and response message	<i>Default:</i>  [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = unqualified ] [nillable = false ] [position = ]
<b>TRAFFIC_SIGNAL_EVENT_ID</b> int Public  «XSDelement»	Internal ID used by TransitMaster; (not used by Siemens i2 system)	<i>Default:</i>
<b>EVENT_TIME</b> dateTime Public  «XSDelement»	Timestamp of when the event got received by TransitMaster from the vehicle requesting priority.	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]
<b>EVENT_GEO_NODE</b> int Public  «XSDelement»	Internal ID of event geo node (not used by Siemens i2 system)	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [use = ]

**TRANSIT SIGNAL PRIORITY REQUEST MESSAGE FORMAT (continued)**

<p><b>VEHICLE_ID</b> string Public</p> <p>«XSDelement»</p>	<p>Unique ID of vehicle requesting priority service</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>
<p><b>ROUTE_ID</b> string Public</p> <p>«XSDelement»</p>	<p>Unique ID of route driven by vehicle</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>
<p><b>APPROACH_DIRECTION</b> int Public</p> <p>«XSDelement»</p>	<p>Degrees of the approach towards the intersection for the vehicle; this is the statically configured value and not the measured value, so this value will not jitter;</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>
<p><b>EXIT_DIRECTION</b> int Public</p> <p>[0..1] «XSDelement»</p>	<p>The configured (static) exit direction for this bus transit through the intersection. This optional element will only be sent if the bus transit through the intersection deviates from its normal route.</p>	<p><i>Default:</i> [anonymousRole = false ] [default = ] [fixed = ] [form = ]</p>
<p><b>NODE_LATITUDE</b> float Public</p> <p>«XSDelement»</p>	<p>Latitude of configured geo node (not the vehicle position!); latitude expressed as 12.1234567 – range -90 to +90</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>
<p><b>NODE_LONGITUDE</b> float Public</p> <p>«XSDelement»</p>	<p>Longitude of configured geo node (not the vehicle position!); longitude expressed as 123.1234567 – range 0 to (+/-) 180</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>
<p><b>VEHICLE_LATITUDE</b> float Public</p> <p>«XSDelement»</p>	<p>Latitude of vehicle at the time of this message; latitude expressed as 12.1234567 – range -90 to +90</p>	<p><i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]</p>

**TRANSIT SIGNAL PRIORITY REQUEST MESSAGE FORMAT (continued)**

<b>VEHICLE_LONGITUDE</b> float Public  «XSDelement»	Longitude of vehicle at the time of this message; longitude expressed as 123.1234567 – range 0 to (+/-) 180	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]
<b>DEVIATION_FROM_SCHEDULE</b> int Public  «XSDelement»	Deviation of bus from schedule in minutes.	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]
<b>DISTANCE</b> int Public  «XSDelement»	Distance of geo node radius, global configuration item for all geo nodes in TransitMaster; whole number, precision 5	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]
<b>BUS_LOAD</b> int Public  «XSDelement»	Number of passengers transported by this vehicle	<i>Default:</i> [anonymousRole = false ] [anonymousType = true ] [default = ] [fixed = ] [form = ] [nillable = false ] [position = ]

**TSP\_CHECKINMESSAGE**

Type: *Class\_TSP\_MESSAGE*

XML element representing the check in message sent by TransitMaster system.

*Connections*

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TSP_CHECKINMESSAGE	Public TSP_MESSAGE	"is a" relationship

**TSP\_CHECKOUTMESSAGE**

Type: *Class\_TSP\_MESSAGE*

XML element representing the check out message sent by TransitMaster.

*Connections*

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TSP_CHECKOUTMESSAGE	Public TSP_MESSAGE	"is a" relationship

**RFCSP EXHIBIT 7**

**ATMS FUNCTIONAL REQUIREMENTS**

**POSTED AS A SEPARATE EXCEL DOCUMENT.**

**RFCSP EXHIBIT 8**  
**COMPUTING TECHNICAL REQUIREMENTS**  
**POSTED AS A SEPARATE EXCEL DOCUMENT.**



**RFCSP EXHIBIT 9**  
**IMPLEMENTATION SERVICES REQUIREMENTS**  
**POSTED AS A SEPARATE EXCEL DOCUMENT.**

**RFCSP EXHIBIT 10**

**CITY OF SAN ANTONIO HARDWARE STANDARDS**

**City of San Antonio  
Information Technology Environment Description**

The City of San Antonio Information Technology Services Department (ITSD) will provide computing and infrastructure services for the selected hardware and software solution in one or both of two datacenters that are currently in operation. The two datacenters are interconnected by redundant high-speed Dense Wavelength Division Multiplexing (DWDM) links with servers and storage hosted in both environments. ITSD will manage the Data Center Layer, Networking Layer, Device Layer, Operating System Layer, and Application Infrastructure Layer for the information technology components of the proposed System in accordance with a SLA to be jointly developed by ITSD, the system provider, and the business owner of the System. Management of the Application Layer (business logic) will be determined by SLA. To the extent that information technology equipment necessary to support the System must be deployed outside of the City's managed datacenter environment, the respondent must include in their response the scope necessary to provide appropriate environmental and compliance controls for the proposed System.

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**RFCSP EXHIBIT 11**

**CITY OF SAN ANTONIO SECURITY STANDARDS AND ADMINISTRATIVE DIRECTIVES  
POSTED AS A SEPARATE DOCUMENT.**

**RFCSP EXHIBIT 12**

**ONGOING SUPPORT SERVICES REQUIREMENTS  
POSTED AS A SEPARATE EXCEL DOCUMENT.**

**RFCSP EXHIBIT 13**

**FUTURE-STATE ENHANCEMENT OPPORTUNITIES**

**POSTED AS A SEPARATE EXCEL DOCUMENT.**

**RFCSP ATTACHMENT A, Part One**

**RESPONDENT QUESTIONNAIRE**

**1. Respondent Information:** Provide the following information regarding the Respondent.

(NOTE: Co-Respondents are two or more entities proposing as a team or joint venture with each signing the contract, if awarded. Sub-contractors are not Co-Respondents and should not be identified here. If this proposal includes Co-Respondents, provide the required information in this Item #1 for each Co-Respondent by copying and inserting an additional block(s) before Item #2.)

Respondent Name: \_\_\_\_\_

(NOTE: Give exact legal name as it will appear on the contract, if awarded.)

Principal Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Website address: \_\_\_\_\_

Year established: \_\_\_\_\_

Provide the number of years in business under present name: \_\_\_\_\_

Social Security Number or Federal Employer Identification Number: \_\_\_\_\_

Texas Comptroller's Taxpayer Number, if applicable: \_\_\_\_\_

(NOTE: This 11-digit number is sometimes referred to as the Comptroller's TIN or TID.)

DUNS NUMBER: \_\_\_\_\_

Business Structure: Check the box that indicates the business structure of the Respondent.

Individual or Sole Proprietorship If checked, list Assumed Name, if any: \_\_\_\_\_  
 Partnership  
 Corporation If checked, check one:  For-Profit  Nonprofit  
Also, check one:  Domestic  Foreign  
 Other If checked, list business structure: \_\_\_\_\_

Printed Name of Contract Signatory: \_\_\_\_\_

Job Title: \_\_\_\_\_

(NOTE: This RFCSP solicits proposals to provide services under a contract which has been identified as "High Profile". Therefore, Respondent must provide the name of person that will sign the contract for the Respondent, if awarded.)

Provide any other names under which Respondent has operated within the last 10 years and length of time under for each:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Provide address of office from which this project would be managed:

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Annual Revenue: \$ \_\_\_\_\_

Total Number of Employees: \_\_\_\_\_

Total Number of Current Clients/Customers: \_\_\_\_\_

Briefly describe other lines of business that the company is directly or indirectly affiliated with:

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
List Related Companies:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. **Contact Information:** List the one person who the City may contact concerning your proposal or setting dates for meetings.

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Email: \_\_\_\_\_

3. Does Respondent anticipate any mergers, transfer of organization ownership, management reorganization, or departure of key personnel within the next twelve (12) months?

Yes \_\_\_ No \_\_\_

4. Is Respondent authorized and/or licensed to do business in Texas?

Yes \_\_\_ No \_\_\_ If "Yes", list authorizations/licenses.

\_\_\_\_\_  
\_\_\_\_\_

5. Where is the Respondent's corporate headquarters located? \_\_\_\_\_

6. **Local/County Operation:** Does the Respondent have an office located in San Antonio, Texas?

Yes \_\_\_ No \_\_\_ If "Yes", respond to a and b below:

a. How long has the Respondent conducted business from its San Antonio office?

Years \_\_\_\_\_ Months \_\_\_\_\_

b. State the number of full-time employees at the San Antonio office.

If "No", indicate if Respondent has an office located within Bexar County, Texas:

Yes \_\_\_ No \_\_\_ If "Yes", respond to c and d below:

c. How long has the Respondent conducted business from its Bexar County office?

Years \_\_\_\_\_ Months \_\_\_\_\_

d. State the number of full-time employees at the Bexar County office. \_\_\_\_\_

7. **Debarment/Suspension Information:** Has the Respondent or any of its principals been debarred or suspended from contracting with any public entity?

Yes \_\_\_ No \_\_\_ If "Yes", identify the public entity and the name and current phone number of a representative of the public entity familiar with the debarment or suspension, and state the reason for or

circumstances surrounding the debarment or suspension, including but not limited to the period of time for such debarment or suspension.

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**8. Surety Information:** Has the Respondent ever had a bond or surety canceled or forfeited?

Yes \_\_\_ No \_\_\_ If "Yes", state the name of the bonding company, date, amount of bond and reason for such cancellation or forfeiture.

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**9. Bankruptcy Information:** Has the Respondent ever been declared bankrupt or filed for protection from creditors under state or federal proceedings?

Yes \_\_\_ No \_\_\_ If "Yes", state the date, court, jurisdiction, cause number, amount of liabilities and amount of assets.

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**10. Disciplinary Action:** Has the Respondent ever received any disciplinary action, or any pending disciplinary action, from any regulatory bodies or professional organizations? If "Yes", state the name of the regulatory body or professional organization, date and reason for disciplinary or impending disciplinary action.

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**11. Previous Contracts:**

a. Has the Respondent ever failed to complete any contract awarded?

Yes \_\_\_ No \_\_\_ If "Yes", state the name of the organization contracted with, services contracted, date, contract amount and reason for failing to complete the contract.

---

---

b. Has any officer or partner proposed for this assignment ever been an officer or partner of some other organization that failed to complete a contract?

Yes \_\_\_ No \_\_\_ If "Yes", state the name of the individual, organization contracted with, services contracted, date, contract amount and reason for failing to complete the contract.

---

---

c. Has any officer or partner proposed for this assignment ever failed to complete a contract handled in his or her own name?

Yes \_\_\_ No \_\_\_ If "Yes", state the name of the individual, organization contracted with, services contracted, date, contract amount and reason for failing to complete the contract.

---

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## REFERENCES

Provide three (3) references, that Respondent has provided services to within the past three (3) years. The contact person named should be familiar with the day-to-day management of the contract and be willing to respond to questions regarding the type, level, and quality of service provided.

**Reference No. 1:**

Firm/Company Name \_\_\_\_\_

Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Email Address: \_\_\_\_\_

Date and Type of Service(s) Provided: \_\_\_\_\_

\_\_\_\_\_

**Reference No. 2:**

Firm/Company Name \_\_\_\_\_

Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Email Address: \_\_\_\_\_

Date and Type of Service(s) Provided: \_\_\_\_\_

\_\_\_\_\_

**Reference No. 3:**

Firm/Company Name \_\_\_\_\_

Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No: \_\_\_\_\_

Email Address: \_\_\_\_\_

Date and Type of Service(s) Provided: \_\_\_\_\_

\_\_\_\_\_

## RFCSP Attachment A, Part Two

### **EXPERIENCE, BACKGROUND, QUALIFICATIONS**

Prepare and submit narrative responses to address the following items. If Respondent is proposing as a team or joint venture, provide the same information for each member of the team or joint venture.

1. Describe Respondent's experience relevant to the Scope of Services requested by this RFCSP. List and describe three relevant projects of similar size and scope performed over the past four years. Identify associated results or impacts of the project/work performed.
2. Indicate the number of years Respondent has been in the business of providing ATMS solutions, respectively. Indicate if this is the Respondent's primary line of business. If not, state the Respondent's primary line of business.
3. List all ATMS projects that the Respondent has completed in the last four years.
4. List all ATMS projects that Respondent has in progress as of the proposal due date. For each project listed, give the target date of completion, and the contact name, phone number, and email address for the project manager.
5. Describe Respondent's specific experience with public entities clients, especially large municipalities or authorities. If Respondent has provided services for the City in the past, identify the name of the project and the department for which Respondent provided those services.
6. If Respondent is proposing as a team or joint venture or has included sub-contractors, describe the rationale for selecting the team and the extent to which the team, joint ventures and/or sub-contractors have worked together in the past.
7. Provide an organizational chart showing how the Respondent proposes to staff the project. For each position reflected on the organizational chart:
8. Identify the number and professional qualifications (to include licenses, certifications, associations)
9. Identify relevant experience on projects of similar size and scope
10. State the primary work assignment and the percentage of time to be devoted to the project.
11. Additional Information. Identify any other relevant information about the Respondent's qualifications.

**RFCSP Attachment A, Part Three**

**Proposed Plan and Solutions**

Vendors must provide a proposal containing the following elements. Failure to follow this prescribed format may result in vital information not being considered when reviewing the proposal:

- **Requirements Matrices.** Respondent must, within the provided attachments and for each line item, provide a summary (30 words or less) of the proposed solution to meet the requirement and indicate if the requirement is achievable out of the box, with configuration, with customization, through a 3<sup>rd</sup> party, in a planned release, or is not provided.
- **Proposal Narrative.** Respondent must describe the proposed solution in the outline provided below, using the headings and numbers prescribed.

Provide a 2-3 paragraph summary of the proposal.

**1.1. Software.**

**1.1.1.Application Software Components**

Software/Version	Vendor	Device to be Installed On	Number Licenses	On-going Support Provider

**1.1.2.Database Software Components**

Database Software/Version	Vendor	Device to be Installed On	Number Licenses	On-going Support Provider

**1.1.3.Operating Software Components**

OS Component/Version	Vendor	Device to be Installed On	Number Licenses	On-going Support Provider

**1.1.4.Customizations**

Customization	Vendor	Device to be Installed On	Number Licenses	On-going Support Provider

**1.1.4.1.** Customization Name. For each customization, add a section and describe customization, purpose, how they are to be created and installed, and maintenance/support strategy.

**1.2. Hardware**

Proposed Hardware	Vendor	Specifications	To be acquired by Respondent, City, or other	Hosted by

**1.3. Providers**

Provider	Role	Contracted to	

## **1.4. Other Components**

Identify & describe any other components.

## **1.5. Exceptions**

Describe any proposed solution that depart from the requirements in Exhibit 8 Computing Technical Requirements.

## **2. Solution Documentation**

Provide a 2-3 paragraph summary of the proposed architecture.

### **2.1. User Manuals**

Provide system documentation:

- user manuals printed and electronic
- manufacturer-provided manuals

### **2.2. Architecture Diagram(s)**

Submit comprehensive System Architecture Diagram(s) - Production and Non-Production environments. Diagrams must include:

- 2.2.1. Hardware Requirements**
  - 2.2.1.1.** Specifications
  - 2.2.1.2.** Storage requirements
  - 2.2.1.3.** Instances
- 2.2.2. Software Requirements**
  - 2.2.2.1.** Server Operating System and version
  - 2.2.2.2.** Database and version
  - 2.2.2.3.** Storage Requirements
    - 2.2.2.3.1.** 1<sup>st</sup> 6 months
    - 2.2.2.3.2.** 2<sup>nd</sup> 6 months
  - 2.2.2.4.** Proposed solution software components with versions
    - 2.2.2.4.1.** Indicate whether component is vendor owned or 3<sup>rd</sup> Party (OEM)
- 2.2.3. Subscription Requirements**
- 2.2.4. Connectivity Requirements**
  - 2.2.4.1.** Firewall Rules
  - 2.2.4.2.** Identify where system communications are initiated and received.
- 2.2.5. External System Interface**
  - 2.2.5.1.** Interface file location – FTP, Shared Server Drive, Support Web Service or all?
- 2.2.6. Mobile Devices**
  - 2.2.6.1.** List all potential Operating Systems / Devices that are supported

### **2.3. Local Controller Software Deployment**

Describe deployment of software to local controllers, how it is accomplished, and communication/processes provided by respondent to assist City in deploying or upgrading the application.

### **2.4. Central Server Requirements**

ITSD will manage the Data Center Layer, Networking Layer, Device Layer, Operating System Layer, and Application Infrastructure Layer for the information technology components of the proposed System in accordance with a Service Level Agreement (SLA) to be jointly developed by ITSD, the system provider, and the business owner of the System. Management of the Application Layer (business logic) will be determined by the SLA.

If any information technology equipment necessary to support the System must be deployed outside of the City's managed datacenter environment, the respondent must include in their response the scope necessary to provide appropriate environmental and compliance controls for the proposed System.

## **2.5. Compliance**

Identify any components within the proposed solution that does not meet requirements in Exhibit 8 Computing Technical Requirements

## **3. Implementation Services**

Provide a 2-3 paragraph summary of the proposed implementation, meeting the requirements in Exhibit 9 Implementation Services Requirements.

### **3.1. Project Plan**

Provide a sample plan for implementation of and transition to proposed solution, meeting the requirements in Exhibit 9. Plan should include:

- Milestones
- List of deliverables for each milestone
- Client resources required to complete milestone.
- % of Project Completion at the end of each milestone
- Vendor travel requirements
- Draft schedule

### **3.2. Training**

Describe proposed training approach, resources, and schedule, meeting requirements in Exhibit 9 Implementation Service Requirements.

### **3.3. Roles & Responsibilities**

Describe proposed roles & responsibilities for all participants, meeting the requirements in Exhibit 9 Implementation Services Requirements.

#### **3.3.1. Respondent Roles & Responsibilities**

#### **3.3.2. City Roles & Responsibilities**

#### **3.3.3. Others' Roles & Responsibilities**

### **3.4. Sample Contracts & Documents**

Provide sample contracts/documents for proposed implementation and transition services, to include:

- Professional Services Agreement
- Statement of Work (SOW)

### **3.5. Transition Support**

Describe the warranty post go-live

- period of time covered
- severity levels of issues that may be encountered and response times
- process client must follow to report issues/problems

### **3.6. Provider Availability**

Identify active projects that are being worked on and or planned from the date proposals are due and for the following 6 months.

### **3.7. Plan Risks**

Identify any known risks that have been experienced in previous similar deployments.

#### **4. Maintenance**

Provide a 2-3 paragraph summary of the proposed maintenance provided.

##### **4.1. Maintenance Agreement(s)**

Describe maintenance terms. The City expects maintenance and support will begin after the expiration of a one-year warranty period, lasting for the remainder of the initial term and the optional extension terms. Warranty period shall begin upon City's final written acceptance of the solution. City will require a source code escrow agreement where applicable.

##### **4.2. Service Levels**

If 3rd party solutions are part of the proposal, Describe SLA's from all applicable vendors /contractors /partners. Include SLA's as proposal attachments if available and reference them in this section. Provide sample contracts/documents for proposed support services, to include:

- Maintenance & Support
- Technical Support Service Level Agreement (Engineering Support, System/Application Problem Resolution)
- Customer Support Service Level Agreement (Help Desk, Phone support)

##### **4.3. Maintenance Services**

- Describe support for bug fixes and patches
- Describe support for performance tunings and incremental enhancement.
- Describe Site Availability (uptime with full functionality outside scheduled maintenance periods).
- Describe Maximum Scheduled Downtime (e.g. scheduled maintenance outages must not exceed 6 hours per quarter, and must not exceed 24 hours per year).
- Describe how planned software maintenance/upgrade notifications to customers are handled. Include timing of notices.
- Explain client notifications and what user experiences when they try to access a system that is unavailable due to a scheduled outage.

##### **4.4. Upgrades**

**4.4.1.Commitment.** Describe commitment and maintenance of the solution by software provider(s).

**4.4.2.Requests.** Describe how customers' requests for enhancements are handled. Include practice on how enhancements requests are reviewed and chosen for product upgrades.

**4.4.3.Frequency.** Describe the frequency of maintenance/upgrades to include any 3rd party components that may exist.

**4.4.4.Delivery method.** Describe delivery method for future upgrades and product enhancements, including frequency of upgrades.

##### **4.5. Custom Software**

Describe how custom applications will be maintained to be compatible with any upgrades in software, servers, City-provided network, or other solution components.

## **5. On-Going Support Services**

Provide a 2-3 paragraph summary of the proposed on-going support services for central server application, meeting requirements in Exhibit 12 Ongoing Support Services Requirements.

### **5.1. Roles & Responsibilities**

Describe proposed roles & responsibilities for all participants, meeting the requirements in Exhibit 12 Ongoing Support Services Requirements.

#### **5.1.1. Respondent Roles & Responsibilities**

#### **5.1.2. City Roles & Responsibilities**

#### **5.1.3. Others' Roles & Responsibilities**

### **5.2. Sample Contracts & Documents**

Provide sample contracts/documents for proposed implementation and transition services, to include:

- Professional Services Agreement
- Statement of Work (SOW)
- Service Level Agreements (SLAs)

### **5.3. Day-2 Application Support**

Describe day-2 support model, including:

- Prime contractor
- Period of time covered

#### **5.3.1. Outsourced Central-Server Application Maintenance**

Describe approach to application maintenance, including roles & responsibilities, requirements for access or other services from the City. Include Backup and Restore strategy and service levels. For example, What is the estimated time for recovery should the system database become damaged, description of fault tolerance environment, etc. Provide future dates of known scheduled/planned outages.

#### **5.3.2. Outsourced Tier-3 Support (central server and local controller software)**

- 5.3.2.1. Problem Procedures.** Describe the problem reporting and resolution procedures, for example:
- period of time covered
  - severity levels of issues that may be encountered and response times
  - process client must follow to report issues/problems
- 5.3.2.2. Outages.** Describe how planned and unplanned outages will be handled.
- 5.3.2.3. Severity Levels.** Describe Issue/Problem Severity levels and response times.
- 5.3.2.4. Incidents.** Describe how customer service incidents and/or technical issues are reported and managed. For example:
- days/hours of operation
  - process diagrams
  - roles & responsibilities

**5.3.2.5. Channels.** Describe the various options available for customer and technical support, for example:

- phone
- email
- online support

**5.3.2.6. 3rd Parties.** If proposed solution includes 3rd party utilities, software, services, etc., describe how customer support will be managed with these 3rd parties.

**5.3.2.7. Limitations.** Describe thresholds for support limitations.

**5.3.2.8. Response Time:**

**5.3.2.8.1.** Describe Support Request Acknowledgement Time (time to acknowledge receipt of a support request).

**5.3.2.8.2.** Describe Support Request Mean Time to Resolution.

**5.3.2.9. Tier 1 & 2 Support.** Describe train-the-trainer or super user training and support.

**5.3.2.10. Other.** Describe other Respondent ongoing support roles & responsibilities provided.

#### **5.4. Costs Model**

**5.4.1.** Describe any fee increases that may be assessed due to growth in transactions, users, data storage, and volume of data transfer. Include price change limitations. If vendor offers enterprise and/or departmental cost models, describe this pricing model along with the differences between them.

**5.4.2.** Describe history of maintenance and support fees, in regards to increase in cost and future price adjustments, limitations and notification plan to client of any potential price changes.

**5.4.3.** Describe fee structure for client requested changes to the configuration of the software.

**5.4.4.** Describe if there are any costs associated with customer enhancement requests that are submitted by multiple clients.

**5.4.5.** Describe costs that may be associated with terminating the software licensing contract including notification requirements.

**5.4.6.** Describe any additional fees for after hours, weekend and/or holiday support or maintenance.

**5.4.7.** Describe additional costs that may be imposed for exporting/extracting customer data. Include price change limitations.

**5.4.8.** Describe costs that may be associated with terminating the service contract including notification requirements.

**5.4.9.** Describe any additional fees for after hours, weekend and/or holiday support as it relates to hosting services.

#### **5.5. Plan Risks**

**5.5.1. Known Risks.** Identify any known risks that have been experienced in previous similar outsource services.

**5.5.2. Conversion to In-House.** Describe procedures for converting from managed support model to in-house support.



**RFCSP ATTACHMENT B**

**PRICING SCHEDULE**

POSTED AS A SEPARATE EXCEL DOCUMENT.

**RFCSP ATTACHMENT C**  
**CONTRACTS DISCLOSURE FORM**

Contracts Disclosure Form may be downloaded at <https://www.sanantonio.gov/efrms/atty/ContractsDisclosureForm.pdf>.

Instructions for completing the Contracts Disclosure form are listed below:

1. Download form and complete all fields. Note: All fields must be completed prior to submitting the form.
2. Click on the "Print" button and place the copy in proposal response as indicated in the Proposal Checklist.

**RFCSP ATTACHMENT D**

**LITIGATION DISCLOSURE FORM**

**Respond to each of the questions below by checking the appropriate box. Failure to fully and truthfully disclose the information required by this Litigation Disclosure form may result in the disqualification of your proposal from consideration or termination of the contract, once awarded.**

Have you or any member of your Firm or Team to be assigned to this engagement ever been indicted or convicted of a felony or misdemeanor greater than a Class C in the last five (5) years?

Yes \_\_\_ No \_\_\_

Have you or any member of your Firm or Team to be assigned to this engagement been terminated (for cause or otherwise) from any work being performed for the City of San Antonio or any other Federal, State or Local Government, or Private Entity?

Yes \_\_\_ No \_\_\_

Have you or any member of your Firm or Team to be assigned to this engagement been involved in any claim or litigation with the City of San Antonio or any other Federal, State or Local Government, or Private Entity during the last ten (10) years?

Yes \_\_\_ No \_\_\_

**If you have answered "Yes" to any of the above questions, please indicate the name(s) of the person(s), the nature, and the status and/or outcome of the information, indictment, conviction, termination, claim or litigation, as applicable. Any such information should be provided on a separate page, attached to this form and submitted with your proposal.**

**RFCSP ATTACHMENT E**

**VETERAN-OWNED SMALL BUSINESS PREFERENCE PROGRAM TRACKING FORM**

POSTED AS A SEPARATE DOCUMENT.

**RFCSP ATTACHMENT F**

**SIGNATURE PAGE**

Respondent, and co-respondent, if any, must complete City's Certified Vendor Registration (CVR) Form prior to the due date for submission of proposals. The CVR Form may be accessed at: <http://www.sanantonio.gov/purchasing/>.

By submitting a proposal, whether electronically or by paper, Respondent represents that:

If awarded a contract in response to this RFCSP, Respondent will be able and willing to execute a contract in the form shown in the RFCSP, as attached and set out in RFCSP Exhibit 4, with the understanding that the scope and compensation provisions will be negotiated and included in the final document.

If Respondent is a corporation, Respondent will be required to provide a certified copy of the resolution evidencing authority to enter into the contract, if other than an officer will be signing the contract.

If awarded a contract in response to this RFCSP, Respondent will be able and willing to comply with the insurance and indemnification requirements set out in RFCSP Exhibits 1 & 2.

If awarded a contract in response to this RFCSP, Respondent will be able and willing to comply with all representations made by Respondent in Respondent's proposal and during Proposal process.

Respondent has fully and truthfully submitted a Litigation Disclosure form with the understanding that failure to disclose the required information may result in disqualification of proposal from consideration.

Respondent agrees to fully and truthfully submit the Respondent Questionnaire form and understands that failure to fully disclose requested information may result in disqualification of proposal from consideration or termination of contract, once awarded.

To comply with the City's Ethics Code, particularly Section 2-61 that prohibits a person or entity seeking a City contract - or any other person acting on behalf of such a person or entity - from contacting City officials or their staff prior to the time such contract is posted as a City Council agenda item.

(S)he is authorized to submit this proposal on behalf of the entity.

**Acknowledgement of Prohibition regarding Campaign and Officeholder Contributions**

I acknowledge that this contract has been designated a "high-profile" contract. I have read and understand the provisions regarding high profile contracts that appear on the cover page of this RFCSP.

If submitting your proposal by paper, complete the following and sign on the signature line below. Failure to sign and submit this Signature Page will result in rejection of your proposal.

\_\_\_\_\_  
Respondent Entity Name

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

(NOTE: If proposal is submitted by Co-Respondents, an authorized signature from a representative of each Co-Respondent is required. Add additional signature blocks as required.)

If submitting your proposal electronically, through City's portal, Co-Respondent must also log in using Co-Respondent's log-on ID and password, and submit a letter indicating that Co-Respondent is a party to Respondent's proposal and agrees to these representations and those made in Respondent's proposal. While Co-Respondent does not have to submit a copy of Respondent's proposal, Co-Respondent should answer any questions or provide any information directed specifically to Co-Respondent.

\_\_\_\_\_  
Co-Respondent Entity Name

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

## ATTACHMENT G

### NON-DISCRIMINATION ORDINANCE LANGUAGE

Non-discrimination. As a party to this contract, Vendor understands and agrees to comply with the *Non-Discrimination Policy* of the City of San Antonio contained in Chapter 2, Article X of the City Code and further, shall not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, veteran status, age or disability, unless exempted by state or federal law, or as otherwise established herein.

## ATTACHMENT H

### SUPPLEMENTAL INFORMATION RELATED TO STATE OF TEXAS CONFLICT OF INTEREST REQUIREMENT

The Instructions to Bidders section of this document provides information pertaining to a requirement to file the State of Texas Conflict of Interest Questionnaire (Form CIQ) required by Chapter 176 of the Texas Local Government Code. The Form CIQ is available from the Texas Ethics Commission at:

<http://www.ethics.state.tx.us/forms/CIQ.pdf>

In addition, please complete the City's Addendum to the Form CIQ (Form CIQ-A) and submit it with the Form CIQ to the Office of the City Clerk. The City's Addendum to the Form CIQ can be found at:

<http://www.sanantonio.gov/atty/ethics/pdf/OCC-CIQ-Addendum.pdf>



**RFCSP ATTACHMENT I**

**PROPOSAL CHECKLIST**

Use this checklist to ensure that all required documents have been included in the proposal and appear in the correct order.

Document	Initial to Indicate Document is Attached to Proposal
Table of Contents	
Respondent Questionnaire RFCSP Attachment A, Part One	
Experience, Background, Qualifications RFCSP Attachment A, Part Two	
Proposed Plan and Solution RFCSP Attachment A, Part Three	
Pricing Schedule RFCSP Attachment B	
*Contracts Disclosure form RFCSP Attachment C	
Litigation Disclosure RFCSP Attachment D	
*Veteran-Owned Small Business Program Tracking Form RFCSP Attachment E	
Proof of Insurability (See RFCSP Exhibit 1) Insurance Provider's Letter Copy of Current Certificate of Insurance	
Financial Information	
ATMS Functional Requirements RFCSP Exhibit 7	
Computing Technical Requirements RFCSP Exhibit 8	
Implementation Services Requirements RFCSP Exhibit 9	
City of San Antonio Hardware Standards RFCSP Exhibit 10	
City of San Antonio Security Standards and Administrative Directives RFCSP Exhibit 11	
Ongoing Support Services Requirements RFCSP Exhibit 12	
Future-State Enhancement Requirements RFCSP Exhibit 13	
*Signature Page RFCSP Attachment F	
Proposal Checklist RFCSP Attachment I	
One (1) Original, seven (7) copies and one (1) CD of entire proposal in PDF format if submitting in hard copy.	
*Signed Addendums, if applicable	

\*Documents marked with an asterisk on this checklist require a signature. Be sure they are signed prior to submittal of proposal.

**San Antonio KITS - Price and Schedule of Payments**

**Attachment 1**

**SCHEDULE OF DELIVERABLES AND PAYMENTS**

**Estimated Detailed Project Costs per Task/Deliverable**

<b>Task/Deliverable</b>	<b>Fee</b>
<b>1. Project Management and Bill of Materials</b>	
1.1 Project and Configuration Management	\$200,000
1.2 Bill of Materials for System Equipment	\$30,000
<b>2. ATMS Software</b>	
2.1 System Installation of Base System	\$80,000
2.2 System Configuration of Servers and Workstations	\$55,000
2.3 Unlimited non-expiring KITS Licenses for City	\$200,000
<b>3. System Implementation</b>	
3.1 System Integration	\$70,000
3.2 Software Acceptance	\$30,000
<b>4. Traffic Signal Priority Operation</b>	
4.1 Completion of Phase 1	\$20,000
4.2 Completion of Phase 2	\$30,000
4.3 Completion of Phase 3	\$20,000
4.4 City-wide Signal Priority License	no cost
4.5 City-wide License for up to 5 KITS Mobile Users	no cost
<b>5. Interface with Thrid Party Systems</b>	
5.1 25% Prototype Demonstration	\$40,000
5.2 75% Demonstration of Functionality	\$20,000
5.3 On-site Installation and Integration	\$20,000
<b>6. Traffic Adaptive System</b>	
6.1 Deployment of Traffic Adaptive Decision Support System	\$75,000
6.2 Integration of Performance Monitoring Reports	\$25,000
<b>7. System Support and Maintenance</b>	
7.1 System Support, and Maintenance for Years 1-4	\$204,000
<b>8. System Documentation and Training</b>	
8.1 Training	\$18,000
8.2 Documentation	\$15,000
<b>9. Project Acceptance</b>	
9.1 Project Acceptance	\$20,000
<b>EXPENSES</b>	<b>\$72,000</b>
<b>SUBTOTAL</b>	<b>\$1,244,000</b>

City of San Antonio ATMS

# Statement of Work

Prepared by:

**Kimley-Horn and Associates, Inc.**

For Review by:

**City of San Antonio**

**Version 1.3**

**August 29, 2014**



## PROJECT SCOPE

The following scope of services describes the deployment and integration of KITS for the City of San Antonio based on RFCSP 14-035, 6100004287 May 2, 2014.

## SCOPE OF SERVICES

### **Task 1: Project Management and Bill of Materials**

KHA's Project Manager shall act as the principal contact for the City and other involved agencies. KHA's Project Manager will be responsible for completing activities associated with the performance of this project. Additional responsibilities include managing project planning activities, adherence to project task budgets and tracking resources associated with each aspect of the project.

#### ***Prepare Project Status Reports***

KHA shall prepare and submit written monthly project status reports. The reports shall include the following information including a schedule outlining target dates for completion of items:

- Period covered by the report.
- Overview of the reporting period.
- Tasks, subtasks, deliverables, goods, services, and other work scheduled for the reporting period that were completed.
- Action Items.
- Updated deliverables chart and completion schedule, if necessary.

KHA shall also prepare invoices, billings, and other financial information for review and approval by the City, as required by this agreement.

Payments to KHA will be on a per task/sub-task basis and made after the completion of a defined milestone and associated deliverables included within a given task/sub-task. Project management and expenses will be invoiced in equal monthly amounts for one year.

KHA will meet with City staff to further understand existing City software licenses and planned virtual environment for the project. The City has indicated a desire to leverage existing workstations along with a virtualized server environment for this project. Based on the information gathered during meetings with the TCI and ITSD staff, KHA shall deliver a complete equipment list ("Bill of Materials") for full system deployment and submit to the City for review. KHA will review options and provide input on reusing the City's existing hardware and software licenses to fulfill the needs of the project. Upon the City's and KHA's approval of the equipment list, the City will procure system components, including supporting third-party software, system hardware, network equipment, and peripherals. The equipment will remain at the City. The City will assist with the configuration of remote access into the network to enable authorized KHA staff to remotely diagnose the system. Using funds outside of this agreement, the City will purchase third-party software and any additional hardware and licenses for the VM environment or network that is required for the deployment of KITS. Anticipated software includes:

- SQL Server 2008 or 2012
- MS Excel 2013 or 2010
- MapDotNet

The workstations will be deployed on Windows 7 and the servers on Windows Server 2012. The Integrated System will utilize SQL Server 2012 Standard as its central database. The specific versions of the tools will be determined in conjunction with City's ITSD preference. KHA and the City will conduct up to 3 meetings to finalize the equipment identified in Task 1.1.

Deliverables:

1. Project and Configuration Management – invoiced monthly for 12 months
2. Bill of Materials for System Equipment

**Task 2: ATMS Software**

Integration of KITS shall be performed in stages. The following sequence of events details the staged implementation of the KITS system.

1. The City will procure designated equipment as defined in Deliverable 1.1.
2. KHA will collaborate with the City to determine a subset of five initial intersections that will be used to test the migration and import of existing NextPhase timing data. All intersections will have a consistent version of NextPhase firmware.
3. The source code, reports, registry, and database to support the functionality of the City's modules will be placed under Kimley-Horn's internal configuration management and version control processes.
4. A lab configuration will be created and maintained in KHA's facility to simulate the deployment environment.
5. An installation procedure will be generated by KHA for the City of San Antonio that will be highly correlated to the KITS central software currently installed in Austin, TX. This will be a functional self-contained installation and automate many of the procedures used to install the KITS user interface in the City. This automated installation will include most of the required third-party tools and may reference other supporting third-party documentation.
6. The City will be responsible for providing reliable communication with the field devices and upgrading the firmware to a consistent version. The basis of communication with the NextPhase firmware will be NTCIP 1201, 1202, and 1203 to support the City's functional requirements. Integrated KITS analysis tools will support up to 4 rings, 4 barriers, and 32 phases.
7. KHA will come to the City TMC facilities for the installation and configuration of the equipment and required third-party software. City staff will have the option to observe all installation processes.
8. KHA will fully configure and integrate the first ten intersections.
9. KHA will develop automated database scripts to assist with the import of common fields from the existing Siemens i2 ATMS central database or existing spreadsheets into KITS. The City will be responsible for ensuring the integrity of the data in advance of the automated import.

Deliverables:

1. System Installation of Base System. Payable upon successful integration of KITS User interface connecting to SQL Database and KITS Communication server with new City hardware on City network.
2. System Configuration of KITS servers and workstations. Payable upon completion of task 2.1 and successful communication with the first 10 controllers on City network.
3. Unlimited non-expiring KITS licenses for City of San Antonio. Payable upon completion of task 2.2. End user license agreement for the KITS software is located in Appendix B.

**Task 3: System Implementation**

1. KHA will assist City personnel with the integration of 15 additional pilot intersections by leading the effort to create the intersection graphics, place intersections on the main map, and configure these intersections within KITS. The City will provide communication parameters and configuration data parameters.
2. KHA will provide preliminary training on the graphic configuration, data entry, and most frequently used monitoring tools within the System. Preliminary requirement validation will utilize controllers in this group of controllers. Completion of 15 intersections configured and on-line will be the payment milestone for Task 3.2.
3. City personnel, with guidance from KHA, will be responsible for configuring the remaining intersections by uploading signal timing, entering configuration data, and developing map graphics. Map graphic configuration will require the City to have a documented intersection phase map to a direction. Lane configuration can be granularly configured to depict the intersection operation in more detail. The user will have the option to drag symbols onto the map or to auto-generate the graphics based on populated phase/lane mapping.
4. Unique features and requirements included in the RFP that are not currently available within the 14.9 version of KITS in Austin, TX will be designed and developed. These requirements are listed in Appendix A along with requirements that will not be fully integrated in this initial first phase of the project.
5. KHA will provide incremental software releases in phases to comply with City-requested features included in the RFP.
6. The existing KITS center-to-center (C2C) module will be installed to facilitate the exchange of data with TxDOT. A supplemental scope of work will be needed to account for expected configuration and integration effort C2C with TxDOT, ITSD and TCI.
7. KHA will work with the City to recommend backup strategies for protecting dynamic data collected by KITS. A SQL Server database maintenance procedure will be created and installed by KHA to backup and cleanup data on a regular interval. Email alerts will be configured to notify KHA and the City in the event of errors. In addition, a Remedy ticket will be generated following the successful completion of Task 5.3 if any failures are detected within the database.

8. A backup virtual environment will be provided by City for backup, recovery and continuity of operations. It is expected that the City will provide a clustered SQL Server environment. In the unlikely event of a serious hardware failure, the redundant environment could be manually brought on-line utilizing the documented procedures.
9. KHA will demonstrate continuous successful compliance with system requirements and functionality. The successful demonstration of compliance will constitute Software Acceptance and does not include testing on the interface with 3<sup>rd</sup> party systems or traffic signal priority. These components of the project will be validated in task 10 once the software development is completed and tested in the KHA lab environment.

Deliverables:

1. System Integration. Payable upon 20 intersections on-line within KITS.
2. Software Acceptance.

**Task 4: Traffic Signal Priority Operation**

KITS will enable traffic signal priority operation through a center to center interface with VIA Metro Transit. The operation will be consistent with the final version of the TSP requirements as outlined in **RFCSP EXHIBIT 6**. The implementation of special priority operation will occur through three phases described in the following paragraphs.

1. Phase 1 - Finalization of TSP approach and business rules

KHA will participate and lead up to 5 meetings to design and document the C2C interface that will be used to receive priority requests. The priority solution will utilize existing VIA infrastructure to initiate priority requests into the City ATMS.

2. Phase 2 – Proof of concept

In phase 2, KHA will work with the City to demonstrate to VIA a successful proof of concept for achieving priority. Several prerequisites must be achieved by KHA and the City prior to the proof of concept demonstration. These include the deployment and initial integration of KITS within the ITSD virtualized environment and LAN, successful NTCIP IP communication with existing 2070 controllers / NextPhase version 1.7.7, the software development of a web service by KHA, and the creation and definition of new priority phases at three intersections. At least two controllers will be configured within TCI allowing IP communication through the network provided and maintained by the City. Existing intersection timing will be imported by the KHA to test priority sequences. KHA will develop the software for KITS to send a special function command to the NextPhase NTCIP controller. Functionality will be included within the existing timing values form to allow the user to manually call a special function. KITS will be programmed to automatically generate the priority sequence by sending a special function. Following a successful demonstration of this new functionality in the lab, the proof of concept will be exercised for three field intersections utilizing the TSP center to center interface. IP communication polling statistics within KITS must have at least a 90% success rate to exercise the proof of concept tests. KHA will provide a browser-based application to exercise the XML/WSDL center to center interface that

will generate priority requests to the internal facing web-service. This web application will be shared with the City to help with integration efforts.

### 3. Phase 3 - Migration

Following successful outcomes of phases 1 and 2, KHA, VIA, TCI and ITSD will jointly coordinate efforts to migrate integrated bus signal priority from the existing i2 platform to KITS. Requests will be generated from authorized users/transit vehicles and received by servers located within VIA. A populated XML schema will be sent to KITS through a secure web service developed by KHA in Task 2 and hosted by ITSD. KHA will collaborate with VIA and ITSD to strategize on secure network connectivity options. The City will provide authentication credentials if required to interface with the VIA owned servers. A response will be sent indicating the success or failure of a request and information will be logged within the central KITS database. Payment for phase 3 will occur after at least 10 live field intersections have been validated for compliance with the TSP business rules.

KITS mobile performance analysis tools will be provided to the City allowing a user to generate reports that include travel time and second-by-second velocity and location of authorized vehicles. The KITS Mobile web service is both a data collection and a data analytics tool. It can be used to enhance traffic operations by providing data to support operational decisions or evaluate traffic improvements.

The KITS Mobile web service allows users to create a profile for data collection. The user records the start of his or her trip using the KITS Mobile application on a mobile device. KITS Mobile records the location, speed, altitude, heading, and time every second until the user ends the trip. The user can also enter information about the trip to record details such as weather, construction activities, presence of incidents, and other pertinent details. The trip is automatically recorded on a database maintained by in the cloud by Kimley Horn and available an authorized user on the KITS Mobile website.

The trips can be viewed on the KITS Mobile website by user, route, or trip. More than one trip can be selected at a time to compare data. Displaying speed data of the trip is the default view. Other information that can be displayed includes: location, time, heading, and altitude. The data is displayed using Google Earth or Google Maps with standard map navigation to zoom or pan around the map or to zoom to the selected trip. Each data point can be selected individually to display information particular to that point or the map can display information for all of the data points using color coded icons as shown below. The map also displays a legend that can be modified to adjust thresholds for the color coded icons.

The KITS Mobile Android and iOS application can calculate travel times when the user selects two points on any route or trip. The travel time algorithm calculates the trip distance, average speed, and total trip time. The details of the trip are also displayed with the travel time results to show the information input by the user for the weather, incidents, etc.



The KITS Mobile web service provides full reporting functionality for data analytics. The reports can be selected by time range, geographic region, or user. The Reports function allows the users to view raw data or to generate a variety of graphs. A typical graph produced is the “Speed vs. Time” graph shown below. In addition, multiple runs can be compared to each other to show the result of improvements using the “Compare Speed vs. Distance Report.” The screenshots (shown below) show the process of selecting the desired runs and viewing the report. The data can be used to gauge exactly how the improvements impact the performance of the trip. The data is shown by node to identify where speed or delay changes. The data can be exported to an Excel spreadsheet and the average of the runs can be displayed on the graph.

Reports will be created by KHA and integrated into KITS allowing historical reporting for all transit priority requests.

This task allows for multiple iOS or Android devices to concurrently provide data into the KITS mobile web service and for up to 5 users to analyze the data on-line. The City will supply up to five mobile devices and will manage and pay the data plan required for each device. Kimley-Horn will train City staff to set up user accounts, routes, and trips. This task includes the data storage for the data collection, the maintenance of the maps and the reports.

**Deliverables:**

1. Completion of Phase 1.
2. Completion of Phase 2.
3. Completion of Phase 3.
4. City-wide signal priority license for an unlimited number of authorized vehicles.
5. City-wide license for up to 5 KITS Mobile users.

**Task 5: Interface with Third-Party Systems**

Based on the requirements stated in the RFP, KHA will create a robust and maintainable interface for the *Remedy* and CRM System. It is expected that KITS will be enhanced to provide the following:

- KITS alert configuration will be modified to enable users to configure a system event/alert to also trigger an outbound message to the *Remedy* and/or CRM system. A user confirmation will be required in advance of sending the outbound message.
- KITS will send a related message that includes existing configuration data to the ITS element generating the event. It is expected that the primary use case will be to automatically generate tickets for communication failures, conflict flash events and any errors associated with the SQL database. KITS will enable the user to set a persistence time for the failure to remain in advance of generating the message.
- The City will be responsible for providing identification numbers that link an asset in the systems along with the desired information configured in KITS to be included.

Deliverables:

1. 25% prototype demonstration.
2. 75% demonstration of functionality.
3. On-site installation and integration.

**Task 6: Traffic Adaptive System**

The Kadence adaptive decision and KITS congestion manager will be deployed to enable detailed performance related reports and allow the City to deploy adaptive signal control operation on corridors in the future.

1. KHA will provide the City the KITS congestion management module along with the Kadence adaptive module. These two modules will allow the City to configure trigger thresholds from detector occupancy data that will select or suggest alternative control strategies to provide congestion management actions. The congestion management logic will allow the City to use other arterial detectors for triggering actions.
2. The congestion management actions will include the ability to identify conditions under which an alternative control strategy may be beneficial. It will also provide the ability to implement the alternative control strategy automatically or manually as selected (programmed) by the City. This is expected to be particularly valuable in responding to incidents. If the manual implementation method is selected, an alert (alarm) will inform the City staff of the alert condition and recommended response. To activate the alternative control strategy, City staff will acknowledge the alert to enable the alternative control strategy. If the automatic implementation method is selected, the alternative control strategy will be implemented without requiring any City staff actions. It will be possible to let the adaptive module run in monitoring mode. In this mode, all potential modifications to current timing will be logged, but not implemented in the field. The alternative control strategy will provide new baseline split, offset, cycle, and sequence parameters through the Kadence adaptive control module.
3. KHA will install the Kadence adaptive control module (based on ACSLite technology) for use on intersections designated by the City. The City will be responsible for modifications (if any) to detection and communications to support the requirements for adaptive operation. With this integrated module, the City will be able to generate reports on the coordinated phases that provide granular measurement of percent arrivals on green and red. Additional integrated tools will enable the City to visualize historical intersection performance timing and provide quantitative performance output. A license will be granted to the City to use performance reporting for all intersections in the City along with real-time adaptive operation on up to 10 City intersections. A separate license will be required to run adaptive operation on more than 10 City intersections.

Deliverables:

1. Deployment of Traffic Adaptive Decision Support System.
2. Integration of Performance Monitoring Reports.

**Task 7: System Support and Maintenance**

KHA shall provide support and maintenance for the supplied software for a period of four years from the time of software acceptance. Any ATMS software issues found during this period will be addressed at no additional cost to the City. New functionality, additions, and enhancements made to the software, that do not constitute a separately packaged and marketed version or module of the system, developed by the Consultant during this period shall be offered to the City at no additional license fee. Upon approval by the City, these enhancements shall be installed and integrated based on current hourly rates.

KHA shall provide maintenance services, which will include phone, e-mail, and on-site support as needed during City’s working hours. KHA shall perform periodic check-ups and tune-ups several times a year to validate System performance.

KHA will provide full system and security administration for the City as part of this KITS. Under a day-two support plan, KHA will administer security for all City users of KITS, fully maintain the server processes, confirm compliance with operating system patches, and the support the SQL Server database. Since KITS security relies on Windows Active Directory, it is expected the City will continue manage domain level users as well as KHA remote access into the City’s network (via Citrix or VPN).

Following the conclusion of the four year system support period following system acceptance, the City may, at its option, continue the same level of system warranty and support for five additional years.

**Deliverables:**

1. System Support and Maintenance for Years 1-4.

**Task 8: System Documentation and Training**

KHA will provide the following KITS documentation to the City:

- System User’s Manual – provides an overview description of the system, its components, how they are used or accessed by the operators, as well as how to use the GUI’s for all aspects of the system.
- Quick Start Guide – describes initial configuration and setup of the system. This brief document references the User’s Manual, but presents the information in a simple format. The document focuses on data entry, map customization, and initial configuration.

Electronic copies of the final documentation will be provided.

A training schedule will be delivered at least one week prior to the comprehensive training sessions that will detail the date and time for each topic. It is anticipated that the training will be broken up into six one-day sessions. The City will have the opportunity to prioritize topics to help determine the amount of time that is spent on each topic.

Training topics may include:

- Overview of KITS
- Operation and management of the system
- System maintenance
- Security
- Map configuration and customization
- On-line help
- Data integrity
- Naming conventions
- System components
- Effective monitoring
- Advanced functionality

Deliverables:

1. Six sessions of classroom training. Payable after each training session.
2. Electronic and hardcopy system documentation. Payable upon delivery of electronic and hardcopy documentation.

**Task 9: Project Acceptance**

Following the substantial completion of the project, an acceptance procedure will be executed to validate compliance with the City's required functionality. A matrix of functionality will be developed along with procedures to verify proper functionality. This testing will include all aspects of the project. It is expected that the testing will require a maximum 12 hours to complete and may be observed by member(s) of City's staff.

Deliverables:

1. Project acceptance.

**Other**

**File Format for Electronic Files and Communication**

KHA shall use the standard City software set forth below when preparing deliverables. KHA shall provide deliverables in the appropriate file format (by downloads and/or via e-mail) as follows:

- Microsoft Word or Adobe PDF – Word Processing
- Microsoft Excel – Spreadsheet
- Microsoft PowerPoint – Presentation Materials

The City shall provide comments in electronic format using the same software as outlined above.

**Optional Services and Operational Support**

Additional services may be provided in support of the system, its operations, or the communication infrastructure for the City. Authorization by the City is required prior to

## City of San Antonio ATMS – Statement of Work

beginning any of these tasks. Services that are not included in this scope but may be provided as additional services include, but are not limited to:

- Integration services for additional intersections
- Database population
- Additional intersection graphic configuration
- Integrated, stand-alone laptop operation
- Communication troubleshooting and integration
- Corridor retiming
- System operational services
- Performance measurement services

## Appendix B

*KITS EULA - This license applies to all software components, developed by Consultant or a Subconsultant, which comprise the KITS software.*

- 1. Use – The Software may be installed and used by the CITY and its employees for an unlimited amount of time. This permanent license will cover all KITS functionality installed including the following modules: Traffic Control, Traffic Responsive, CCTV, Scheduler, Alert Manager, DMS, TxDOT C2C, and Time Synchronization. The CITY will not be required to pay additional license fees for future upgrades to these KITS modules.*
- 2. Distribution - The software may not be used by or distributed to outside entities without the expressed written permission of the CONSULTANT. The source code for the system will be placed in escrow. The source code will be released from escrow to the CITY in the event the owner of the source code or its designated representative no longer provides support.*
- 3. Restrictions – The City may not provide, in any way, any portion of the program to another person or entity without the expressed written permission of the CONSULTANT. This applies to the Software in object form as well as the Software documentation.*
- 4. Copyright – All intellectual property rights in the Software and user documentation are owned by the CONSULTANT and are protected by US copyright laws, other applicable copyright laws, and International treaty provisions. The CONSULTANT retains all rights not expressly granted.*
- 5. Limited Warranty – Except as specifically provided herein, the CONSULTANT makes no warranty, representation, promise or guarantee, expressed or implied, statutory or otherwise, with respect to the Software, user documentation or related technical support, including their quality, performance or fitness for a particular purpose. The CONSULTANT will in no way be responsible for any ramification resulting from modification to the Software or hardware configuration by the CITY.*
- 6. Liability – To the fullest extent permitted by law, CONSULTANT shall indemnify and hold harmless the CITY, CITY'S officers, directors, and employees from and against any and all costs, losses, and damages to the extent they arise out of the negligent acts, errors or omissions of the CONSULTANT in the performance and furnishing of the CONSULTANT's services under this Agreement. The CONSULTANT will not be responsible for operating system, 3<sup>rd</sup> party software, or hardware failures. It is the CITY'S responsibility to make periodic backup copies of data for protection against a system failure. Notwithstanding any other provision in the Agreement, with respect to any use of KITS Consultant shall have no obligation to indemnify or defend the City, its officers, directors, and employees from and against any costs, losses, and damages that arise out of the negligence or wilful misconduct of the City or of third parties for whom the Consultant is not responsible.*
- 7. Government Restricted Rights – The Software and/or user documentation are provided with RESTRICTED AND LIMITED RIGHTS. Use, duplication or disclosure by the CITY is subject to restrictions as set forth in FAR 52.227-14 (June 1987) Alternate III(g)(3) (June 1987), FAR 52.227-19 (June 1987), as applicable. CONTRACTOR/CONSULTANT is Kimley-Horn and Associates, Inc., 7740 N. 16<sup>th</sup> Street Suite 300, Phoenix, Arizona 85020.*



# Exhibit D

# Exhibit 7

## ATMS Functional REQUIREMENTS TRACEABILITY MATRIX

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
<b>1</b>	<b>ATMS - CENTRAL SYSTEM (GENERAL REQUIREMENTS)</b>							
	<b>KITS - Kimley-Horn Integrated Transportation System</b>							
1.1	Provide real time two-way traffic signal communications so that staff can use this data to adjust signal timing.	Y						
1.2	Provide monitoring capability in graphical and text formats	Y						
1.3	Provide general operational configuration	Y						
1.4	Provide a Commercial Off the Shelf (COTS) solution	Y						
1.5	Provide diagnostic capabilities to notify staff about traffic signal malfunction	Y						
1.6	Be able to identify the problem and issue an electronic incident ticket to the City's Remedy or CRM system.			Y				Software development required. Additional detail can be found in Task 5 of scope of work
1.7	Allow staff to address certain traffic signal issues remotely- can remotely change signal timing	Y						
1.8	Be capable of proactively monitor traffic congestion.	Y						
1.9	Be capable of alerting the Traffic Management Center if traffic frequently backs up or if time to drive down an arterial increases significantly which will allow staff to react rapidly to developing situations.	Y						
1.10	Be capable of incorporating new traffic management applications as they are developed in the future without requiring wholesale system replacement.	Y						
1.11	Provide capability for inter-jurisdictional compatibility; and regional cooperation through data sharing and emergency management.		Y					KITS will be deployed to include existing TxDOT C2C functionality. Collaboration, configuration and integration will be performed in a future project phase
1.12	Be capable of viewing and controlling traffic monitoring video cameras	Y						
1.13	Be capable of managing signal timing data for over 2000 signals in the system	Y						
1.14	Be capable of collecting traffic data from individual signals	Y						
1.15	Aids in traffic signal maintenance and equipment tracking	Y						
1.16	The ATMS Traffic Signal System shall provide a single interface between the traffic signal controllers in the field and the users of the system.	Y						
<b>1.17</b>	<b>The ATMS Traffic Signal System shall be capable of communicating with the following minimum number of field devices</b>							
1.17.1	2,000 Signalized Intersections	Y						



**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.1.1.3	Zone/Area	Y						
2.1.1.4	System-Wide	Y						
<b>2.1.2</b>	<b>The ATMS Traffic Signal System shall provide the following operator-selectable control modes for system control for the specified controller(s), section(s), zone(s), or system.</b>	Y						
<b>2.1.2.1</b>	<b>Manual Control - The operator shall be able to manually override the plan that the system, zone, section, or intersection is currently running</b>	Y						
2.1.2.1.1	The Operator shall be able to initiate and release manual control manually, via the user interface	Y						
2.1.2.1.2	The Operator shall be able to schedule the initiation and termination of Manual Control	Y						
2.1.2.2	Free – The Controller, section, zone or system shall operate without coordination.	Y						
2.1.2.3	Flash – The ATMS Traffic Signal System shall command the controller, section, zone, or system to flash	Y						
2.1.2.4	Scheduled Time-of-Day (TOD) operation following the Local Controller's schedule	Y						
<b>2.1.3</b>	<b>The ATMS Traffic Signal System shall have an event scheduler that can schedule commands for devices as well as internal system operations based on time and date.</b>	Y						
2.1.3.1	Events must be scheduled to occur on any combination of the day of the week, a particular date, or whether the day is a (user-definable) holiday.	Y						
2.1.3.2	The start time and stop time must both be specified with both a date and time	Y						
2.1.3.3	The ATMS Traffic Signal System shall support up to one thousand (1,000) programmable time of year (TOY) events	Y						
2.1.3.4	The ATMS Traffic Signal System shall support up to one thousand (1,000) programmable time of day/day of week (TOD/DOW) events	Y						
<b>2.1.3.5</b>	<b>The system shall be able to schedule system commands for the specified controller(s), section(s), zone(s), or system., including the following:</b>	Y						
2.1.3.5.1	Go to Flash	Y						
2.1.3.5.2	Go to Free	Y						
2.1.3.5.3	Run off local schedule	Y						
2.1.3.5.4	Run a pattern	Y						
2.1.3.5.5	Run a defined list of multiple actions	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.1.3.5.6	Turn special function on	Y						
2.1.3.5.7	Turn special function off	Y						
2.1.3.5.8	Turn on transit signal priority	Y						
2.1.3.5.9	Turn off transit signal priority	Y						
2.1.3.5.10	Enable/disable traffic responsive operation	Y						
2.1.3.5.11	Override current traffic responsive plan	Y						
2.1.3.5.12	Make local controller active or inactive	Y						
2.1.3.5.13	Generate alarm report	Y						
2.1.3.5.14	Clear a specific log	Y						KITS logs can be deleted or archived
2.1.3.5.15	Broadcast time	Y						2.1.3.6.3
<b>2.1.3.6</b>	<b>The system shall be able to schedule system commands for the following internal system operations (at minimum):</b>	Y						
2.1.3.6.1	Turn messaging on or off	Y						
2.1.3.6.2	Synchronize workstation and device clocks	Y						
2.1.3.6.3	Get the failure log for the server	Y						Event log reports can be scheduled
<b>2.1.4</b>	<b>The scheduler shall include multiple time-of-day/day-of-week (TOD/DOW) schedules</b>	Y						
2.1.4.1	TOD/DOW schedules shall have one minute resolution	Y						
2.1.4.2	Multiple TOD/DOW schedules should be able to be active at one time	Y						
2.1.5	System Operators shall be able to schedule system commands one year in advance	Y						
2.1.6	All Manual Operator commands shall have priority over scheduled entries in the scheduler.	Y						
2.1.7	The Scheduler shall be able to schedule and execute multiple commands for the same defined time	Y						
<b>2.1.8</b>	<b>The Scheduling capability shall include the ability to schedule permanent and temporary events</b>	Y						
2.1.8.1	Permanent commands shall be performed every time the matching of time parameters occurs	Y						
2.1.8.2	Temporary commands shall be performed once and then be deleted from the scheduler database	Y						
<b>2.1.9</b>	<b>The ATMS Traffic Signal System shall include a permanent schedule that defines fixed and floating holidays</b>	Y						
2.1.9.1	It shall be possible to override TOD/DOW plans with Holiday/Exception day plans	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.2	<b>ACCESS</b>	Y						
2.2.1	<b>The ATMS Traffic Signal System shall support a multi-terminal, multi-user interface to the system.</b>	Y						
2.2.1.1	The ATMS Traffic Signal System shall allow access to multiple levels of the system simultaneously	Y						
2.2.2	The ATMS Traffic Signal System shall support at least 25 concurrent users	Y						
2.3	<b>ALARMS</b>	Y						
2.3.1	The ATMS Traffic Signal System shall be capable of providing alarms to System Operators	Y						
2.3.2	The ATMS Traffic Signal System shall monitor intersection devices, detectors, and communication channels for errors.	Y						
2.3.3	The ATMS Traffic Signal System shall have user selectable alarms based off any event generated in the controller. The Respondent shall identify all of the alarms/alerts that are supported by the controller and central software	Y						
2.3.4	Alarms shall be configurable for both persistence (number of occurrences within a specified time period) and duration (trigger only after triggering event is active for specified duration).	Y						
2.3.5	Alarms shall be transmitted to each TOC and active system operators	Y						
2.3.6	Alarms shall be capable of being acknowledged from any authorized user	Y						
2.3.7	All alarms and acknowledgements shall be logged	Y						
2.3.8	<b>The ATMS Traffic Signal System shall allow the System Administrator to configure the recipients of alarm notification.</b>	Y						
2.3.8.1	<b>The System Administrator shall be able to configure the method of notification on a per alarm and per recipient basis</b>	Y						
2.3.8.1.1	The ATMS Traffic Signal System shall be capable of sending alarms through SMS to the designated recipients.	Y						Requires collaboration with ITSD to allow outbound email messaging from KITS servers
2.3.8.1.2	The ATMS Traffic Signal System shall be capable of sending alarms through email to the designated recipients	Y						
2.3.8.2	The System Administrator shall be able to configure the recipients of alarms by TOD/DOW	Y						
2.3.9	The System Administrator shall be able to establish alarm notification by group members	Y						
2.3.10	<b>The ATMS Traffic Signal System shall provide at least the following alerts</b>	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.3.10.1	Conflict Flash	Y						
2.3.10.2	Local Flash	Y						
2.3.10.3	Commanded Flash	Y						
2.3.10.4	Preempt	Y						
2.3.10.5	Local Free	Y						
2.3.10.6	Prioriters	Y						
2.3.10.7	Controller Keyboard Press							It does not appear that NextPhase 1.7.7 supports this functionality through NTCIP.
2.3.10.8	Communication failure/resumption	Y						
2.3.10.9	Door open							It does not appear that NextPhase 1.7.7 supports this functionality through NTCIP.
2.3.10.10	Laptop computer connected to controller							It does not appear that NextPhase 1.7.7 supports this functionality through NTCIP.
2.3.10.11	Power failure/restoration	Y						
2.3.10.12	Detector failures	Y						
2.3.10.13	Arrivals on red above a specified threshold for an approach	Y						Detector configuration by City required
2.3.11	The ATMS Traffic Signal System shall be capable of allowing SMS messages and emails to designated recipients	Y						
2.3.12	All sent SMS messages and emails shall be logged	Y						
2.3.13	The ATMS Traffic Signal System shall be capable of sending multiple SMS messages/emails within a few seconds of each other.	Y						
2.3.14	SMS messages/emails shall be sent within 60 seconds of the event.	Y						
2.3.15	<b>The system software must be able to be commanded from the event scheduler to monitor the real-time phase status of a traffic signal controller unit to ensure that its operation is within proper constraints of the timing plan that is in effect.</b>	Y						
2.3.15.1	The software shall use the central database timing parameters to check against the phase returns.	Y						
2.3.15.2	<b>Through compliance monitoring, the error conditions, which shall be detected, include the following:</b>	Y						
2.3.15.2.1	The controller is not using the proper timing plan	Y						
2.3.15.2.2	The controller time clock is out of synchronization	Y						
2.3.15.2.3	The controller is not sequencing	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.3.15.2.4	The phase sequence is improper	Y						
2.3.15.2.5	Phase time compliance	Y						
2.3.15.3	Pre-emption occurrences shall not be interpreted as an error condition.	Y						
<b>2.4</b>	<b>CONTROLLER CONFIGURATION INTERFACE</b>	Y						
2.4.1	The interface used to edit and view the local controller configuration shall be integrated with the ATMS Traffic Signal System.	Y						
<b>2.4.2</b>	<b>The central system application shall be used to store all data used by the ATMS Traffic Signal System.</b>	Y						
2.4.2.1	The system should also store the central copies of the current timing plans for each of the configured intersections.	Y						
<b>2.4.2.2</b>	<b>The system shall store multiple versions of the configuration information for each field device.</b>	Y						
2.4.2.2.1	The date that each intersection dataset was created should be maintained.	Y						
2.4.2.2.2	The date and time that each intersection dataset was downloaded should be maintained (for each download).	Y						
<b>2.4.2.2.3</b>	<b>These archives shall be easily accessible, viewable, and printable in the same format that current data would use.</b>	Y						
2.4.2.2.3.1	Archived file shall show the date and time at which the archive file was created (as opposed to the date on which it was displayed or printed) when viewed or printed.	Y						
2.4.2.3	The system shall have the capability of storing a text description documenting explanations of why changes were made to the programming of an intersection.	Y						
2.4.2.4	The system shall have a way of storing attachments related to the particular intersection such as photos, phasing layouts, and detector assignments.	Y						
2.4.2.5	All system parameters, to include the timing parameters for each individual intersection shall be able to be queried. For example, it shall be possible to identify all intersections in which a ped recall is currently applied in the timing parameters.	Y						
<b>2.4.3</b>	<b>The system shall support the editing, copying and deleting of data.</b>	Y						
2.4.3.1	Data-entry formats shall be designed for easy data preparation by the operators	Y						
2.4.3.2	All configuration information shall be printable in the proper format for use by the traffic engineers and maintenance technicians in the field	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.4.3.3	System shall also provide a means to export configuration informations to spreadsheet programs in comma-separated variable format (csv) and as text files. All columns and rows shall be clearly labeled using terms consistent with those used in the central software, local controller software, documentation, and training materials.	Y						
2.4.3.4	In order to alleviate repetitive data entry, the system shall allow the operator to copy configuration information to multiple devices	Y						
2.4.3.5	<b>System generation of traffic control operations shall include safeguards to preclude dangerous or undesirable intersection operation.</b>	Y						
2.4.3.5.1	These safeguards shall, as a minimum, include range checking, and coordinated timing plan diagnostics for each pattern/split combination.	Y						
2.4.3.5.2	<b>At a minimum, timing plan diagnostics shall check for the following:</b>	Y						
2.4.3.5.2.1	Split times which violate minimum phase lengths (minimum green + yellow + all red)	Y						
2.4.3.5.2.2	Split times which violate pedestrian times ( walk + flashing don't walk + yellow + all red)	Y						
2.4.3.5.2.3	Split times which do not add up to cycle length	Y						
2.4.3.5.2.4	Split times which cause barriers to not be aligned.	Y						
2.4.3.5.3	The diagnostics shall check for split time violations which occur during short way correction mode as well as those which occur during the programmed cycle length for a given coordination pattern.							KITS has this deployed for other controller types. Can be added to NextPhase. Currently not priced into phase 1
2.4.3.5.4	Checking for splits which violate pedestrian times shall not prevent the use of vehicular splits which are less than the pedestrian times	Y						
2.4.3.5.5	When errors occur, the results shall be displayed clearly and concisely with information sufficient for timely correction by the operator	Y						
2.4.4	<b>Periodic download of field device configuration</b>	Y						
2.4.4.1	The system shall perform periodic and operator scheduled download of all field field device configuration informaiton and compare such field databases with the central system, which shall be considered to be the master	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.4.4.2	<b>In the event that a change is made to controller settings through the keypad or by means of a portable computer, the controller should automatically download any and all changes to the central system.</b>							KITS has this deployed for other controller types. Can be added to NextPhase. Currently not priced into phase 1
2.4.4.2.1	After downloading, this change will be logged and stored in the appropriate tables in the database.							KITS has this deployed for other controller types. Can be added to NextPhase. Currently not priced into phase 1
2.4.4.2.2	The system operator will be notified that a change is waiting to be verified to be stored in the permanent data file for the intersection.							KITS has this deployed for other controller types. Can be added to NextPhase. Currently not priced into phase 1
2.4.4.2.3	This download shall occur without operator intervention, and shall occur not more than thirty minutes after the last change was made.							KITS has this deployed for other controller types. Can be added to NextPhase. Currently not priced into phase 1
2.4.4.2.4	It shall be possible for this feature to be deactivated at the system operator's discretion.	Y						
2.4.4.3	Operator may also choose to download and compare databases manually, if desired.	Y						
2.4.4.4	When comparing field and central system parameters (whether initiated by the operator or automatically through a change in field), the software shall highlight the discrepancies between the two data sets. The operator shall have the option of saving the downloaded field configuration information or uploading the central configuration information, or any part thereof, to the field.	Y						
2.4.5	<b>System shall support data archival at administrator-defined intervals</b>	Y						
2.4.5.1	The system shall be capable of storing all data generated by all intersections for at least 7 days without degrading the functionality of the system.	Y						
2.4.5.2	The cleanout time should be configurable by individual table	Y						
2.4.6	When an operator opens a controller database that is in use, the central signal system software shall display a message explaining to the operator that the database is already open.	Y						
2.5	<b>LOGS</b>	Y						
2.5.1	<b>The ATMS Traffic Signal System shall maintain logs of system events</b>	Y						
2.5.1.1	System logs shall be accessible from any workstation	Y						
2.5.1.2	System Operators shall be capable of defining specific events and/or time periods for viewing or report generation.	Y						

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No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.5.1.3	<b>The ATMS Traffic Signal System shall include a Traffic System Log</b>	Y						
2.5.1.3.1	The ATMS Traffic Signal System shall log traffic-related events (including phase changes, detector calls, coordination events, etc.)	Y						
2.5.1.4	Events shall be listed in chronological sequence.	Y						
2.5.1.5	<b>Each message should be stored with the date, time, and location.</b>	Y						
2.5.1.5.1	The date and time recorded for each event should be based on the date and time the event occurred as reported by the local controller and not the date and time that the message was received by the central system or written into the log.	Y						
2.5.1.6	The system administrator shall have the ability to export event log data in MS Excel format	Y						
2.5.1.7	Log retention interval shall be set by the system administrator	Y						
2.5.1.8	<b>The ATMS Traffic Signal System shall log users who are currently logged into the system.</b>	Y						
2.5.1.8.1	The ATMS Traffic Signal System shall log the users name and the time the user logs in and out the system.	Y						
2.5.1.8.2	The ATMS Traffic Signal System shall display a list of the operators that are currently logged onto the central signal system software to a user-defined set of operators.	Y						
2.6	<b>REPORTING</b>	Y						
2.6.1	<b>The ATMS Traffic Signal System shall include standard reports</b>	Y						
2.6.1.1	Standard reports shall be obtainable from a menu of report names	Y						
2.6.1.2	Standard reports shall be obtainable from any operator workstation	Y						
2.6.1.3	Standard reports shall be displayed on the workstation monitor	Y						
2.6.1.4	Standard reports shall be printable	Y						
2.6.1.5	Data from standard reports shall be able to be exported in a format that can be opened and read by Microsoft Excel.	Y						
2.6.1.6	It shall be possible to save any standard report to a file	Y						
2.6.1.7	Where applicable, the user shall be able to limit the report details to a the whole system, a particular zone, a particular area, or a particular intersection or device.	Y						
2.6.1.8	<b>At minimum, the ATMS Traffic Signal System shall include the following standard reports</b>	Y						
2.6.1.8.1	<b>System Status</b>	Y						
2.6.1.8.1.1	<b>The System Status Report shall include possible status conditions</b>	Y						



**Exhibit 7**  
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No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.6.1.8.1.1.1	<p>This display is an overview of the present condition of all devices in the traffic system including intersection controllers, detectors, communication channels, and other categories of devices. The conditions shall include all possible status conditions (e.g. on-line, failed, etc.) and modes (e.g. TOD/DOW, On Flash, etc.) as described in this specification.</p> <p>At the discretion of the operator, it may be displayed as a list, or displayed as a map with colors or symbols used to indicate the status of each device. Regardless of how this data is displayed, it should update continuously without operator intervention.</p>	Y						
<b>2.6.1.8.2</b>	<b>Intersection Operation</b>	Y						
2.6.1.8.2.1	The Intersection Operation Report shall present the real-time intersection operation	Y						
<b>2.6.1.8.3</b>	<b>Communication Statistics</b>	Y						
2.6.1.8.3.1	This display/report shows the communications throughput. The display shall include number of communication attempts, number of successes, number of failures, and percentage of successful communications per intersection, per channel, and per system	Y						
<b>2.6.1.8.4</b>	<b>Detailed Detector Failure Status</b>							
2.6.1.8.4.1	This display/report displays the failure information for all failed detectors. This information shall include as a minimum: detector location, reason for failure, and time of failure.							KITS supports. Can be added to NextPhase. Currently not priced into phase 1
<b>2.6.1.8.5</b>	<b>System Detector MOE Reports</b>							
<b>2.6.1.8.5.1</b>	<b>Detector Summary information should include the following:</b>							
2.6.1.8.5.1.1	Counts/Speed/Occupancies over time	Y						
2.6.1.8.5.1.2	Total counts	Y						
2.6.1.8.5.1.3	Counts per time division (5, 10, 15, etc. minute intervals)	Y						
2.6.1.8.5.1.4	Real-time acquisition	Y						
<b>2.6.1.8.5.2</b>	<b>Historical MOE reports should include information related to the selected system detectors. Information on this report should include:</b>							
2.6.1.8.5.2.1	Present volume versus historical volume;	Y						
2.6.1.8.5.2.2	Present occupancy versus historical occupancy;	Y						
2.6.1.8.5.2.3	Present speed versus historical speed; and	Y						
2.6.1.8.5.2.4	Present delay versus historical delay.	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
<b>2.6.2</b>	<b>The ATMS Traffic Signal System shall have the capability of generating custom reports using Crystal reports or other 3rd party COTS</b>							
2.6.2.1	Custom reports shall be definable by any system operator	Y						
2.6.2.2	Custom reports shall be definable from any operator workstation	Y						
2.6.2.3	System Operators shall be able to define report format and content	Y						
2.6.2.4	Custom reports shall be printable to any network printer	Y						
2.6.2.5	Custom Reports shall be savable to the standard reports list	Y						
<b>2.7</b>	<b>GUI</b>	Y						
2.7.1	The ATMS Traffic Signal System shall provide an easy to use interface	Y						
2.7.2	The GUI shall provide access to monitoring and control options from a single point.	Y						
2.7.3	The GUI shall provide hot keys for commonly used functions	Y						
2.7.4	The GUI shall provide right-click menu options for links to commonly used functions	Y						
2.7.5	The GUI shall provide both visual and audio alarms	Y						
2.7.6	The Operator shall be able to open several windows at one time	Y						
<b>2.7.7</b>	<b>The ATMS Traffic Signal System shall include an Object Library that contains dynamic icon objects that show different states to reflect the current system/intersection status.</b>	Y						
<b>2.7.7.1</b>	<b>Dynamic objects shall include the following objects as a minimum:</b>	Y						
2.7.7.1.1	Traffic Signals	Y						
2.7.7.1.2	Links	Y						
<b>2.7.7.2</b>	<b>The Dynamic objects shall be placed on the GUI using an integrated graphical editor. It should not be necessary to create additional files in an external application in order to place the dynamic objects.</b>	Y						
2.7.7.2.1	Dynamic objects shall be directly linkable to system database	Y						
2.7.7.2.2	Dynamic objects shall be placed on the GUI without software programming or recompilation.	Y						
2.7.7.2.3	The storage of the definition of the dynamic objects should occur on the application server such that all clients connected to the server can see the objects in the same way.	Y						
<b>2.7.8</b>	<b>The ATMS Traffic Signal System shall include graphical displays for displaying and accessing system information</b>	Y						
2.7.8.1	All commands for manipulating the graphical displays shall be available directly from the Operator Workstation	Y						

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**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.7.8.2	Multiple traffic condition views shall be supported simultaneously on the operator workstation	Y						
2.7.8.3	Operators shall and able to access system functions using the graphical display system	Y						
2.7.8.4	Common icons shall be used as much as possible for all display levels.	Y						
2.7.8.5	All colors shall be selectable by the operator.	Y						
2.7.8.6	The same colors and icons shall also be used in display/report screens.	Y						
2.7.8.7	A legend shall be available within the display window, defining the meaning of each icon and color.	Y						
<b>2.7.9</b>	<b>The ATMS Traffic Signal System shall include graphic displays for the display of real-time system information</b>	Y						
2.7.9.1	The Operator shall be able to display the real-time graphics on the workstation and/or system monitor	Y						
2.7.9.2	Real-time graphics displays shall be available at the system, area, section, and intersection levels	Y						
<b>2.7.9.3</b>	<b>The ATMS Traffic Signal System shall support the City's ESRI GIS system map and provide a connection to an online mapping system such as OpenStreetMaps, Google Maps or Bing maps.</b>	Y						
2.7.9.3.1	The System Map shall display dynamic objects that represent the ATMS field devices	Y						
2.7.9.3.2	Selection of any particular dynamic icon on the system map shall display a more detailed status window	Y						
2.7.9.3.3	The System Map shall provide interactive mechanisms for editing and modifying dynamic graphic screens that are linked to the system dynamic elements	Y						
<b>2.7.9.3.4</b>	<b>The System Map shall allow system operators to select the following specific system status information for viewing</b>	Y						
2.7.9.3.4.1	Communications Status	Y						
2.7.9.3.4.2	Main Street Green	Y						
2.7.9.3.4.3	Preemption Status	Y						
2.7.9.3.4.4	Link Volumes	Y						
2.7.9.3.4.5	Coordination Status	Y						
2.7.9.3.4.6	Signals on Flash	Y						
2.7.9.3.4.7	Link Speeds	Y						

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No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.7.9.3.5	The System Operator shall have zoom and scrolling capabilities within the System Map	Y						
<b>2.7.9.3.6</b>	<b>The System Map shall be able to include the following minimal information:</b>							
2.7.9.3.6.1	Major Streets	Y						
2.7.9.3.6.2	Street Names	Y						
2.7.9.3.6.3	Freeways	Y						
2.7.9.3.6.4	Rail Lines	Y						
2.7.9.3.6.5	Major Landmarks	Y						
2.7.9.3.6.6	Traffic Signal Controllers	Y						
2.7.9.3.6.7	CCTV Cameras	Y						
2.7.9.3.6.8	Dynamic Message Signs	Y						
2.7.10	The ATMS Traffic Signal System shall support aerial photography for use as the main map as well as the intersection graphics	Y						
<b>2.7.11</b>	<b>The ATMS Traffic Signal System shall be capable of defining area maps which cover a specific area of the City</b>	Y						
2.7.11.1	The ATMS Traffic Signal System shall support an unlimited number of Area Maps	Y						
<b>2.7.11.2</b>	<b>The Area Maps shall include all the information and features of the System Map, plus the following information</b>	Y						
2.7.11.2.1	Minor Streets	Y						
2.7.11.2.2	Individual Signal Phase Status	Y						
2.7.11.3	Information displayed on the Area Map shall be definable by the Operator	Y						
<b>2.7.12</b>	<b>The ATMS Traffic Signal System shall provide individual intersection displays</b>	Y						
2.7.12.1	Intersection Displays shall be accessed from a drop-down list or by double clicking on the intersection icon on the System or Area map at any zoom level or by zooming all the way in to the intersection.	Y						
2.7.12.2	Multiple intersection display windows shall be displayable simultaneously	Y						
2.7.12.3	The Operator shall be able to minimize and maximize the detailed intersection display	Y						
<b>2.7.12.4</b>	<b>The Intersection Display shall be capable of including the following information (at minimum)</b>	Y						
2.7.12.4.1	Street Names	Y						
2.7.12.4.2	Current Timing Plan in Use	Y						
2.7.12.4.3	Vehicle and pedestrian Displays	Y						

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**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

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2.7.12.4.4	Overlap displays (different states of the flashing yellow arrow display should be clearly identifiable.)	Y						
2.7.12.4.5	Current Communication Status	Y						
2.7.12.4.6	Control Mode	Y						
2.7.12.4.7	Vehicle calls per phase	Y						
2.7.12.4.8	Pedestrian calls per phase	Y						
2.7.12.4.9	System detector actuation	Y						
2.7.12.4.10	Special functions	Y						
2.7.12.4.11	Detector actuations (inputs)	Y						
<b>2.7.12.4.12</b>	<b>Local and Master Cycle Timers, if used</b>	Y						
2.7.12.4.12.1	Cycle Counters shall count up to a value equal to the length of the current cycle	Y						
2.7.12.4.13	Preempt status	Y						
2.7.12.4.14	Priority status	Y						
2.7.12.4.15	Overlap Information	Y						
2.7.12.4.16	Lane control state	Y						KITS is deployed with reversible lane functionality in Miami-Dade County. This can be added for NextPhase graphics. This operation is priced into phase 1
<b>2.7.12.5</b>	<b>The ATMS Traffic Signal System shall indicate the interval that each active phase is currently in</b>							Additional investigation required to determine if possible with NextPhase
2.7.12.5.1	The amount of time that the phase has been in the current interval shall be displayed using a counter that counts upward.	Y						
2.7.12.6	The ATMS Traffic Signal System shall provide an upward incrementing counter for the entire split time for each phase when running in coordinated mode.	Y						
2.7.13	The ATMS Traffic Signal System shall refresh information of the graphics displays as frequently as the data is being returned from the field devices.	Y						
<b>2.7.14</b>	<b>Specific intersections can be located using a search tool</b>	Y						
2.7.14.1	The search tool shall allow the use intersection numeric identification number or street name as the search entity.	Y						
2.7.14.2	The user shall be able to search for intersections within a particular grouping	Y						
<b>2.8</b>	<b>DETECTORS</b>	Y						
2.8.1	The ATMS Traffic Signal System shall support system and local detectors	Y						

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No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.8.2	The Detectors shall be capable of being used for vehicle detection, traffic counting, traffic flow monitoring, and traffic-responsive operation.	Y						
2.8.3	The ATMS Traffic Signal System shall process and maintain detector count and occupancy data on a continuous basis.	Y						
<b>2.8.4</b>	<b>The ATMS Traffic Signal System shall support the following types of detector data types:</b>	Y						
2.8.4.1	Volume	Y						
2.8.4.2	Occupancy	Y						
2.8.4.3	Travel time	Y						
2.8.4.4	Arrivals on Red/Green	Y						
2.8.5	The ATMS Traffic Signal System shall be capable of automatically logging detector data in the database	Y						
2.8.6	The System Operator shall be able to enable/disable the recording of detector data	Y						
2.8.7	The Detector data shall be archived periodically	Y						
2.8.8	The parameters for management and storage of the detector data shall be configurable by the System Operator	Y						
<b>2.8.9</b>	<b>The ATMS Traffic Signal System shall continuously monitor detector data from the field for proper operation</b>	Y						
2.8.9.1	Detectors shall be classified as acceptable, marginal, disabled, and failed.							Classification are currently different but can be modified. This is not priced into phase 1
2.8.9.2	Detector failures shall be reported to the system log and operator alarm.	Y						
<b>2.8.9.3</b>	<b>The software shall have operator-selectable filters that define the thresholds that a detector must exceed to be considered failed.</b>	Y						
2.8.9.3.1	The filter values shall be selectable on a TOD basis	Y						
<b>2.8.9.4</b>	<b>As a minimum, the following four failure types shall be diagnosed:</b>	Y						
<b>2.8.9.4.1</b>	<b>Maximum Presence</b>	Y						
2.8.9.4.1.1	if an active detector exhibits continuous detection for a program entered period (0-255 minutes in one minute increments)	Y						
<b>2.8.9.4.2</b>	<b>No Activity</b>	Y						
2.8.9.4.2.1	if an active detector does not exhibit an actuation during a program period (0-255 minutes in one minute increments)	Y						
<b>2.8.9.4.3</b>	<b>Erratic Output</b>	Y						

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2.8.9.4.3.1	if an active detector exhibits excessive actuation (program entered maximum counts per minute 0-255 in increments of one)	Y						
2.8.9.4.4	<b>Failed Communication</b>	Y						
2.8.9.4.4.1	failed detectors shall not be available for traffic control strategies	Y						
2.9	<b>TIME</b>	Y						
2.9.1	The system shall use NTP to synchronize all controllers, workstations, and central system time	Y						
2.9.2	The ATMS Traffic Signal System shall transmit a clock update in conjunction with the command for the implementation of a different timing plan	Y						
2.9.3	<b>The software should also upload, on a periodic basis selectable by the operator, the date/time from local controller and other field clock. If the controller time has drifted beyond an operator-defined amount, then:</b>	Y						
2.9.3.1	the system shall automatically download the true time to the controller	Y						
2.9.3.2	the system should report the clock drift to the operator	Y						
2.9.3.3	the event and action is logged	Y						
2.9.4	The software must have the ability to enable or disable daylight savings functions, handle leap years, and holidays and special events. All software must be capable of operating in the central time zone.	Y						
2.10	<b>SETUP</b>	Y						
2.10.1	The ATMS Traffic Signal System shall be capable of assigning field devices to control groups.	Y						
2.10.2	Field devices shall be assignable to more than one of the control groups	Y						
2.10.3	The ATMS Traffic Signal System shall support a minimum of 500 control groups	Y						
2.10.4	The ATMS Traffic Signal System shall be capable of transmitting any command to all devices within a control group.	Y						
2.11	<b>TSD</b>	Y						
2.11.1	The ATMS Traffic Signal System shall provide static and dynamic green band displays.	Y						
2.11.2	System Operators shall be able to select real-time or timings stored in the database for the green band display	Y						
2.11.3	System Operators shall be able to select the intersection to be displayed searching by asset number or name or by selecting a control group.	Y						

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No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.11.4	The time-space diagram shall be capable of overlaying GPS coordinates from a travel time run over a plot of the signal timings that occurred during the same time period as the travel time run.	Y						
2.11.5	The time-space diagram shall provide information as to the cause of phase termination when viewing historical timings (i.e. when the mouse hovers over a termination point.)			Y				Similar functionality exists. Will be developed to support this as part of this initial phase
2.11.6	The operator shall then be able to perform on-screen fine-tuning, using click and drag methods to adjust the offsets, with the resulting changes in the widths of the progression bands being displayed. The operator shall then be able to save to the database the resulting changes in offsets for that timing plan	Y						
<b>2.12</b>	<b>COMMUNICATIONS</b>	Y						
2.12.1	The ATMS Traffic Signal System shall manage all communications between the system servers and the field devices.	Y						
2.12.2	The ATMS Traffic Signal System shall provide a message communications scheme that ranks messages to field devices on a priority level basis.	Y						
2.12.3	User-initiated messages shall have higher priority over polling messages	Y						
2.12.4	The Communications scheme shall allow dropping of real-time monitoring to help facilitate the quickest completion of higher priority messages	Y						
2.12.5	The ATMS Traffic Signal System shall also prioritize communications to field devices based on the present use of the system	Y						
2.12.6	The system administrator shall have the ability to configure the polling timeout in milliseconds for each device.	Y						
2.12.7	The Communications type shall be selectable by the System Operator	Y						
<b>2.12.8</b>	<b>The ATMS Traffic Signal System shall monitor communications between the system servers and field devices</b>	Y						
2.12.8.1	The ATMS Traffic Signal System shall fail individual components when operator-selectable thresholds are exceeded	Y						
<b>2.12.8.2</b>	<b>If communications fails, the ATMS Traffic Signal System shall display a heads-up alarm to the system operator</b>	Y						
2.12.8.2.1	The ATMS Traffic Signal System shall log all communication failures	Y						
2.12.8.2.2	The ATMS Traffic Signal System shall continue to attempt to reestablish communications with the failed component for an operator-definable amount of time.	Y						



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2.12.8.2.3	If communications is re-established within the selected time period, the component shall be considered operational	Y						
2.12.8.2.4	<b>If communications is re-established, the ATMS Traffic Signal System shall log the event and clear the alarm</b>	Y						
2.12.8.2.4.1	The System Operator shall be able to enable/disable communications monitoring through the GUI.	Y						
2.12.9	<b>The ATMS Traffic Signal System shall be capable of monitoring communications performance.</b>	Y						
2.12.9.1	The ATMS Traffic Signal System shall provide statistics on communication downtime and number of drops on a group, intersection, and system-wide basis over a user selectable time period.	Y						
2.13	<b>POLLING</b>							
2.13.1	The ATMS Traffic Signal System shall be capable of providing once per second polling of all field devices	Y						
2.13.2	Polling rates shall be selectable by the System Operator on a channel by channel or individual intersection basis.	Y						
2.13.3	When viewing multiple intersections, the ATMS Traffic Signal System shall be capable of automatically varying polling rates to insure once-per second refresh rates.	Y						
2.14	<b>REMOTE ACCESS</b>	Y						
2.14.1	<b>The ATMS Traffic Signal System shall provide a means for allowing a direct connection to program and read data from the local intersection controllers</b>	Y						All KITS services, and integrated laptop KITS UI can be configured on up to 10 laptop computers. City is responsible for procuring hardware and software licenses.
2.14.1.1	Direct connection methods should not require a connection to the server to function properly.	Y						
2.14.1.2	Though other devices can be supported for the direct connection methods, at a minimum these methods must support laptop computers.	Y						
2.14.1.3	Devices connected directly to the local intersection controllers shall be able to upload/download timing parameters and set time and date on the controller	Y						
2.14.1.4	Devices connected directly to the local intersection controllers shall synchronize their database with the Central database upon next connection to the LAN.	Y						
2.15	<b>SPLIT MONITORING</b>							
2.15.1	<b>The ATMS Traffic Signal System shall be capable of comparing programmed phase timing to real-time phase returns</b>	Y						

## Exhibit 7

### ATMS Functional REQUIREMENTS TRACEABILITY MATRIX

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.15.1.1	The comparison of programmed and real-time phase data shall be displayed on the operator workstation.	Y						
<b>2.15.2</b>	<b>The ATMS Traffic Signal System shall be capable of monitoring actual split times by phase.</b>	Y						
2.15.2.1	Intersections or control groups for which the splits will be recorded shall be user selectable	Y						
2.15.2.2	Splits shall be displayed as a summary over a specified time period or on a cycle by cycle basis	Y						
2.15.2.3	Splits shall be accurate regardless of the programmed ring and barrier structure that is in use and should be displayed for all phases in use.	Y						
2.15.2.4	Splits shall be displayed for all cycles during the requested time period regardless of plan change or whether the signal is running in coordinated or free mode.	Y						
2.15.3	The ATMS Traffic Signal System shall display the percentage of time that the phase was terminated because it reaches it maximum value	Y						
2.15.4	The ATMS Traffic Signal System shall display the percentage of time that the phase was terminated because it was forced off	Y						
2.15.5	The ATMS Traffic Signal System shall display the percentage of time that the phase was terminated because it gapped out	Y						
2.15.6	The ATMS Traffic Signal System shall have the ability to export the split monitor report to an Excel compatible file.	Y						
<b>2.16</b>	<b>EXPORT</b>							
<b>2.16.1</b>	<b>The ATMS Traffic Signal System shall provide a means of uploading and downloading timing information for data analysis and timing development</b>	Y						
2.16.1.1	The ATMS Traffic Signal System shall be capable of importing and exporting traffic volume data	Y						
2.16.1.2	The importing and exporting of data in the Universal Traffic Data Format (UTDF) shall be supported							Dependent on controller/firmware. Not part of existing NextPhase functionality or priced into phase 1 of this project. Can be added for additional fee
<b>2.17</b>	<b>CENTER TO CENTER</b>							
<b>2.17.1</b>	<b>The ATMS Traffic Signal System shall be capable of sending and receiving information from transportation partners using the current Center-to-Center protocol implemented by the Texas Department of Transportation.</b>	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.17.1.1	The data to be exchanged should include at a minimum traffic signal plan selection, link speed data, link travel time data, incident locations, and camera snapshots.		Y					Base functionality will be provided. Additional services required for KHA, TCI, ITSD TxDOT IT collaboration modify network to securely exchange data
<b>2.18</b>	<b>TRANSIT SIGNAL PRIORITY</b>							
2.18.1	The ATMS Traffic Signal System must be able to receive a transit signal priority (TSP) request message via a communications socket from the VIA Metropolitan Transit Authority servers and correctly act on the message to apply a check in or check out detector call at the appropriate signalized intersection.			Y				Special functions will be used since remote detector call are not supported in NextPhase 1.7.7 with NTCIP. Software development will be required and is included in base price
2.18.2	It shall be possible to define transit detection zones within the system software such that when a TSP message is received, the appropriate detector on the appropriate approach and direction and for the specified bus route is triggered		Y					
2.18.3	The message received from the VIA servers will be an XML message in the form shown in Exhibit 6.		Y					
<b>2.18.4</b>	<b>The system software shall be capable of generating logs and reports that show the number of TSP requests that have been received per intersection and per detector.</b>		Y					
2.18.4.1	The reports should also provide metrics indicating the impact that the TSP request had on the intersection operations (i.e. was priority granted, and if so was a phase extended or terminated early to accommodate the priority request).	Y						
<b>2.19</b>	<b>TRAFFIC RESPONSIVE CONTROL</b>							
<b>2.19.1</b>	<b>The ATMS Traffic Signal System shall be capable of operating in traffic responsive mode as described below.</b>	Y						Substantial integration required for TRSP. KHA will provide all functionality, the City will need to determine and configure volume and occupancy detector signatures for each timing plan
2.19.1.1	The ATMS Traffic Signal System shall select the timing plan that is best suited to the existing traffic conditions as measured by the system detectors and analyzed by the central system's traffic-responsive process	Y						
2.19.1.2	Volumes and occupancies of system detectors assigned to inbound, outbound, and side street traffic are scaled and monitored by the algorithm	Y						

**Exhibit 7**  
**ATMS Functional REQUIREMENTS TRACEABILITY MATRIX**

No.	Requirement	out of box	with configuration	requires customization	3rd party (if Yes, list firm's name and role)	future release	not available	Solution Description (30 words or less)
2.19.1.3	Once the traffic-responsive algorithm has selected the appropriate timing plan, the plan number shall be commanded to the intersections on a continuous basis until the traffic-responsive process recognizes, based on sufficient change in traffic conditions, the need to command a different timing plan.	Y						
2.19.1.4	All of the algorithms' plan changes are to be logged	Y						
2.19.1.5	Should communications be lost to one or more intersections in a section operating in Traffic-Responsive mode, for an operator-defined time frame, the whole section will drop back to its local TOD/DOW schedule	Y						
<b>2.20</b>	<b>ADDITIONAL FUNCTIONS</b>	Y						
2.20.1	Support for Dynamic Message Signs. This would include a communications interface using the NTCIP protocol, and a message management system	Y						
<b>2.20.2</b>	<b>Support for Closed Circuit Television Cameras (CCTV); this additional functionality would include the camera control system.</b>	Y						
2.20.2.1	The control system would include pan, zoon, tilt, iris, pre-sets.	Y						
2.20.2.2	The camera protocol will include Cohu, but others may be considered.	Y						
2.20.3	Historical Controller Database Configuration Management Tool. This functionality is the ability for the City to store notes with different timing plans. The user should have the ability to store historical controller databases over time as individual files.	Y						
2.20.4	Alert Prioritization. This functionality provides the ability to define specific users as priority recipients with secondary users being alerted if only the top priority user did not respond within some user-programmable time period.	Y						
2.20.5	Real-time I/O display. This functionality would provide the ability for the user to view an intersection graphic that would show dynamic icons representing the Inputs and Outputs of the controller.	Y						
2.20.6	External Call placement. This functionality would allow the system operator to place vehicle, pedestrian, and preemption calls to a controller using the Central System Software. The controller firmware/software will be required to support external placement of calls.	Y						NextPhase version 1.7.7 does not appear to support this functionality over NTCIP. This can be achieved by mapping a special function to a detector. KITS is able to send an NTCIP command to implement a special function
2.20.7	TxDOT Center-to-Center Support. This functionality is supporting the current TxDOT Center-to-Center standard for sharing data between centers.	Y						

































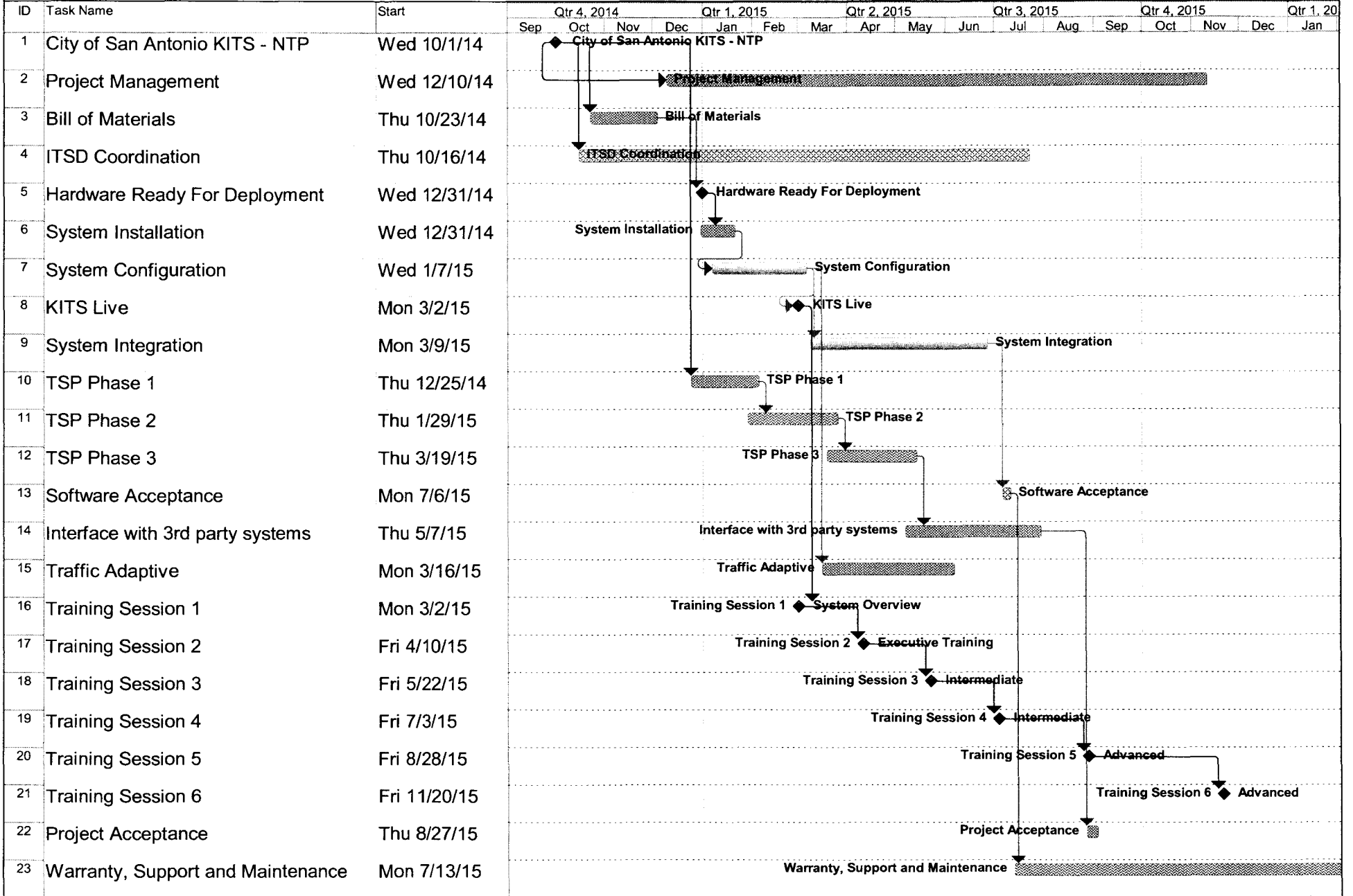








## City of San Antonio ATMS Replacement Baseline System Project Plan



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