PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is hereby made and entered into this 31 day of August, 2017, by and between the Lexington-Fayette Urban County Government, an urban county government located in Lexington, Kentucky (hereinafter referred to as the LFUCG), and Traffic Control Products, Inc. (TCP), (hereinafter referred to as "Provider"), on the terms, conditions and provisions as set forth herein below. All references to "Contractor" shall mean "Provider".

I. PROJECT NAME, DESCRIPTION, AND EXHIBITS

This project includes an agreement to provide a Central Advanced Traffic Management System with software, related hardware, and related services. The terms and conditions set forth in RFP #18-2017 (the "RFP"), Central Advanced Traffic Management System (CATMS), regarding LFUCG's traffic signal operations shall govern this Project. The following documents are attached hereto and incorporated herein by reference as if fully stated:

Exhibit A - Scope of Work
Exhibit B - Breakdown of Costs
Exhibit C - The RFP
Exhibit D - Provider's Response to the RFP
Exhibit E – Provider's Standard Warranty In the event of a conflict between contract documents, the terms and conditions set forth in the Scope of Work shall govern, followed by this Agreement, the RFP, and then Provider's Response to the RFP.

II. DUTIES OF PROVIDER

A. Provider agrees to render professional services to LFUCG, as set out and more fully described in the Scope of Work relative to the above-referenced project that is illustrated in Exhibit "A" attached hereto.

B. Provider designates Terry Stanoch, Vice President, whose business address and phone number is 4565 Glenbrook Rd. Willoughby, OH 44094, (440) 951-8929 as its project manager and contact person for this project. Provider acknowledges and agrees that its employees or agents are not employees of LFUCG for any purpose whatsoever.

C. Provider agrees to maintain records and accounts, including personnel, financial and property records, sufficient to identify and account for all costs pertaining to the project and certain other records as may be required by LFUCG to assure a proper accounting for all project funds. These records shall be made available to the LFUCG for audit purposes and shall be retained for a period of five (5) years after the expiration of this Agreement.

D. Necessary services must be completed in their entirety by Provider within one (1)

year from the issuance of the NTP. Provider and LFUCG may extend the time period of this Agreement beyond the termination date when mutually agreeable by the parties.

III. DUTIES OF LFUCG

A. LFUCG designates David Filiatreau, PE, PTOE, whose business address and phone number is 101 E. Vine Street, Suite 300, Lexington, KY 40507, (859) 258-3491 as its contact person for this project, who shall provide a notice to proceed and such other written authorizations as are necessary to commence for proceed with the project and various aspects of it. Regarding project tasks for which Provider personnel have been engaged to assist LFUCG personnel, LFUCG shall be responsible for the supervision, management, technical direction, and control of LFUCG personnel.

B. The Project Manager shall:

1. Review and make appropriate recommendations on all requests submitted by Provider for payment for services and work provided and performed in accordance with this Agreement;

2. Provide all criteria and information requested by Provider as to LFUCG's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations;

3. Upon request from Provider, assist Provider by placing at Provider's disposal all available information in LFUCG's possession pertinent to the Project, including existing drawings, specifications, shop drawings, product literature, previous reports and any other data relative to the Project;

4. Arrange for access to and make all provisions for Provider to enter the Project site to perform the services to be provided by Provider under this Agreement and

5. Provide notice to Provider of any deficiencies or defects discovered by LFUCG with respect to the services to be rendered by Provider hereunder.

IV. COMPENSATION AND PAYMENT

A. LFUCG shall pay Provider an amount not to exceed $835,500.00 for services as specified in the Scope of Services, attached hereto and marked as Exhibit "A". A more detailed breakdown and description of costs and payment milestones as specified in the Breakdown of Costs is attached hereto and marked as Exhibit "B".

B. INCREASE OF FEES

Following execution of this Agreement, Aany contract amendment or project-related purchase which, increases the original contract price fee shall require prior approval from the LFUCG Urban County Council. No contract amendment or project-related purchase shall be structured as to avoid this prior legislative approval requirement.

V. OWNERSHIP OF INSTRUMENTS OF SERVICE

All services rendered by Provider under this Agreement, and the product or proceeds of such Services, including any and all information and data owned or controlled by LFUCG, manifested in programs and documentation purchased, produced, or delivered to or on Client's behalf ("Work Product") shall belong to and be owned by LFUCG upon Provider's receipt of payment in the manner set forth in Exhibit B.

Provider shall retain sole and exclusive ownership, right, title and interest, including ownership of copyright, with respect to Provider's Intellectual Property. LFUCG shall not reuse at another site or make any modification to the documents without the prior written authorization of the Provider.

VI. ADDITIONAL SERVICES

In the event additional services for the aforementioned project not covered under this Agreement are required, Provider agrees to provide the required services only at terms mutually agreed upon by Provider and LFUCG in writing.

If LFUCG desires to change the services covered by a Scope of Work or wishes to obtain additional Services not listed in a Scope of Work, LFUCG's Project Manager shall so advise Provider in writing within thirty (30) days' of the requested change. Provider shall perform such services pursuant to the written modified agreement. Pursuant to Subsection B of this Agreement, any written modification of a Scope of Work that results in any increase in fees will require prior legislative approval from the LFUCG Urban County Council.

VII. INSURANCE REQUIREMENTS

Provider shall carry professional liability insurance in the minimum amount of $1 million per occurrence, $2 million aggregate or $2 million combined single limit and shall carry workers' compensation insurance in accordance with the statutory requirements of the State of Ohio.

VIII. INDEMNIFICATION

The Risk Management Provisions set forth in the RFP shall remain in full force and effect for the duration of this Agreement.

IX. TERM AND TERMINATION OF AGREEMENT

This Agreement is effective for a period of one (1) year from the date on which it is accepted by LFUCG, and may be renewed for an additional one (1) year term upon mutual agreement, provided that it has not been terminated. The warranty and support provisions of RFP #18-2017 shall continue for a period of three (3) years and are subject to renewal upon mutual agreement. The terms and conditions of provider's standard warranty (Exhibit D) shall be in addition to and not in derogation of other rights and privileges that LFUCG may have at law or under any other instrument, including any manufacturer's warranties or special warranties contained in a separate instrument.

LFUCG may terminate the Agreement only upon written notice to Provider of such termination and specifying the effective date at least thirty (30) days prior to the effective date of such termination. If the Agreement is terminated by LFUCG in the manner provided herein, Provider will be compensated for services rendered to the date of termination.

X. TIME; DEFAULT; OPPORTUNITY TO CURE

Should Provider be obstructed or delayed in the prosecution or completion of its services as a result of unforeseeable causes beyond the control of Provider, and not due to its own fault or neglect, including but not restricted to acts of nature or of a public enemy, unforeseeable acts of the national, state or local government, fires, floods, epidemics, quarantine regulations, strikes or lock-outs, then Provider shall notify LFUCG in writing within ten (10) working days after commencement of such delay, stating the specific cause or causes thereof. LFUCG shall not refuse to accept delivery by reason of delays occasioned by *force majeure*. Any delay resulting from *force majeure* shall correspondingly extend the time for performance by Provider.

Notwithstanding the above, a party's failure to comply with any term or condition under this Agreement shall entitle the other party to give the party in default written notice requiring it to make good such default. If the party in default has not cured such default within thirty (30) days after receipt of written notice, the notifying party shall be entitled, in addition to any other rights it may have under this Agreement or otherwise by law, to terminate this Agreement by giving written notice to take effect immediately. The right of either party to terminate hereunder shall not be affected in any way by its waiver of or failure to take action with respect to any previous default.

XI. GENERAL CONDITIONS

A. Non-discrimination. Provider shall not, in the performance of this Agreement, discriminate or permit discrimination in violation of federal or state laws or local ordinances because of race, color, sex, age, or disability as recognized

under The Title VII of the Civil Rights Act of 1964, race, color, religion, sex or national origin.

B. Captions. Captions used in this Agreement are for convenience and are not used in the construction of this Agreement.

C. Applicable Laws. Parties to this Agreement shall conform with all existing and applicable city ordinances, resolutions, state laws, federal laws, and existing and applicable rules and regulations. Kentucky law will govern the terms and the performance under this Agreement.

D. Interest of the LFUCG. No elected official or any officer or employee of the LFUCG shall have a financial interest, direct or indirect, in any LFUCG Agreement. Any violation of this section with the knowledge of the person or corporation contracting with the LFUCG shall render the Agreement voidable.

E. Interest of the Provider. The Provider covenants that he presently has no interest and shall not acquire any interest, direct or indirect, which would conflict with the performance of services required to be performed under this Agreement; he further covenants that in the performance of this Agreement, no person having any such interest shall be employed.

F. Merger. This Agreement shall not be merged into any other oral or written agreement, lease or deed of any type. This is the complete and full agreement of the parties.

G. Modification. This Agreement contains the entire Agreement of the parties. No representations were made or relied upon by either party other than those that are expressly set forth herein. No agent, employee or other representative of either party is empowered to alter any of the terms hereof unless done in writing and signed by an authorized officer of the respective parties.

H. Assignment. The Provider may not assign its rights under this Agreement without the express prior written consent of the LFUCG.

I. Strict Compliance. All provisions of this Agreement and each and every document that shall be attached shall be strictly complied with as written, and no substitution or change shall be made except upon written direction from authorized representative.

J. Use of E-Verify Program- Provider is required and hereby agrees to use a federal immigration verification system, https://www.uscis.gov/e-verify, to determine the work eligibility status of new employees physically performing services within the State of Kentucky. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

K. Debarment or suspension by any federal agency. (This section applies if any part of this Agreement is funded by a federal agency.) Office of Management and Budget (OMB) guidelines require that any individual or

entity that has been placed on the Excluded Parties List System ("EPLS" - available for review through www.sam.gov) may not be a participant in a federal agency transaction that is a covered transaction or act as a principal of a person participating in one of those covered transactions. These guidelines apply to covered transactions under a grant from any federal agency for which a recipient expects to receive reimbursement for expenditures incurred or an advance on future expenditures.

The Contractor providing goods and/or services to LFUCG certifies, by acceptance and execution of this Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. Contractor further agrees, by accepting and executing this Agreement, that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the Contractor or any lower tier participant is unable to certify this statement, it shall attach an explanation to this Agreement.

L. During the performance of this contract, Provider agrees as follows:

1. The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, or disability. The Contractor shall ensure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex or national origin. As used herein, the word "treated" shall mean and include, without limitation, the following: recruited, whether by advertising or by other means; compensated; selected for training, including apprenticeship; promoted; upgraded; demoted; downgraded; transferred; laid off; and terminated. The Contractor agrees to and shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officers setting forth the provisions of this nondiscrimination clause.
2. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
3. The Contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice advising the labor union or worker's representative of the Contractor's commitments under the Equal Employment Opportunity Clause of the LFUCG and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor shall furnish to the human rights and relations

director all Federal forms containing the information and reports required by the Federal government for Federal contracts under Federal rules and regulations, and including the information required by Sections 10-192 to 10-194, inclusive, and shall permit reasonable access to his records. Records accessible to the human rights and relations director shall be those which are related to Paragraphs (1) through (7) of this subsection and only after reasonable notice is given the Contractor. The purpose for this provision is to provide for investigation to ascertain compliance with the program provided for herein.

5. The Contractor shall take such actions with respect to any subcontractor as the LFUCG may direct as a means of enforcing the provisions of Paragraphs (1) through (7) herein, including penalties and sanctions for noncompliance; however, in the event the Contractor becomes involved in or is threatened with litigation as the result of such directions by the LFUCG, the LFUCG will enter into such litigation as necessary to protect the interests of the LFUCG and to effectuate the provisions of this division; and in the case of contracts receiving Federal assistance, the Contractor or the LFUCG may request the United States to enter into such litigation to protect the interests of the United States.

6. The Contractor shall file and shall cause his subcontractors, if any, to file compliance reports with the Contractor in the same form and to the same extent as required by the Federal government for Federal contracts under Federal rules and regulations. Such compliance reports shall be filed with the human rights and relations director. Compliance reports filed at such times as directed shall contain information as to the employment practices, policies, programs and statistics of the Contractor and his subcontractors.

7. The Contractor shall include the provisions of Paragraphs (1) through (7) of this Section, "Equal Employment Opportunity Clause", and Section 10-193 in every subcontract or purchase order so that such provisions will be binding upon each subcontractor or vendor.

EXECUTED this 31 day of August, 2017.

Kenneth Pappas
Attest

Traffic Control Products, INC.
Provider

Perry Stanosh
By

Vice President
Title

EXECUTED this 31 day of August, 2017.

Attest Deputy

LFUCG

Jim Gray

By

Mayor

Title

AUG 3 1 2017

Date

1. SCOPE OF WORK

Central ATMS Installation Test

The Team is prepared to provide the state-of-the-art CATMS software, MaxView, to meet the LFUCG's requirements. The MaxView software runs on standard Windows servers and can accessed from any workstation running a modern web browser such as Internet Explorer or Firefox. The Team will install and integrate the ATMS hardware and software, as well as provide testing and training as outlined below. ALL configuration data in MaxView is stored in a SQL Server database making server redundancy and backup an easy, familiar process. The Team firmly believes that MaxView is the best solution for the LFUCG as our software has been built from the ground up rather than adapting legacy solutions to meet current standards. This design means MaxView comes with all the expectations of a modern solution without the weight of legacy problems.

The Team will work with LFUCG staff to determine the best standard deployment processes. Throughout the contract life, the Team's Project Manager will coordinate with the LFUCG project contact to ensure proper procurement procedures are followed and that LFUCG's objectives and goals are met.

Intelight will work with LFUCG and the agency IT department (if desired) for a smooth and safe integration into the LFUCG network. MaxView is built on industry standard components that are used by millions of users worldwide. For this reason, the system is very secure and integrates well into existing Windows based systems and networks.

Central System Installation

Once the necessary server equipment has been provided, the MaxView installation and configuration will begin.

Intelight will install and configure all MaxView software. Initial system setup (ready for controller integration) is typically completed within one day.

MaxView delivers several unique advantages during system deployment, management and upgrade cycles due to the underlying technologies on which it is based and the core system architecture. Specifically these are:

- Simple server installation and deployment – The MaxView server installation is contained in a single self-executing installer that verifies all pre-requisites and then installs the MaxView services and provisions an empty default database.
- Industry standard monitoring and deployment tools – All MaxView application and field communications services are hosted within Microsoft Internet Information Server. Microsoft IIS is a leading enterprise ready web server that securely powers hundreds of thousands of websites every day.
- No client installation requirements – As MaxView is a true thin client there is no need to install or configure any client software on the MaxView workstations. The only client requirement is a PC or Mac with a modern web browser and the Microsoft Silverlight plugin.
- Self-describing database editor metadata – When connected to a controller running MaxTime, the MaxView service receives an XML file from MaxTime that essentially self-describes the set of database tables that it has available when it is first connected to the system. This simplifies deployment when a large number of intersections are deployed—especially when multiple firmware versions are running in the field. With this functionality intersections in the field can be upgraded without the worry of coordinating an equivalent upgrade in the central system.

MaxView supports a variety of physical hardware configurations depending on the specific agency requirements.

In any given installation the system will include field controllers, a MaxView server and MaxView clients, all of which will be deployed on the agency's network. Typically all components of the system will be deployed on an internal LAN and protected from the open Internet by a firewall. Remote clients can then gain access to the system through a VPN connection to the private LAN.

Phased Approach

Because the LFUCG currently operates approximately 400 signalized intersections and is pursuing upgrades to the traffic signal controller local software in parallel to this project, a phased approach to integrating the traffic signals and other ITS devices into the MaxView CATMS software is necessary. Following such a phased approach will allow the LFUCG to continue to operate traffic signals and ITS devices using the existing software while migrating groups of devices to the MaxView system. To affect this phased approach the Team's project manager will work with the LFUCG's project manager to identify and prioritize groups of signals and ITS devices that can be moved off the existing system and to MaxView. This prioritization process will result in a schedule showing when particular groups of devices will become operational under MaxView. Those devices that have not been migrated to MaxView will continue to be monitored and controlled through the LFUCG's existing software.

Database Conversions

Our team will do timing conversions from the existing controller databases to MaxTime controller databases. Timing databases will be programmed off-site from the existing timing sheets and will be tested in both the Windows and Linux (Local Controller) versions of MaxTime. We understand that clearance calculations may need to be verified. Our database conversions will be completed with a team of field and timing experts led by Whitney Nottage, who has overseen over 4,000 database conversions in Georgia. We will work with LFUCG to develop an efficient conversion process that meets the needs of the agency and ensures a quality project.

Our team has extensive experience with database conversions. Two different software platforms frequently require very different programming to achieve the same operation. We understand that when converting from one software to another the key is understanding the existing operation. The main goal of our team will be to duplicate the existing operation during the conversions. Throughout the process we will provide input and feedback on features and functions that may be used to optimize an intersection, if desired. Anticipated steps within the conversion process are:

- Review of existing database and submission of questions to the agency about the existing operation (if any)
- Initial database conversion by team
- QAQC of database in Windows emulator
- Review of database conversion by a PE/PTOE
- Submission of database to LFUCG for review
- Address agency comments
- Bench test final database on a Linux controller

We support the major project goals which include, but are not limited to, the following:

- Forming a long-term support partnership with Agency's staff
- Providing the Agency with true, open architecture NTCIP and ATC compliant products. We offer the Agency full, unrestricted access to our NTCIP MIBS, ATC APIs, and other relevant tools needed to interface with our software and hardware. This would enable the

Agency to easily install third-party software on Intelight controllers in the future, if so desired

- Providing the Agency with a reliable, innovative product that we will continue to back with first class support
- Providing future product innovation and adaptation to current industry (IT Industry) technologies
- Continuing to provide customer driven development and configuration of products for ease of use, maintenance, cost-effective solutions, and enhanced functionality
- Providing quick response, effective local and remote customer support driven by service oriented business model

Local Controller Software and Rack-mounted CPU Modules

The Team is prepared to provide at least 425 Intelight 1C CPU modules running the latest version of MaxTime at a rate of fifty (50) per month.

MaxTime is a Linux-based local software that meets the current ATC standard, version 5.2b. We understand LFUCG's desire to keep up with emerging technologies, so it is important to note that MaxTime is also compliant with the ATC's latest draft standard, version 6. MaxTime is compatible with the proposed CATMS in this response, MaxView.

We propose updating the LFUCG's (and partner Agencies') 2070 traffic signal controllers with Intelight 2070-1C modules with MaxTime local software. Intelight can also install our MaxTime local controller software on other vendor's 1C modules if the following conditions are met:

- Third-party vendor 2070-1C carrier and engine boards are ATC 6.10 (Draft) compliant with a minimum of 32 MB Flash Memory (common)
- Per the ATC 6.10 (Draft) specification, the third-party vendor will provide Intelight the platform's board support package

Intelight's ATC 2070-1C modules have been successfully used in multiple vendors 2070 controller chassis with various 2070 modules installed.

If LFUCG has custom cabinet standards, Intelight will also add a standard I/O Module for LFUCG 33X cabinets to facilitate faster controller change outs and database conversions. Once selected, the default individual I/O pin functions can be user configured from the Web UI or front panel for special cabinet configurations.

Training

Intelight will provide training for both the local controller software, MaxTime, and the central ATMS software, MaxView. Our team will work with LFUCG to schedule training at a time that is acceptable to the agency. .

Development of Training Materials

Our team will develop the appropriate training materials for the desired training sessions. A draft version of the training materials will be provided to the agency for review and comment. The Team will finalize these materials based on the comments received.

Conduct Training

Training will be performed at the LFUCG designated facilities and will be presented in English. Intelight will cater training to be delivered utilizing the equipment provided by the LFUCG (projectors, screens, etc.), and will request the equipment from the LFUCG with ample time to prepare. If additional non-standard equipment is required, we will provide said equipment. The Team will also provide the required training materials.

The training courses will be designed to be interactive and hands on. The training will utilize the MaxView user interface and MaxTime windows application on trainee's workstations or laptops, as well as local controllers running the MaxTime software. The necessary software for training will be provided by the Team.

MaxView Training

For the central ATMS system, the Team will facilitate the three training courses below during the system integration and installation phases of the project. We will work with the agency to schedule these training courses.

- System Operations – This class will train LFUCG staff on the use of the MaxView CATMS software. Training will provide users with sufficient expertise to use and manipulate all of the key features and applications within the CATMS.
- System Administration – This class will train LFUCG staff on all administrative features of the CATMS.
- System Maintenance – This class will train LFUCG staff with the maintenance of the CATMS. Training will provide users with sufficient expertise to utilize diagnostic and maintenance utilities and to diagnose, maintain and repair all supplied CATMS elements.

MaxTime Training

For the local controller software, the Team will facilitate the three training courses below during the database conversion phase of the project. We will work with the agency to schedule these training courses.

- Local Software Signal Timings – This class will train LFUCG staff on programming the basic timing parameters into the WebUI. Functions covered will include, but not be limited to, administration, database management, phase timings, detector configuration, coordination, normal overlaps, flashing yellow arrow overlaps, and preemption.
- Local Software Field Troubleshooting – This class will train LFUCG staff on field programming and troubleshooting from the front panel interface. Topics covered will include, but not be limited to, database management, flash troubleshooting, timings troubleshooting, cabinet troubleshooting capabilities in the controller, and detection troubleshooting.
- Local Software Advanced Training – This class will train LFUCG staff on advanced features within the MaxTime local controller software. This will include, but not be limited to, advanced phase options, advanced coordination functions, advanced overlap types and options, advanced preemption options, and advanced administration functions.

System Acceptance Testing

The Team will work with the LFUCG to implement a robust testing process to meet the contract requirements and prevent defects. We will work with the LFUCG to produce and adhere to testing plans that will provide proof of performance. We are prepared to provide all materials, equipment, and staff required to complete the testing and will coordinate with the LFUCG's project manager to ensure LFUCG staff is available to observe the tests at an agency-approved location.

Development of System Acceptance Test Plan

The Team will develop the System Acceptance Test Plan (SATP) that provides details on the testing to be performed and relates each test to specific requirements. A draft version of the SATP will be provided to the agency for review and comment. The Team will finalize the test plan and procedures based on the comments received.

System Acceptance Test Plan Execution

After installation and integration of the MaxView system and the establishment of communications to the initially deployed controllers, execution of the SATP will be coordinated with the Agency. At the agreed upon time, the test procedures will be performed and results will be noted in the SATP document.

System Variances

Should any portions of the test lack performance or fail to meet the stated system requirements, such variables will be recorded as a System Variance. The Team project manager will be prepared to provide a proposed solution to resolve the deficiency within seven days of receiving the system variance documentation. We will work closely with the LFUCG project manager to propose, resolve, and test any solutions to System Variances.

2. COST PROPOSAL

The milestones used to determine payments for all fixed price design and development phase activities (when applicable), shall be based on the following:

Furnish, Install, and Integrate CATMS Hardware and Software
Full payment for this milestone shall be based on all CATMS hardware and software being received, installed, and operational. Full payment for this milestone will constitute meeting all contract requirements and submitting all required documentation. All submitted information, data and documentation must be reviewed and approved before full payment will be made. This milestone shall represent the amount reflected in the proposal.

CATMS Graphics Configuration
Payment shall be split into four sections as reflected in the cost proposal. The Provider shall submit payment requests upon the completion of each section. LFCUG will review and approve each section in a timely manner prior to full payment.

Data Conversion
This milestone will be broken into approximately eight sections. Each month the Provider will submit the number of completed databases for review. Payment will be made each month proportionate to the number of completed and submitted databases.

Local Controller Software and Rack Mounted CPU Modules
Provider will have monthly deliveries of the proposed CPU modules. Upon delivery of the CPU modules to LFUCG the Provider can submit payment request. Payment shall be released each month for the number of delivered CPU modules at the proposed unit price.

Training and Documentation –
This milestone is reached upon completion of training and providing all system documentation. Full payment for this milestone will constitute meeting all contract requirements and submitting all required documentation including acceptance of the training plan. All submitted information, data and documentation must be reviewed and approved by the LFUCG before full payment will be made.

Develop Draft Systems Acceptance Test Plan and Training Material
This milestone is reached upon delivery of a draft training material and draft systems acceptance test plan material. Payment shall be released in full upon acceptance of training and system acceptance material by LFUCG.

Conduct System Acceptance Testing and Training with LFCUG Staff
This milestone is reached upon completion of conducting a system acceptance test with LFUCG staff. Full payment for this milestone will constitute meeting all contract requirements and submitting all required documentation including acceptance of the training plan. All submitted information, data and documentation must be reviewed and approved by the LFUCG before full payment will be made.

The Vendor can submit a request in writing to amend the payment terms. The request will be reviewed by the LFUCG Project Manager to determine if the revised payment terms can be supported by the project.

COST PROPOSAL

	Qty	per unit	Extended
Central ATMS Installation – Vendor shall provide an CATMS system capable or running up to (500) field devices (controllers) and coordinate with TE and Information Technology (IT) staff in installing the required software on virtual servers currently at LFUCG. The system shall be supplied with an extended 3 year warranty.	500	$315	$157,500
Central ATMS Graphics Integration – Vendor program MaxView CATMS with graphic representation of each intersection.	4	$1250	$5000
2. **Data Conversion** – Vendor shall convert individual controller data stored in the central ATMS from OASIS to the compatible format. There are approximately (375) signalized intersection controllers, (15) lane use controllers, and (12) combination intersection/lane use controllers where three center lanes shift throughout the day.	402	$250	$100,500
3. **Local Controller Software and Rack Mounted CPU Modules** – Vendor shall provide no less than (425) 1-C CPU modules with the selected Linux based, local software pre-installed. Software and modules shall be compatible with the selected central ATMS and meet current Advanced Transportation Controller (ATC) Standards. Supplier must be able to deliver at least (50) modules per month until all are received. Vendor is not expected to upload individual intersection data or perform CPU module change-outs other than for instructional purposes.	425	$1,260	$535,500
4. Testing and Training – Vendor shall test and confirm that the central ATMS functions and operates in accordance with the characteristics and specifications as promised. The vendor and/or system developer shall provide on-site training and a written User's Manual for all CATMS and Local Equipment. The manual shall include system drawings, network diagrams, administrative instructions, operator instructions, and trouble shooting.	1	$8,000	$8,000
5. **Develop Draft Systems Acceptance Test Plan and Training Material** – The vendor shall develop and submit for approval a System Acceptance Test (SAT) Plan for the CATMS. The SAT shall be conducted by the Vendor and LFUCG Traffic Engineering personnel at the TMC where the CATMS is hosted as a part of the implementation in accordance with the approved delivery and test procedures.	1	$11,000	$11,000

6. **Conduct System Acceptance Testing and Training with LFUCG Staff** – The vendor shall conduct the SAT at the LFUCG TMC and provide user training for the TE personnel upon successful completion of the System Acceptance Test. deliverables: Final System Acceptance Test plan, Final Training Materials, Conduct Training Deliverables: Final System Acceptance Test plan, Final Training Materials, Conduct Training. **Deliverables:** Final System Acceptance Test plan, Final Training Materials, Conduct Training	1	$18,000	$18,000
total			$835,500

Lexington-Fayette
Urban County Government

Request for Proposals

The Lexington-Fayette Urban County Government hereby requests proposals for **RFP #18-2017 Central Advanced Traffic Management System** to be provided in accordance with terms, conditions and specifications established herein.

Sealed proposals will be received in the Division of Central Purchasing, Room 338, Government Center, 200 East Main Street, Lexington, KY, 40507, until **2:00 PM**, prevailing local time, on **July 7, 2017**.

Proposals received after the date and time set for opening proposals will not be considered for award of a contract and will be returned unopened to the Proposer. It is the sole responsibility of the Proposer to assure that his/her proposal is received by the Division of Central Purchasing before the date and time set for opening proposals.

Proposals must be sealed in an envelope and the envelope prominently marked:

RFP #18-2017 Central Advanced Traffic Management System If mailed, the envelope must be addressed to:

Todd Slatin – Purchasing Director
Lexington-Fayette Urban County Government
Room 338, Government Center
200 East Main Street
Lexington, KY 40507

Additional copies of this Request For Proposals are available from the Division of Central Purchasing, Room 338 Government Center, 200 East Main Street, Lexington, KY 40507, (859)-258-3320, at no charge.

Proposals, once submitted, may not be withdrawn for a period of ninety (90) calendar days.

The Proposer must submit one (1) master (hardcopy), (1) electronic version in PDF format on a flashdrive or CD and seven (7) duplicates (hardcopies) of their proposal for evaluation purposes.

The Lexington-Fayette Urban County Government reserves the right to reject any or all proposals, and to waive technicalities and informalities when such waiver is determined by the Lexington-Fayette Urban County Government to be in its best interest.

Signature of this proposal by the Proposer constitutes acceptance by the Proposer of terms, conditions and requirements set forth herein.

Minor exceptions may not eliminate the proposal. Any exceptions to the specifications established herein shall be listed in detail on a separate sheet and attached hereto. The Lexington-Fayette Urban County Government shall determine whether any exception is minor.

The Lexington-Fayette Urban County Government encourages the participation of minority- and women-owned businesses in Lexington-Fayette Urban County Government contracts. This proposal is subject to Affirmative Action requirements attached hereto.

Please do not contact any LFUCG staff member or any other person involved in the selection process other than the designated contact person(s) regarding the project contemplated under this RFP while this RFP is open and a selection has not been finalized. Any attempt to do so may result in disqualification of the firm's submittal for consideration.

Laws and Regulations

All applicable state laws, municipal ordinances and regulations of all authorities having jurisdiction over the project shall apply to the contract, and shall be deemed to be incorporated herein by reference.

Equal Employment Opportunity

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its subcontracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

Kentucky Equal Employment Opportunity Act

The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any "county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded

contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

"During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, or national origin;

(2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, or national origin;

(3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provision of the nondiscrimination clauses required by this section; and

(4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses."

The Act further provides:

"KRS 45.610. Hiring minorities -- Information required

(1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetables.

(2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor -- Hiring of minority contractor or subcontractor

(1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification

shall be binding upon the contracting agency unless it is reversed in the course of judicial review.

(2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.

(3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job."

It is recommended that all of the provisions above quoted be included as special conditions in each contract. In the case of a contract exceeding $250,000, the contractor is required to furnish evidence that his workforce in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

LFUCG Non-Appropriation Clause

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.

Contention Process

Vendors who respond to this invitation have the right to file a notice of contention associated with the RFP process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the RFP process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the RFP process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with RFP processes. If, based on this review, a RFP process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a RFP recommendation must be filed within 3 business days of the RFP recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

SELECTION CRITERIA:

a. Features of the central ATMS, ability to adapt to emerging technologies, and documented successful deployments of the proposed system. (30 points)

b. Cost of each category in Section C individually and total project cost. If the central ATMS has add-on modules for certain features they need to be described and a cost associated for each. (20 points)

c. Capacity of the vendor/developer to perform the work and implement the new systems. Central ATMS operational within two (2) months of award and the entire project complete within eight (8) months. (15 points)

d. Familiarity with the details of the project and of Lexington's traffic control needs. (15 points)

e. Project approach and proposed procedures to accomplish scope of the project. (10 points)

f. Technical and administrative support process once the initial migration is complete. (10 points)

Proposals shall contain the appropriate information necessary to evaluate based on these criteria. A committee composed of government employees as well as representatives of relevant user groups will evaluate the proposals.

Questions shall be submitted via IonWave at: https://lexingtonky.ionwave.net

Central Purchasing point of contact:

Sondra Stone
Division of Central Purchasing
sstone@lexingtonky.gov

Affirmative Action Plan

All vendors must submit as a part of the proposal package the following items to the Urban County Government:

1. Affirmative Action Plan for his/her firm;
2. Current Work Force Analysis Form;

Failure to submit these items as required may result in disqualification of the submitter from award of the contract. All submissions should be directed to:

Director, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor
Lexington, Kentucky 40507

All questions regarding this proposal must be directed to the Division of Central Purchasing, (859)-258-3320.

AFFIDAVIT

Comes the Affiant, _____, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is _____ and he/she is the individual submitting the proposal or is the authorized representative of _____, the entity submitting the proposal (hereinafter referred to as "Proposer").

2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.

6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

_____

STATE OF _____

COUNTY OF _____

The foregoing instrument was subscribed, sworn to and acknowledged before me by _____ on this the _____ day of _____, 20__.

My Commission expires: _____

_____
NOTARY PUBLIC, STATE AT LARGE

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.

- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.

- Section 503 of the Rehabilitation Act of 1973 states:

  The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

  The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

****

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

_____ _____

Signature *Name of Business*

WORKFORCE ANALYSIS FORM

Name of Organization: _____

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African-American (Not Hispanic or Latino		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino		Asian (Not Hispanic or Latino		American Indian or Alaskan Native (not Hispanic or Latino		Two or more races (Not Hispanic or Latino		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators																	
Professionals																	
Superintendents																	
Supervisors																	
Foremen																	
Technicians																	
Protective Service																	
Para-Professionals																	
Office/Clerical																	
Skilled Craft																	
Service/Maintenance																	
Total:																	

Prepared by: _____ **Date:** _____/_____/_____

(Name and Title)

Revised 2015-Dec-15

DIRECTOR, DIVISION OF CENTRAL PURCHASING
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
200 EAST MAIN STREET
LEXINGTON, KENTUCKY 40507

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well Veteran –owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, MPA, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

Firm Submitting Proposal: _____

Complete Address: _____
Street City Zip

Contact Name: _____ Title: _____

Telephone Number: _____ Fax Number: _____

Email address: _____

Lexington-Fayette Urban County Government
MWDBE PARTICIPATION GOALS

A. GENERAL

1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses as subcontractors or suppliers in their bids.

2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.

3) The LFUCG has also established a 3% of total procurement costs as a Goal for participation of Veteran-Owned Small Businesses (VOSB).

4) **It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.**

B. PROCEDURES

1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)

2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)

3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:

    a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)

4) The LFUCG will make every effort to notify interested MWDBE and Veteran subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.

2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.

3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned and operated by a person(s) that are economically and socially disadvantaged.

4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned and operated by a veteran and/or a service disabled veteran.

5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

1) **The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran-Owned subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.**

2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.

3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.

4) **Failure to submit this information as requested may be cause for rejection of bid or delay in contract award.**

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed;

estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.

2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE and/or Veteran participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:

a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.

b. Included documentation of advertising in the above publications with the bidders good faith efforts package

c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event

d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned businesses of subcontracting opportunities

e Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.

f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less that seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

i. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.

j. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.

k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

p. Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.

q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

Note: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.

MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented resolution 167-91—Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

> *"A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFUCG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFUCG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises..."*

A Disadvantaged Business Enterprise is defined as a business that has been certified as being at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female
- Economically and Socially Disadvantaged

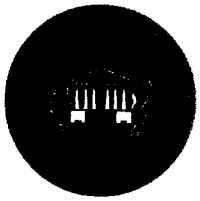
In addition, to that end the city council also adopted and implemented resolution 167-91—Veteran-owned Businesses, 3% Goal Plan in July of 2015. The resolution states in part (a full copy is available in Central Purchasing):

> *"A resolution adopting a three percent (3%) minimum goal for certified veteran-owned small businesses and service disabled veteran-owned businesses for certain of those Lexington-Fayette Urban County contracts related to*

construction for professional services, and authorizing the Division of Purchasing to adopt and implement guidelines and/ or policies consistent with the provisions and intent of this resolution by no later than July 1, 2015."

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tsmsdc.com	502-365-9762
Small Business Development Council	Shirie Hawkins UK SBDC	smack@uky.edu	859-257-7666
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwboc.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	paatricem@keynewsjournal.com	859-373-9428



LFUCG MWDBE PARTICIPATION FORM
Bid/RFP/Quote Reference #_____

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1.				
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

_____ _____

Company **Company Representative**

_____ _____

Date **Title**

LFUCG MWDBE SUBSTITUTION FORM
Bid/RFP/Quote Reference #_____

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project.

SUBSTITUTED MWDBE Company Name, Address, Phone, Email	MWDBE Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
1.					
2.					
3.					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

_____ _____

Company **Company Representative**

_____ _____

Date **Title**

MWDBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference #_____

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name	Contact Person
Address/Phone/Email	Bid Package / Bid Date

MWDBE Company Addre	Contact Person	Contact Information (work phone Email, cell)	Date Contacte	Services to be performed	Method of Communicati (email, phone meeting, ad, event etc)	Total dollars $$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

_____ **Company**

_____ **Date**

_____ **Company Representative**

_____ **Title**

LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE and Veteran contractors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Bid/RFP/Quote #_____

Total Contract Amount Awarded to Prime Contractor for this Project_____

Project Name/ Contract #	**Work Period/ From:** **To:**
Company Name:	**Address:**
Federal Tax ID:	**Contact Person:**

Subcontractor Vendor ID (name, address, phone, email	Description of Work	Total Subcontract Amount	% of Total Contract Awarded to Prime for this Project	Total Amount Paid for this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date

By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentations may result in the termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims.

_____ _____

Company **Company Representative**

_____ _____

Date **Title**

LFUCG STATEMENT OF GOOD FAITH EFFORTS
Bid/RFP/Quote #_____

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.

_____ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.

_____ Included documentation of advertising in the above publications with the bidders good faith efforts package

_____ Attended LFUCG Central Purchasing Economic Inclusion Outreach event

_____ Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities

_____ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses

_____ Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

_____ Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

_____ Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

_____ Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.

_____ Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.

_____ Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the

contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

_____ Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

_____ Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

_____ Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

_____ Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

_____Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.

_____ Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE **and Veteran participation.**

NOTE: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.

The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Company	**Company Representative**
Date	**Title**

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

   The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, *29 U.S.C. 650 et. seq.*, as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.

3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.

4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.

5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.

6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".

7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.

8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,

10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.

11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.

12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

(1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties

(2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.

(3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
(a) Failure to perform the contract according to its terms,

conditions and specifications;

(b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;

(c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;

(d) Failure to diligently advance the work under a contract for construction services;

(e) The filing of a bankruptcy petition by or against the contractor; or

(f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.

14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.

15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this

Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.

17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.

18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.

19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

_____ _____

Signature Date

RISK MANAGEMENT PROVISIONS
INSURANCE AND INDEMNIFICATION

INDEMNIFICATION AND HOLD HARMLESS PROVISION

(1) It is understood and agreed by the parties that Consultant hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Consultant or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "Consultant") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.

(2) Consultant shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by Consultant's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the Consultant; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.

(3) Notwithstanding, the foregoing, with respect to any professional services performed by Consultant hereunder (and to the fullest extent permitted by law), Consultant shall indemnify, save, hold harmless and defend LFUCG from and against any and all liability, damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of Consultant in the performance of this agreement.

(4) In the event LFUCG is alleged to be liable based upon the above, Consultant shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.

(5) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

(6) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONSULTANT acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONSULTANT in any manner.

FINANCIAL RESPONSIBILITY

CONSULTANT understands and agrees that it shall, prior to final acceptance of its proposal and the commencement of any work or services, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AAND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

CONSULTANT shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work or services hereunder by CONSULTANT. The cost of such insurance shall be included in any bid:

Coverage	**Limits**
General Liability (Insurance Services Office Form CG 00 01)	$1 million per occurrence, $2 million aggregate or $2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, $1 million per occurrence
Professional Liability	$1 million per occurrence, $2 million aggregate
Worker's Compensation	Statutory
Employer's Liability	$500,000.00

The policies above shall contain the following conditions:

a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky. LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.

b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.

c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement and a Products Liability endorsement unless they are deemed not to apply by LFUCG.

d. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions) for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by LFUCG.

e. The Professional Liability policy shall be maintained for a minimum of three years beyond the completion date of the project, to the extent commercially available. If not commercially available, CONSULTANT shall notify LFUCG and obtain similar insurance that is commercially available and acceptable to LFUCG.

f. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.

g. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of CONSULTANT's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If CONSULTANT satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, CONSULTANT agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

a. Latest audited financial statement, including auditor's notes.

b. Any records of any self-insured trust fund plan or policy and related accounting statements.

c. Actuarial funding reports or retained losses.

d. Risk Management Manual or a description of the self-insurance and risk management program.

e. A claim loss run summary for the previous five (5) years.

f. Self-Insured Associations will be considered.

Safety and Loss Control

CONSULTANT shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

CONSULTANT agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONSULANT understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

CONSULTANT understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging CONSULTANT for any such insurance premiums purchased, or suspending or terminating the work.

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LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

REQUEST FOR PROPOSALS
RFP #18-2017

CENTRAL ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS)
And
CPU MODULES w/LOCAL CONTROLLER SOFTWARE

A. Purpose

The Lexington-Fayette Urban County Government (LFUCG) is soliciting proposals from interested and qualified product developers/vendors to provide central system software, local controller software, compatible CPU module, data migration, implementation and integration of a new Advanced Traffic Management System (ATMS) plus field components. The ATMS shall be implemented to meet the needs of the LFUCG Division of Traffic Engineering (TE) to provide enhanced traffic management now and into the future as Intelligent Transportation Systems (ITS) technologies progress.

B. Overview

TE currently monitors and operates (400) local, 2070ATC controllers running OASIS firmware by Econolite. The central ATMS is CENTRACS 2.0 also by Econolite. OASIS is a legacy platform no longer supported by the developer. Therefore, to take advantage of the central ATMS, TE is entertaining proposals for a major upgrade to the traffic management system to take full advantage of emerging technologies and fiber-optic communications infrastructure.

C. Scope of Requested Services

The scope of services set forth in this Request for Proposal represents an outline of the items to include in the proposal and services that LFUCG anticipates the selected vendor to perform.

1. **Central ATMS Installation** – Vendor shall provide an ATMS system capable or running up to (500) field devices (controllers) and coordinate with TE and Information Technology (IT) staff in installing the required software on virtual servers currently at LFUCG. If the ATMS is different than CENTRACS 2.0, both systems will need to run together throughout the system migration to ensure continuous system integrity.
2. **Data Conversion** – Vendor shall convert individual controller data stored in the central ATMS from OASIS to the compatible format. There are approximately (375) signalized intersection controllers, (15) lane use controllers, and (12) combination intersection/lane use controllers where three center lanes shift throughout the day.

3. **Local Controller Software and Rack Mounted CPU Modules** – Vendor shall provide no less than (425) 1-C CPU modules with the selected Linux based, local software pre-installed. Software and modules shall be compatible with the selected central ATMS and meet current Advanced Transportation Controller (ATC) Standards. Supplier must be able to deliver at least (50) modules per month until all are received. Vendor is not expected to upload individual intersection data or perform CPU module change-outs other than for instructional purposes.

4. **Testing and Training** – Vendor shall test and confirm that the central ATMS functions and operates in accordance with the characteristics and specifications as promised. The vendor and/or system developer shall provide on-site training and a written User's Manual for all ATMS and Local Equipment. The manual shall include system drawings, network diagrams, administrative instructions, operator instructions, and trouble shooting.

5. **Develop Draft Systems Acceptance Test Plan and Training Material** – The vendor shall develop and submit for approval a System Acceptance Test (SAT) Plan for the ATMS. The SAT shall be conducted by the Vendor and LFUCG Traffic Engineering personnel at the TMC where the ATMS is hosted as a part of the implementation in accordance with the approved delivery and test procedures.
    a. The Vendor shall develop a structured training program that will be reviewed and approved by LFUCG. This training program shall include formal instruction in all applicable components of the ATMS, as well as system administration and support. Training shall include, at a minimum, the following topics:
        i. System Operation
        ii. System Administration
        iii. System User
        iv. Maintenance
    b. Assemble Draft Systems Acceptance Test Plan and Training Materials for QA/QC
    c. Vendor will submit Draft Systems Acceptance Test Plan and Training Materials to LFUCG for review and comment.
    d. Once LFUCG has had time to review the draft, Vendor will prepare for and conduct one LFUCG Review Meeting/ to discuss any comments (1/conference Call with Traffic Engineering Staff).
    e. Vendor will address all comments and revise document for final submittal.
    f. Upon completion of the project, the vendor will submit the Final System Acceptance Test plan and training materials.

6. **Conduct System Acceptance Testing and Training with LFUCG Staff** – The vendor shall conduct the SAT at the LFUCG TMC and provide user training for the TE personnel upon successful completion of the System Acceptance Test.

    Deliverables: Final System Acceptance Test plan, Final Training Materials, Conduct Training

D. Selection Criteria and RFP Submittal Process

Selection criteria will be as follows:

(1) Features of the central ATMS, ability to adapt to emerging technologies, and documented successful deployments of the proposed system. (30 points)

(2) Cost of each category in Section C individually and total project cost. If the central ATMS has add-on modules for certain features they need to be described and a cost associated for each. (20 points)

(3) Capacity of the vendor/developer to perform the work and implement the new systems. Central ATMS operational within two (2) months of award and the entire project complete within eight (8) months. (15 points)

(4) Familiarity with the details of the project and of Lexington's traffic control needs. (15 points)

(5) Project approach and proposed procedures to accomplish scope of the project. (10 points)

(6) Technical and administrative support process once the initial migration is complete. (10 points)

All costs directly or indirectly related to preparation of a response to this Request for Proposals, to any oral presentation required to supplement and/or clarify the submittal which may be required by LFUCG, or to any protests so filed shall be the sole responsibility of and shall be borne by the Offeror(s). Each Vendor, by submitting its proposal, waives any claim for liability against the LFUCG as to loss, injury and costs or expenses that may be incurred as a consequence of its response to this document.

The Selection Committee may request a short interview of the vendor submitting a proposal as part of the selection process. Once a proposal is selected, should the LFUCG be unable to negotiate a satisfactory contract with the selected firm at a price determined to be fair and reasonable, negotiations with that firm shall be formally terminated. LFUCG will then select from the remaining vendors the next one to be offered the project. All proposals shall be valid for a period of **90 days** from the submission date. LFUCG reserves the right to reject any, and all, proposals and to re-solicit.

E. Technical Requirements for the Central ATMS:

1. Central Software shall have the ability to monitor and control all 2070 controllers being used by LFUCG regardless of the manufacturer.
2. Central software shall have the ability to interface fully with controllers including capability for efficient upload and download of the complete set of NTCIP parameters.
3. The Central ATMS Application shall be compatible with Microsoft IIS ver. 8.5 or later with the database hosted on LFUCG's server using Microsoft SQL Server 2014.
4. The Central ATMS Client shall be Internet browser neutral.
5. Central ATMS Main Interface shall be a graphical user interface showing the main map and shall support multiple client windows. At a minimum, it shall have direct access to a System Menu, Signal Control Menu, Database Management Menu, Alarms Menu, and Windows Menu.
6. Global Alarm Status – The Main ATMS System Window shall have a Notification Area which displays active and unacknowledged alarms as well as an optional feature to send out notifications.
7. System, Section, Group, and Intersection Tree shall be customizable allowing for search by map, tree, number, groupings, corridors , etc. and to access external links associated with that intersection. Each user shall be able to set up intersection groupings based on their logon id.
8. Incident and Traffic Conditions shall be available in real time with the ability to turn on/off in map view.
9. Main System Map may support any one of the following sources: Google, Bing, ESRI (preferred), Open Street maps, or other standard mapping source and be able to incorporate LFUCG GIS services layers into the map. The system map shall be intuitive and easy to use providing varying levels of detail depending on the zoom and display options. The user may select one device or multiple devices for viewing at one time.
10. Intersection View shall show detailed configuration and operational status including plan, phasing, coordination, overlap, pedestrian actuation, left-turn type, optional time-space information between several intersections, etc.
11. Intersection View Configuration shall be done internally without the need for additional software. It shall show graphics for all typical operation scenarios and allow for the creation of templates that can be easily copy/paste/modify for similar intersections.
12. System Status shall be readily available showing server operation, connection status, and user status.
13. Device and Communication method shall be capable of supporting a variety of controllers deployed in the field conforming to NTCIP 1201 and 1202 mandatory and optional objects.
14. Device Database Editing and Management shall allow for live editing and upload/download comparisons between the ATMS database and field controller data. Archived data shall be available for comparison, backups, and easily accessible for data retrieval.
15. At a minimum, the Central ATMS Software shall support any combination of the following communications methods: Ethernet, fiber optic, wireless Ethernet, cellular, Ethernet over copper, serial over IP, Ethernet over dialup, direct serial, and serial via modem.

Technical Requirements for the Local Controller and Rack Mounted CPU Module (unit)

In addition to standard functions listed Part C-3, the unit shall provide similar functionality as the Intelight 2070-1C CPU module running the latest version of MaxTime (or equivalent).

Warranty and Ongoing Support

The Vendor shall provide remote and on-site support for all aspects (hardware, software, upgrades) of the Central ATMS (not including the actual server) and CPU Modules purchased by LFUCG for no less than three (3) years. Vendors shall provide information on Service Levels offered along with a cost structure of each for consideration.

EXHIBIT "D"

JOINT RESPONSE OF TRAFFIC CONTROL PRODUCTS AND INTELIGHT, INC., TO RFP #18-2017 CENTRAL ADVANCED TRAFFIC MANAGEMENT SYSTEM (43 PAGES)

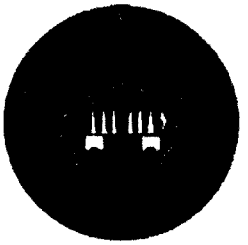
July 5, 2017

PROJECT

PROPOSAL TO FURNISH INSTALL INTEGRATE ATMS SOFTWARE & LOCAL CONTROLLER SOFTWARE

FOR

Lexington-Fayette Urban County Government RFP #18-2017 Central Advanced Traffic Management System



BY

Traffic Control Products

Traffic Control Products
Primary Contact: Terry Stanoch
4565 Glenbrook Rd.
Willoughby, OH 44094
PH# (440) 951-8929 FX# (440) 951-8203

INTELIGHT

NEVER STAND STILL

Intelight, Inc.
Primary Contact: Tom Stiles, PE, PTOE
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July 5, 2017

Todd Slatin – Purchasing Director
Lexington-Fayette Urban County Government
Room 338, Government Center
200 East Main Street
Lexington, KY 40507

RESPONSE TO RFP 18-2017, Central Advanced Traffic Management System

Mr. Slatin,

Traffic Control Products (TCP), along with Intelight, is pleased to submit our response to the Lexington-Fayette Urban County Government (LFUCG) request for proposal for a Central Advanced Traffic Management System. TCP is proposing a solution that modernizes the LFUCG's traffic signal operations by providing local controller hardware and software as well as a modern central management software. This proposal features Intelight's MaxTime local controller software and MaxView central system software. Intelight has designed and developed MaxTime to leverage the increased processing power of the Advanced Transportation Controller (ATC) into an intuitive and flexible local controller software that is unmatched in the industry. MaxView leads the industry in providing an open framework for multi-controller support and high-resolution data analytics.

TCP and Intelight take great pride in providing responsive and effective customer service. We work as a team to respond quickly to customer calls and inquiries. Our team will operate as an extension to the LFUCG's staff to deliver this project in a manner that is timely and meets the needs of the agency. Our innovative products, capabilities, and experience enable us to help the agency accomplish its ultimate goal of providing a robust, modern traffic management system.

TCP agrees to conform to all terms and conditions set forth in the RFP. Additionally, we have no conflicts of interest that prevent us from providing any services in this contract. We will provide all of the requested products and services to implement a complete integrated system. Our qualifications, product technical descriptions and additional information are on the following pages.

TCP is a privately-owned company based in Willoughby, OH with over 40 years of experience in the traffic signal industry. Intelight is an Arizona-based corporation with its headquarters and manufacturing facilities in Tucson, AZ. TCP will provide services from its Ohio office and will be supported by Intelight staff based in Atlanta, St. Louis, Seattle and Arizona.

We look forward to working with the LFUCG on this project. Please contact me if you have any questions regarding this proposal, pricing, or our technical capabilities.

Sincerely,

Terry Stanoch
Vice President
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1 PROJECT UNDERSTANDING

The Lexington-Fayette Urban County Government (hereafter referred to as LFUCG) recognizes the need for an innovative and advanced traffic control system that will allow them to be at the forefront of the nation's best traffic systems. This forward thinking led the government to the decision that improving the transportation system through the procurement of an existing, off-the-shelf, non-proprietary technology is key to moving the region to a technological platform that is sustainable for many years. Intelight understands that this is one of the many reasons the LFUCG has sought proposals from transportation technology innovators like TCP and Intelight.

Lexington is Kentucky's second-largest city at the intersection of Interstates 64 and 75. Like many older cities, Lexington's original street system was laid out using the "hub and spoke" design. Efficient and safe access to and from the LFUCG center and outward to the connecting highway systems and the rest of the metropolitan area is essential to any modern urban traffic management system.

The LFUCG is responsible for roughly 400 signalized intersections located on city, county and state routes. The existing communications system makes use of Ethernet over fiber communications or wireless devices. Most controllers are Econolite 2070 controllers with OASIS software that are integrated into a proprietary, legacy system. Intelight understands that this system does not provide expandability, openness and the innovative technological framework necessary for the LFUCG's growing needs.

Following in the footsteps of advancing technology and furthering the "open-architecture" concept, TCP and Intelight (hereafter referred to as "the Team") are positioned to provide the one solution that best meets the agency's needs. We are prepared to provide the LFUCG with **MaxView**, our state-of-the-art Central Advanced Traffic Management System (ATMS). MaxView is a modern, client/server application built using the Microsoft Silverlight and .NET Framework platforms, designed from the ground up utilizing modern graphical user interface design standards. By leveraging off-the-shelf industry standard software, Intelight is able to deliver a *true web-based thin client*, while also delivering an unrivaled client experience, including an incredibly responsive main map, multiple application windows and rich client interactions. MaxView is not adapted from an older legacy system and, as such, is not constrained by legacy interaction models or design standards. Instead MaxView is reimagined to embrace the modern web and modern technologies.

The Team is prepared to furnish, install, integrate and test all necessary hardware and software, and to make operational a fully distributed ATMS using MaxView. This system provides real-time, centralized control and monitoring of field devices such as traffic signal controllers, CCTV cameras, dynamic message signs (DMS) and other ITS devices. Additionally, the Team will be fully responsible for maintaining and caring for all hardware, equipment and software furnished as part of this deployment until such time as the final acceptance of the system by the city.

As requested in the RFP, the Team is prepared to provide 425 1C modules at a rate of 50 per month. Included with Intelight's 1C module is the state-of-the-art Advanced Transportation Controller (ATC) local software, ***MaxTime***. Today, Intelight's MaxTime software solution is the most deployed non-custom ATC controller software in North America, providing both traditional operations and advanced functionality. Hosted on a modern, intuitive, and open standards based platform. MaxTime is designed and built exclusively for the ATC platform (including the ATC API) and will sustain the LFUCG for decades to come.

The Team will designate a project manager who will be responsible for coordinating the work under this contract with other concurrent work as needed, communicating with key contract personnel and LFUCG staff, making certain adequate staffing is maintained to complete the project, establishing and maintaining contract administration procedures, informing LFUCG's

project manager of any changes to the key personnel assigned to this project, and keeping LFUCG's project manager informed regarding any and all pertinent decisions related to this project.

The Team is prepared to provide project support, as outlined in the scope of requested services, starting two weeks after receiving Notice to Proceed (NTP). The Team will provide all software, training, acceptance testing and product support throughout the life of the contract with options to extend. All standards related to Systems Engineering, Federal Rule 940, the National Transportation Communications for ITS Protocol (NTCIP), and SAE Standard J2735 will be considered, as appropriate, during all work performed during throughout the life of this contract. The Team is prepared to follow the "LPA Guidelines Manual for Federal-Aid Projects" and all applicable federal, state, and local requirements and procedures as applicable.

1.1 Known Constraints and Challenges

The Team understands and supports the LFUCG in its goal to provide an open central software system that can talk to multiple manufacturers' controller software packages. Intelight has fully integrated multiple controller software packages into MaxView, including the Econolite ASC/3 and Cobalt signal control software packages along with the Wapiti and BiTrans software. Intelight understands the complexities and challenges of providing full implementation for another manufacturer's software, often with little or no support said manufacturer.

Intelight provides full NTCIP MIBS, Block Object Definitions, and related files and documentation to customers when they purchase MaxTime controller software for no additional cost, future-proofing the deployments of our controllers. Should LFUCG acquire other controllers and the MIBS, software development kit (SDK) and documentation, Intelight will incorporate these into MaxView at no additional cost to the customer during the period covered by the contract.

2 PROJECT APPROACH

Under this project, the Team will furnish, install and integrate the MaxView ATMS software. Within two weeks of receiving the NTP, the Team will submit a detailed schedule outlining all milestone dates and project deliverables. The Team will work with the LFUCG to refine and finalize the schedule and maintain a working schedule to be updated on a monthly basis. Bi-weekly progress meetings will be held with the LFUCG to report progress and provide detailed information. The Team will work develop acceptance test procedures that will be used to verify and accept all deliverables.

2.1 Central ATMS Installation

The Team is prepared to provide the state-of-the-art ATMS software, MaxView, to meet the LFUCG's requirements. The MaxView software runs on standard Windows servers and can be accessed from any workstation running a modern web browser such as Internet Explorer or Firefox. The Team will install and integrate the ATMS hardware and software, as well as provide testing and training as outlined below. ALL configuration data in MaxView is stored in a SQL Server database making server redundancy and backup an easy, familiar process. The Team firmly believes that MaxView is the best solution for the LFUCG as our software has been built from the ground up rather than adapting legacy solutions to meet current standards. This design means MaxView comes with all the expectations of a modern solution without the weight of legacy problems.

The Team will work with LFUCG staff to determine the best standard deployment processes. Throughout the contract life, the Team's Project Manager will coordinate with the LFUCG project contact to ensure proper procurement procedures are followed and that LFUCG's objectives and goals are met.

Intelight will work with LFUCG and the agency IT department (if desired) for a smooth and safe integration into the LFUCG network. MaxView is built on industry standard components that are used by millions of users worldwide. For this reason, the system is very secure and integrates well into existing Windows based systems and networks.

2.1.1 Central System Installation

Once the necessary server equipment has been provided, the MaxView installation and configuration will begin.

Intelight will install and configure all MaxView software. Initial system setup (ready for controller integration) is typically completed within one day.

MaxView delivers several unique advantages during system deployment, management and upgrade cycles due to the underlying technologies on which it is based and the core system architecture. Specifically these are:

- Simple server installation and deployment – The MaxView server installation is contained in a single self-executing installer that verifies all pre-requisites and then installs the MaxView services and provisions an empty default database.
- Industry standard monitoring and deployment tools – All MaxView application and field communications services are hosted within Microsoft Internet Information Server. Microsoft IIS is a leading enterprise ready web server that securely powers hundreds of thousands of websites every day.
- No client installation requirements – As MaxView is a true thin client there is no need to install or configure any client software on the MaxView workstations. The only client requirement is a PC or Mac with a modern web browser and the Microsoft Silverlight plugin.
- Self-describing database editor metadata – When connected to a controller running

MaxTime, the MaxView service receives an XML file from MaxTime that essentially self-describes the set of database tables that it has available when it is first connected to the system. This simplifies deployment when a large number of intersections are deployed—especially when multiple firmware versions are running in the field. With this functionality intersections in the field can be upgraded without the worry of coordinating an equivalent upgrade in the central system.

MaxView supports a variety of physical hardware configurations depending on the specific agency requirements.

In any given installation the system will include field controllers, a MaxView server and MaxView clients, all of which will be deployed on the agency's network. Typically all components of the system will be deployed on an internal LAN and protected from the open Internet by a firewall. Remote clients can then gain access to the system through a VPN connection to the private LAN.

2.1.2 Phased Approach

Because the LFUCG currently operates approximately 400 signalized intersections and is pursuing upgrades to the traffic signal controller local software in parallel to this project, a phased approach to integrating the traffic signals and other ITS devices into the MaxView ATMS software is necessary. Following such a phased approach will allow the LFUCG to continue to operate traffic signals and ITS devices using the existing software while migrating groups of devices to the MaxView system. To affect this phased approach the Team's project manager will work with the LFUCG's project manager to identify and prioritize groups of signals and ITS devices that can be moved off the existing system and to MaxView. This prioritization process will result in a schedule showing when particular groups of devices will become operational under MaxView. Those devices that have not been migrated to MaxView will continue to be monitored and controlled through the LFUCG's existing software.

2.2 Database Conversions

Our team will do timing conversions from the existing controller databases to MaxTime controller databases. Timing databases will be programmed off-site from the existing timing sheets and will be tested in both the Windows and Linux (Local Controller) versions of MaxTime. We understand that clearance calculations may need to be verified. Our database conversions will be completed with a team of field and timing experts led by Whitney Nottage, who has overseen over 4,000 database conversions in Georgia. We will work with LFUCG to develop an efficient conversion process that meets the needs of the agency and ensures a quality project.

Our team has extensive experience with database conversions. Two different software platforms frequently require very different programming to achieve the same operation. We understand that when converting from one software to another the key is understanding the existing operation. The main goal of our team will be to duplicate the existing operation during the conversions. Throughout the process we will provide input and feedback on features and functions that may be used to optimize an intersection, if desired. Anticipated steps within the conversion process are:

- Review of existing database and submission of questions to the agency about the existing operation (if any)
- Initial database conversion by team
- QAQC of database in Windows emulator
- Review of database conversion by a PE/PTOE
- Submission of database to LFUCG for review

- Address agency comments
- Bench test final database on a Linux controller

We support the major project goals which include, but are not limited to, the following:

- Forming a long-term support partnership with Agency's staff
- Providing the Agency with true, open architecture NTCIP and ATC compliant products. We offer the Agency full, unrestricted access to our NTCIP MIBS, ATC APIs, and other relevant tools needed to interface with our software and hardware. This would enable the Agency to easily install third-party software on Intelight controllers in the future, if so desired
- Providing the Agency with a reliable, innovative product that we will continue to back with first class support
- Providing future product innovation and adaptation to current industry (IT Industry) technologies
- Continuing to provide customer driven development and configuration of products for ease of use, maintenance, cost-effective solutions, and enhanced functionality
- Providing quick response, effective local and remote customer support driven by service oriented business model

2.3 Local Controller Software and Rack-mounted CPU Modules

The Team is prepared to provide at least 425 Intelight 1C CPU modules running the latest version of MaxTime at a rate of fifty (50) per month.

MaxTime is a Linux-based local software that meets the current ATC standard, version 5.2b. We understand LFUCG's desire to keep up with emerging technologies, so it is important to note that MaxTime is also compliant with the ATC's latest draft standard, version 6. MaxTime is compatible with the proposed ATMS in this response, MaxView.

We propose updating the LFUCG's (and partner Agencies') 2070 traffic signal controllers with Intelight 2070-1C modules with MaxTime local software. Intelight can also install our MaxTime local controller software on other vendor's 1C modules if the following conditions are met:

- Third-party vendor 2070-1C carrier and engine boards are ATC 6.10 (Draft) compliant with a minimum of 32 MB Flash Memory (common)
- Per the ATC 6.10 (Draft) specification, the third-party vendor will provide Intelight the platform's board support package

Intelight's ATC 2070-1C modules have been successfully used in multiple vendors 2070 controller chassis with various 2070 modules installed.

If LFUCG has custom cabinet standards, Intelight will also add a standard I/O Module for LFUCG 33X cabinets to facilitate faster controller change outs and database conversions. Once selected, the default individual I/O pin functions can be user configured from the Web UI or front panel for special cabinet configurations.

2.4 Training

Intelight will provide training for both the local controller software, MaxTime, and the central ATMS software, MaxView. Our team will work with LFUCG to schedule training at a time that is acceptable to the agency. .

2.4.1 Development of Training Materials

Our team will develop the appropriate training materials for the desired training sessions. A draft version of the training materials will be provided to the agency for review and comment. The Team will finalize these materials based on the comments received.

2.4.2 Conduct Training

Training will be performed at the LFUCG designated facilities and will be presented in English. Intelight will cater training to be delivered utilizing the equipment provided by the LFUCG (projectors, screens, etc.), and will request the equipment from the LFUCG with ample time to prepare. If additional non-standard equipment is required, we will provide said equipment. The Team will also provide the required training materials.

The training courses will be designed to be interactive and hands on. The training will utilize the MaxView user interface and MaxTime windows application on trainee's workstations or laptops, as well as local controllers running the MaxTime software. The necessary software for training will be provided by the Team.

2.4.2.1 MaxView Training

For the central ATMS system, the Team will facilitate the three training courses below during the system integration and installation phases of the project. We will work with the agency to schedule these training courses.

- System Operations – This class will train LFUCG staff on the use of the MaxView ATMS software. Training will provide users with sufficient expertise to use and manipulate all of the key features and applications within the ATMS.
- System Administration – This class will train LFUCG staff on all administrative features of the ATMS.
- System Maintenance – This class will train LFUCG staff with the maintenance of the ATMS. Training will provide users with sufficient expertise to utilize diagnostic and maintenance utilities and to diagnose, maintain and repair all supplied ATMS elements.

2.4.2.2 MaxTime Training

For the local controller software, the Team will facilitate the three training courses below during the database conversion phase of the project. We will work with the agency to schedule these training courses.

- Local Software Signal Timings – This class will train LFUCG staff on programming the basic timing parameters into the WebUI. Functions covered will include, but not be limited to, administration, database management, phase timings, detector configuration, coordination, normal overlaps, flashing yellow arrow overlaps, and preemption.
- Local Software Field Troubleshooting – This class will train LFUCG staff on field programming and troubleshooting from the front panel interface. Topics covered will include, but not be limited to, database management, flash troubleshooting, timings troubleshooting, cabinet troubleshooting capabilities in the controller, and detection troubleshooting.
- Local Software Advanced Training – This class will train LFUCG staff on advanced features within the MaxTime local controller software. This will include, but not be limited to, advanced phase options, advanced coordination functions, advanced overlap types and options, advanced preemption options, and advanced administration functions.

2.5 System Acceptance Testing

The Team will work with the LFUCG to implement a robust testing process to meet the contract requirements and prevent defects. We will work with the LFUCG to produce and adhere to testing plans that will provide proof of performance. We are prepared to provide all materials, equipment, and staff required to complete the testing and will coordinate with the LFUCG's project manager to ensure LFUCG staff is available to observe the tests at an agency-approved location.

2.5.1 Development of System Acceptance Test Plan

The Team will develop the System Acceptance Test Plan (SATP) that provides details on the testing to be performed and relates each test to specific requirements. A draft version of the SATP will be provided to the agency for review and comment. The Team will finalize the test plan and procedures based on the comments received.

2.5.2 System Acceptance Test Plan Execution

After installation and integration of the MaxView system and the establishment of communications to the initially deployed controllers, execution of the SATP will be coordinated with the Agency. At the agreed upon time, the test procedures will be performed and results will be noted in the SATP document.

2.5.2.1 System Variances

Should any portions of the test lack performance or fail to meet the stated system requirements, such variables will be recorded as a System Variance. The Team project manager will be prepared to provide a proposed solution to resolve the deficiency within seven days of receiving the system variance documentation. We will work closely with the LFUCG project manager to propose, resolve, and test any solutions to System Variances.

2.5.3 Existing CENTRACS System

MaxView provides full support for most of the existing Econolite local controller software. This support provides a seamless upgrade path for the controllers under one system. If desired, the Team will work with the LFUCG to move the existing legacy controllers onto the MaxView system and gradually exchange the controllers for Intelight MaxTime controllers

2.5.4 Reversible Lane Operation

Although the reversible lane operations will be configured at the local controller software level, MaxView includes powerful tools that can help remotely manage and monitor the LFUCG's reversible lane systems. MaxView's robust Traffic Responsive and Action Set functionality can be used to trigger changes in the lane system based on traffic loading or scheduled special events. The schedule for Traffic Responsive can be configured in MaxView, reducing the need to visit each lane controller in the field to make changes.

3 CAPACITY TO PERFORM WORK

3.1 Firm Qualifications

3.1.1 History of Company and Software

3.1.1.1 Traffic Control Products

Traffic Control Products, Inc. (TCP) has been distributing high-quality, innovative traffic device control equipment for more than 40 years. Headquartered in the Cleveland suburb of Willoughby, TCP maintains satellite offices in Akron, Canton and Cincinnati to ensure excellent customer support.

A supplier of premium sensor equipment to the traffic industry, TCP has built its solid reputation on delivering products on time, pricing equipment competitively and offering outstanding after-market support. Product lines are sold in Ohio, Kentucky, Pennsylvania, West Virginia, Indiana and Michigan.

"As the market for high-quality, forward-thinking traffic technology has grown, TCP's operations have grown too, expanding product lines and sales territories," said Kevin Durgin, President. "We put tremendous effort in developing strong relationships and giving our clients the support they need."

Our Products: Second to None

TCP's high-quality products meet the requirements of the National Electrical Manufacturer Association (NEMA) as well as the 170, 2070 and ATC standards. Intelight, FLIR, Traficon, Wapiti, Right of Way (ROW) and Emtrac manufactured products deliver excellent functionality and superior performance for our clients. TCP has an extensive line card to service the needs of its customers.

TCP houses a wide variety of components in its large warehouse where experienced staff build, test and repair equipment on-site. The warehouse and office space includes a complete cabinet and controller systems test center and an engineering and CAD center. Because TCP carries a variety of components in stock, emergencies are resolved quickly.

TCP also offers state of art Advanced Traffic Management System (ATMS) software for both our NEMA and 170/2070/ATC clients.

Our Staff: People Make the Difference

Traffic Control Products employs a staff of technical personnel for controller assembly, controller programming and field troubleshooting. Software specialists manage specifications set by NEMA and 170 Standards, ramp metering and surveillance systems.

Customer service is an integral part of the TCP culture and can be expected at each stage of the order. Experienced sales and technical staff guide TCP customers through the process of designing systems, purchasing products, installing equipment and trouble-shooting issues. After the sale, TCP offers customers phone and field support. Additionally, the company hosts technology seminars in various cities across its sales territory.

3.1.1.2 Intelight

Intelight was founded in 2006 by President Craig C. Gardner, PE. Since then, the company has grown to over 40 employees and supplements its full-time staff with seven full solution distribution partners throughout the world. Intelight's corporate office and manufacturing facilities are in Tucson, AZ, with the systems development and services office being located in Seattle, WA. Regional offices in Atlanta, GA, Phoenix, AZ, and St. Louis, MO, provide local field support.

Intelight manufactures and supplies innovative traffic management products, including advanced traffic controllers, traffic control cabinets, arterial systems masters, NTCIP compliant local software and web-based central software systems. The company mission is to provide customers with the highest quality and most innovative technology along with exceptional service and cost-effectiveness.

Intelight's primary business focus is software and firmware for central and local traffic signal management and control. In our 11 years of business, we have helped advance the industry with the following innovations:

- *First Linux-based local traffic signal firmware in North America* – Also first to develop exclusively on the ATC platform
- *Largest deployment of Linux-based ATC compliant controllers* – 9 years of continuous in-field Linux controller service with over 3000 Linux-based controllers deployed world-wide
- *First cost effective ATC compliant controllers* – Cost comparative to legacy OS-9 and custom hardware based controllers
- *First embedded controller web server with first full function web based controller interface*
- *First touch-screen controller*
- *First embedded Android processing system on controller*
- *First fully web-based central system (true thin-client, not requiring any application specific software to be loaded on operator or client workstations)*
- *Full support for open standards* – First traffic signal software vendor to provide full NTCIP MIBS to customers with no restrictions, additional fees or licensing restrictions.

By establishing a diverse and innovative product line and assembling a handpicked staff of experts from the traffic signal industry, Mr. Gardner has built the foundation for a long lasting, reliable and industry-leading corporation.

3.1.2 Team History

Our project team members are located throughout the United States; however, we interact daily. Our regional offices allow us to provide regional support to our customers and stay in touch with projects throughout the nation. As shown in our references, the proposed team has worked together on countless deployments from 30 intersection systems to those with thousands of intersections. Our ability to stay flexible, communicate effectively, and capitalize on each of our strengths enables us to frequently check in on customers, address issues quickly and provide customers with a seamless support and project management interface.

3.1.3 Unique Qualifications

Intelight strives to lead the industry with best-in-class products. Our goal is to continuously improve the most intuitive, yet most powerful central and local signal software available in the industry. Design and development of MaxView has been heavily influenced by a blend of customer and employee input representing hundreds of years of combined traffic operations experience, blended with new, innovative approaches. The result is a stable, lightweight (light on resources), and easy to use traffic signal system which can handle advanced operations for the seasoned user while providing a simple, web-based user experience for those who need to perform simple tasks.

3.2 Key Staff

3.2.1 Project Team

Intelight's team of software engineers, traffic engineers and project managers has a proven track record of providing the most streamlined and successful deployments possible. A dedicated project manager will ensure that the project scope is provided on schedule and within budget and will serve as the main Point of Contact (PoC) for LFUCG. The team is backed by a strong history, which provides the foundation and lessons learned on which this project will be structured.

To date, Intelight has shipped over 6,000 traffic signal controllers worldwide and, through competitive evaluation processes, installed more than 25 new (not upgrading existing customers) central traffic management systems in just under three years. Furthermore, we continue to be shortlisted in the top three scoring providers for many publicly posted requests for proposals across North America. Intelight has decades of direct experience amongst our key staff.

Our highly-qualified software/hardware engineering and support services staff has significant experience in both local and central control software and the ability to apply innovative and unique, cost effective solutions in an efficient time frame.

shows the proposed project team.

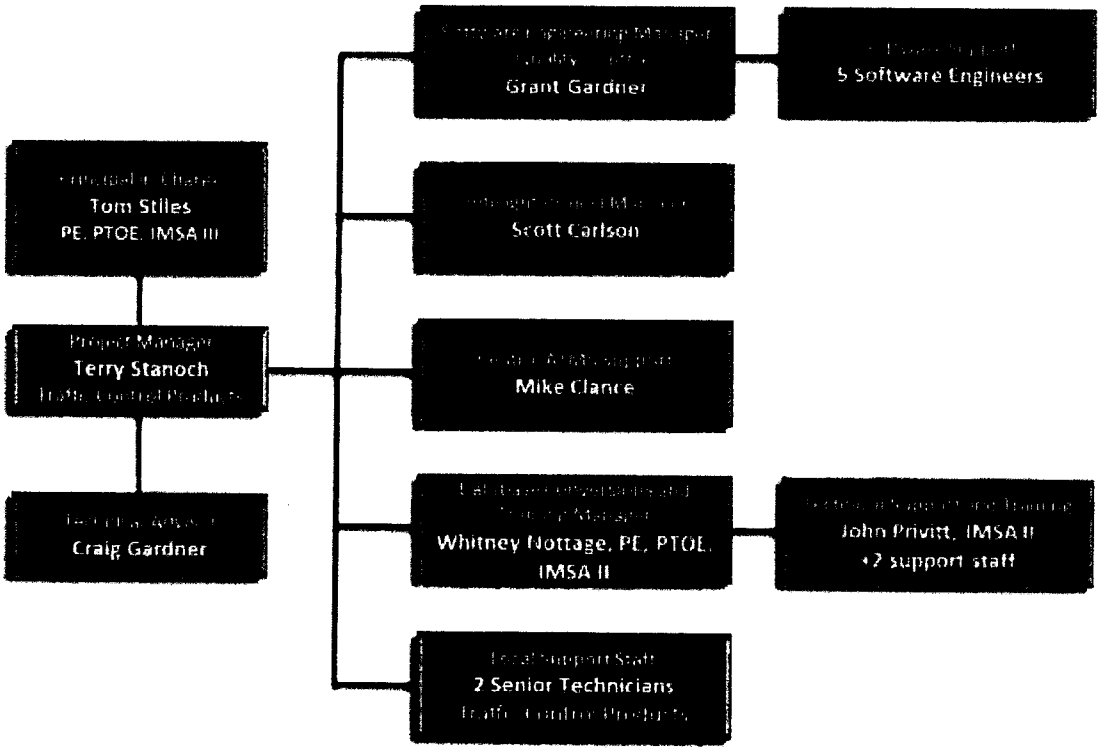


Figure 1 – Proposed Project Team

3.2.1.1 Intelight Project Team Members

Tom Stiles, P.E. PTOE, IMSA Level III is Intelight's Vice President of Sales and Services. He will serve as a *Principal-in-Charge* for this project. Mr. Stiles will be responsible for coordinating engineering support and ensuring that adequate resources are available and provided to address any needs, requirements, and concerns throughout the project's life. He is a licensed Professional Engineer in multiple states and also a Professional Traffic Operations Engineer. Mr. Stiles has

significant experience in both field operations and large system and controller deployments including the State of Utah, Georgia and many locations throughout the west coast.

Craig C. Gardner, P.E., will serve as the *Technical Advisor* for the project. As President of Intelight, Inc. Craig has over 30 years of experience in the traffic signal industry and has been a leading innovator in developing and deploying traffic signal controller and central system software. Craig will provide valuable expertise and guidance for integration and deployment problems, if any should occur, and prioritizing staff time to ensure the agencies' needs are addressed accurately in a reasonable time. Specifically, Mr. Gardner's career experience in software design and development has included primary responsibility for several large signal system projects including:

- Utah Department of Transportation (2000 intersections)
- Georgia Department of Transportation (up to 9000 intersections)
- City of Tucson, Arizona (700 intersections)
- New York City (10,000 int.)
- City of Los Angeles (3,500 intersections)
- Las Vegas, Nevada (1,600 int.)
- Beijing, China (6,000 int.)

Grant Gardner is Intelight's Chief Technology Officer and is also responsible for security in Intelight. Mr. Gardner has over eight years of successful software management experience in the technology Mr. Gardner has extensive experience managing and driving large-scale software projects, with a strong track record of delivering high quality and on time releases to millions of customers. Building on his industry leading experience while at Microsoft, he now manages the day-to-day software operations and process at Intelight and is responsible for driving and delivering the company's MaxTime and MaxView® software releases and roadmap. Mr. Gardner will be supported by Intelight software engineers Mark Richards, Alex Yuly and Maxime de Baynast. Mr. de Baynast is the nation's leading NTCIP standards expert and serves as Intelight's NTCIP and Embedded (Web Browser) developer.

Scott Carlson IMSA Level III is Intelight's Midwestern Regional Manager based out of St. Louis, Missouri. Mr. Carlson has over 30 years of experience in traffic. He will be the *Intelight Project Manager* for this project, working closely with Mr. Clance to provide the agency with a local contact that can be on-site for support or meetings within short notice. Mr. Carlson started surveying with his father, a licensed land surveyor, at age 12, then later as an engineering aide on the survey crew for the City of Sioux City. He then advanced through the traffic engineering department, eventually ending up as sign and signal supervisor his last 11 years in government work. In the traffic department, he was responsible for signal design standards, and all traffic engineering and maintenance operations. While in Sioux City, Mr. Carlson worked extensively with an old JHK legacy system. Mr. Carlson is an IMSA Level III certified Signal Technician.

Mike Clance is Intelight's Eastern Regional Manager and supervises the daily operations of Intelight's projects across the country. Mr. Clance will provide *Central ATMS Support* during the life of this project.

Mr. Clance has more than 30 years of experience as a software engineer, solutions architect, systems integrator, project manager and product manager. In these roles he has been responsible for managing software development projects and software engineering teams, both locally and internationally. He has also been responsible for managing customer relations and delivering and implementing software development projects for these customers. Mr. Clance has been a leader of software development teams, testing and system installation and integration teams for traffic management software. He has extensive experience in systems design, software design and development, system integration and troubleshooting and debugging. Mr. Clance spent 12 years

with Siemens, where he served as the Product Manager for central system software and controller software and is very familiar with the ACTRA, Tactics and SEPAC software packages.

Whitney Nottage, PE, IMSA Level II is a Senior Traffic Engineer at Intelight and will be the *Database Conversions and Training Manager* for the lifetime of the project, assisting the project team in provide software and hardware troubleshooting, training and support for this project. Mrs. Nottage has over eight years of experience directly related to the technical aspects of the traffic industry, working for consultants designing and maintaining traffic signals. Starting as a design engineer, she has served multiple roles including designing ATMS systems and traffic signals, developing and deploying signal timings, and daily operations and maintenance of traffic signals. Mrs. Nottage's technical knowledge and experience provides great support for development, programming and troubleshooting of simple or complicated signal systems alike.

3.2.1.2 Traffic Control Products Team Members

Terry Stanoch is Traffic Control Products, Inc.'s Vice President and has over 17 years of experience in the transportation industry. Mr. Stanoch oversees sales and operations at TCP. In these roles, he is responsible for managing business development, outside sales, and inside sales. Mr. Stanoch also works closely with the Director of Technical Services on cabinet production, assembly, quality control and engineering. Mr. Stanoch will work with TCP and Intelight staff to ensure that the project is completed per the requirements provided in the bid proposal.

Ken Pappalardo is Traffic Control Products, Inc.'s Director of Technical Services, and has over 18 years of experience in the transportation industry. Mr. Pappalardo oversees cabinet production, field support and technical services and assists in sales and operations. Ken also has experience working for an electrical contractor which specialized in traffic signal installation and maintenance. He has an IMSA Traffic Signal Level III certification, IMSA Work Zone Safety Specialist certification, is an IMSA Certified Moderator and is certified as a Supervisory Fiber Optic Technician. Mr. Pappalardo will play an important role in assuring the ATMS system and 1C module upgrades are done timely and accurately.

Salvatore Citaro is one of Traffic Control Products, Inc.'s experienced field technicians, is also responsible for supporting and maintaining Traffic Control Product's computers and network. Mr. Citraro started his career in the traffic industry in 2009 building traffic signals in the warehouse, and progressed into production from point to point wiring of NEMA Back Panels then ultimately into intersection cabinet set-up, production and configuration. Through his production and technical knowledge, he arose into a field technician where he troubleshoots customers' various cabinet equipment and furthermore assists them in initiation and function of their planned intersection cabinet. Mr. Citaro will be one of the primary field technicians working with Intelight technical support staff to complete this project in a timely manner.

3.3 Proposed Schedule

Intelight understands the LFUCG's scheduling expectations and proposes a draft schedule as shown below. Upon NTP, Intelight will work with the LFUCG to refine this schedule. The schedule below is based upon the following assumptions:

- Initial deployment will consist of 10 intersections for verification and acceptance testing purposes
- The selected controller local software version is currently supported by MaxView.

Proposed tasks and schedule are:

- 9/2/17 – Assumed Notice to Proceed & Kick-off meeting (1 day)

- SCHEDULE
  - 9/5/17 – 9/9/17 – Schedule Development (14 days)
  - 9/12/17 – 9/16/17 – LFUCG review/approval of schedule (7 days)
- TRAINING
  - 9/12/17 – 9/23/17 – City-specific Training development (14 days)
  - 9/26/17 – 10/7/17 – City of Lexington-Fayette Urban County Government review/approval of training documents (14 days)
  - 10/3/17 – 10/7/17 – Intelight finalize training documents (7 days)
  - 10/10/17– 10/14/17 – Initial training sessions
  - 02/13/18 – 02/17/18 – Follow up training and support
- ACCEPTANCE TESTING DOCUMENTS
  - 9/12/17 – 9/23/17 – Acceptance testing development (14 days)
  - 9/26/17 – 10/7/17 – City of Lexington-Fayette Urban County Government review/approval of Acceptance testing (14 days)
  - 10/10/17 – 10/21/17 – Intelight finalize Acceptance testing procedures (14 days)
- INITIAL DEPLOYMENT PERIOD (Assumed 20 intersections)
  - 9/11/17 – 11/11/17 – Bench testing, documentation, resolutions (if necessary) and approval (60 days)
  - 09/11/17 – 09/56/17 – Deployment of first 20 intersections (5 days)
  - 11/11/17 – 12/11/17 – Field Testing (30 days)
  - 01/11/18 – Final Acceptance
- SUPPORT – Ongoing through life of contract

4 SUPPORT

4.1 Technical Support

TCP and our team members take pride in responsive and effective customer service. We work as a team to respond quickly to customer calls and inquiries and as an extension to the Agency's staff to provide realistic delivery dates and timely responses to critical issues.

We provide superior service and quality products in a timely manner. The Agency PM and appropriate staff will have access to a TCP phone number throughout the life of the project. The Team's local PM anticipates being available between 8:00 am through 5:00 pm Eastern Time. In special cases where the PM is unavailable, the support phone number will be forwarded to a qualified person.

Under this project we are offering a three-year warranty as required by the RFP. Intelight's warranty includes support and maintenance providing phone, email, webinar, and on-site support, software bug fixes, and new releases on an annual basis. Following the warranty period, the agency can choose to purchase a maintenance agreement at any time regardless of continuous support program purchases. If the agency does not require support, software upgrades can be purchased for a reduced price at any time after the warranty period has expired.

4.1.1 Quality Assurance

Intelight has several levels of testing for Quality Assurance to prevent defects. We have successfully improved traditional support plans by implementing the following methods:

- *Arranging direct customer access to Intelight support and development staff through local dealers*
- *Intelight's software development model allows for quick and effective 'hot-fix' releases*
- *We provide our maintenance contracts in an "All inclusive" model*
- *Software bug fixes are free for the lifetime of the product*

4.1.1.1 Software Standards Compliance

Intelight recognizes the importance of participating on boards and committees pertaining to the traffic signal equipment industry. Our presence at meetings ensures we are always up to date on the current and proposed standards relating to traffic signal software and hardware so that we meet the standards before they are officially accepted by the industry. In addition, we help shape the future of the industry by contributing our experiences, ideas, and feedback from clients (user feedback) to the standards committees, ensuring new and future standards will provide an added benefit to the end user. One of our principal software engineers is currently a voting member of the ATC Controller Standard Working Group, which provides the minimum requirements for the Advanced Traffic Controller standards. Intelight also has a representative on the NTCIP Committee on Traffic Signal Software Protocols as well as representation in the ATC API Standard Working Group. This industry involvement not only ensures the highest quality and innovation within our own products, but also ensures our team is well versed in 3rd party products.

4.1.1.2 Software Testing Process

The Intelight software development process is based on modern agile software development and management principals. At a high level Intelight breaks its software development into three major programs, specifically: MaxTime ATC software, MaxView ATMS software, and MaxAdapt adaptive control software. All of Intelight's software programs are managed using the same agile development model that is described below.

Each year Intelight aims to deliver 2-4 major feature releases that are aligned across the company's three major software programs discussed above. This allows Intelight to cross develop large features which may have dependencies across multiple programs in a single release, ultimately delivering greater value to the end user through more complete end-to-end scenarios and simpler usability. All of Intelight's major releases follow the same planning, development and testing process that is described below before being delivered to our customers.

In addition to major releases, Intelight will release 'hot fix' releases on demand as product defects are discovered and fixed to ensure customers are not blocked from implementing a given scenario because of a discovered product defect. Hot fix releases are always based on the previous major software release and do not contain major features or other updates. This process allows Intelight to rapidly release targeted hot fix releases to customers to fix a specific issue without risking regression to functionality across the rest of the product.

The specifics detail of Intelight's Major Release and a Hot Fix Release processes are described below:

4.1.1.3 Major Software Release

As stated above, Intelight aims to release 2-4 major software releases a year to continually improve the functionality and feature set of our products. All major releases include a planning, development and stabilization phase as part of the broader release cycle. These phases of the release cycle are described in more detail below:

4.1.1.3.1 PLANNING PHASE

During the planning phase of a release the goals, focus and specific feature set of the release are established. During planning Intelight seeks feedback from all dealers, partners and customers to ensure the most important and relevant feature set is being targeted for a given release. The basic functional and operational specs for the features being planned are also completed during planning phase. Intelight strives to make the planning process customer and project driven to ensure that our customer's most pressing needs are being addressed as quickly as possible from release to release.

4.1.1.3.2 DEVELOPMENT PHASE

After planning is complete the team will start feature development on the set of new features that were designed and agreed upon during the planning stage. The development phase of a release will last from 2-3 months depending on the scope of the agreed upon feature set. During development, the team meets daily at a SCRUM meeting to ensure progress is being made and that any new requirements or customer feedback is being addressed in real time. This allows Intelight to adapt quickly to customer requirement changes or reprioritization during the development cycle, ensuring that our customers' needs will be met at the end of the release.

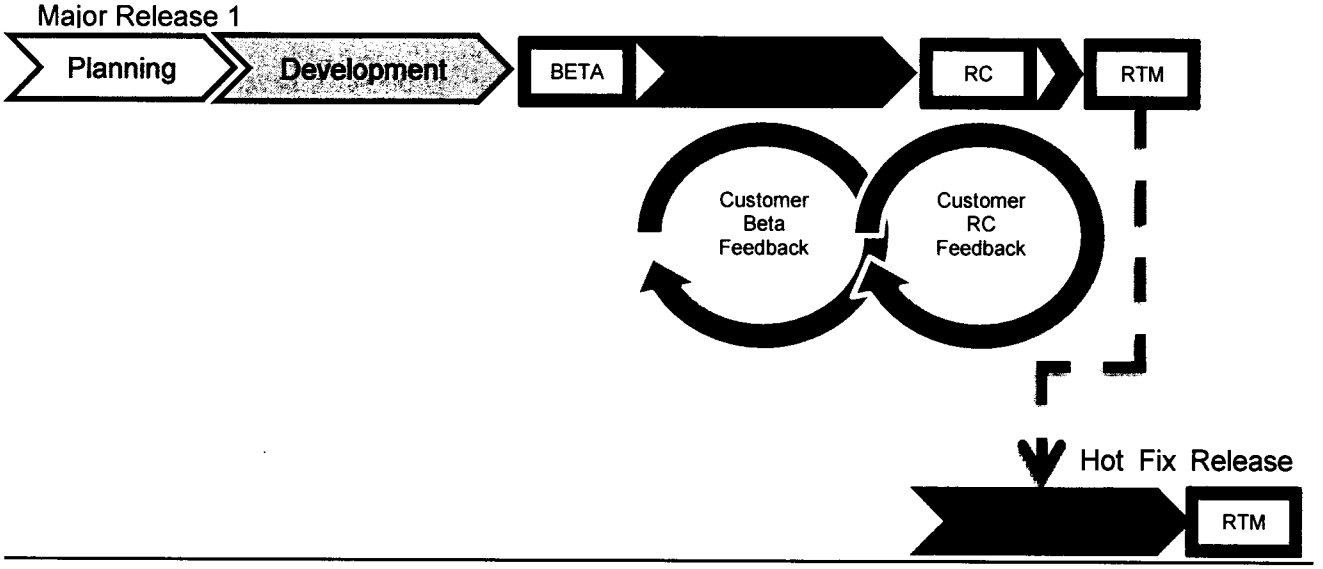
4.1.1.3.3 STABILIZATION PHASE

After feature development is complete and the agreed upon feature set is functional and delivered, the release will enter a stabilization phase. At this point a Beta release will be made available to partners and customers to preview and test the feature set of the upcoming release. During stabilization, the team is focused exclusively on stabilizing the feature set that has been delivered, by fixing bugs and responding to customer change requests/feedback. The stabilization phase of a release will last until all the required bugs discovered in the release are fixed. Once the release is at "zero bug bounce"—a state where there are no active bugs that would block the release—a Release Candidate build is created and again shared with customers and partners for final validation and feedback. If the Release Candidate build passes all final release testing and no additional bugs

are discovered, then the release will be "Released to Manufacturing" and made available as the final release to customers.

4.1.1.4 Hot Fix Releases

Intelight "Hot Fix" releases are released on demand/as needed when a major product defect is discovered by Intelight or a customer in a major release that has already shipped to customers. Once the product defect is verified, Intelight releases a tested and verified hot fix release in as short as time as possible—ideally under 7-14 days. Hot fix updates are made available to all customers running the affected major version, regardless of warranty period. Intelight's Software Process Flow is shown below.



4.1.2 Quality Control

Intelight and our team members take pride in responsive and effective customer service. We work as a team to respond quickly to customer calls and inquiries and as an extension to LFUCG's staff to provide realistic delivery dates and timely responses to critical issues.

We provide superior service and quality products in a timely manner. The LFUCG PM and appropriate staff will have access to an Intelight on-call phone number on a continuous basis. Intelight's local PM anticipates being available between 7:00 am through 7:00 pm. In special cases where the PM is unavailable, the support phone number will be forwarded to a qualified person.

4.1.2.1 Support Team

Intelight will be the primary point of contact and prime provider for this project. To better support the LFUCG and your partners, we have assembled an expert team of traffic signal timing engineers, field support staff, and technicians. Please refer to Section: **Error! Reference source not found.** for information regarding our related project experience. Furthermore, please refer to the Section 3.2.1 for an overview of our full project team.

Intelight will be using its several offices to provide long-term contract support to the City. This includes the Atlanta, GA office that currently has several highly technical staff members that are very familiar with Intelight projects and can provide remote support to any issues. In Intelight's experience, on-site support is very rarely needed, as remote login can resolve most issues that

might occur. In the rare situation that an on-site support is needed, Intelight will have resources available from its Atlanta, St Louis or Seattle offices on short notice.

4.1.2.2 Support Work Flow

Intelight prides itself on responsive and effective customer service. We work as a team to respond quickly to customer calls and inquiries as an extension to the State's staff to provide realistic delivery dates and timely response to critical issues. We understand that although not directly related, issues may arise where our equipment interfaces with other manufactures' products and that our staff's time may be required to help troubleshoot or support those issues. Figure 4.1 shows how an issue will be tracked throughout the solution process. The process starts and ends with the Project Manager to minimize miscommunication and ensure the Agency has a single point of contact who will track support request from start to finish. In addition, users can log into the Intelight website and submit issues online (if desired). Issues submitted online are automatically distributed to Intelight's entire support staff for quick response and resolution.

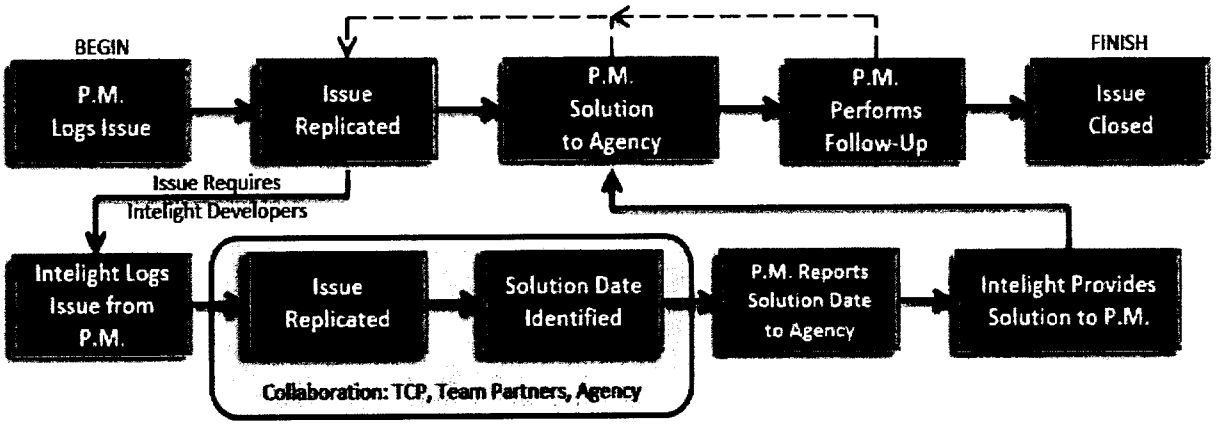


Figure 4.1 – Customer Support Process Diagram

4.1.2.3 Defect Tracking

Intelight uses Microsoft Team Foundation Server to track software issues and development. Issues are entered, assigned to a developer, and then resolved back to the services group for testing and verification prior to shipping a new build back to the customer.

4.1.3 Maintenance and Warranty Service

Intelight and our team members take pride in responsive and effective customer service. We work as a team to respond quickly to customer calls and inquiries and as an extension to the Agency's staff to provide realistic delivery dates and timely responses to critical issues.

We provide superior service and quality products in a timely manner. The LFUCG PM and appropriate staff will have access to an Intelight on-call phone number on a continuous basis. Intelight's local PM anticipates being available between 7:00 am through 7:00 pm. In special cases where the PM is unavailable, the support phone number will be forwarded to a qualified person. Traffic Control Products has partnered with Intelight to offer prompt local support to the LFUCG when needed.

Our on-call support and warranty is included for three years from the purchase of the software at no additional cost (which is shown in our cost proposal) and will include technical support and software

upgrades. Our team is committed to quick response and will respond to service request within four hours. To promptly service the LFUCG we can use phone or Internet meeting technology to remotely support questions or problems that arise. In the event that a problem cannot be accurately diagnosed or fixed over the phone, one of our highly-trained staff will provide on-site support to the Agency. Our support staff is extremely flexible and responsive. Intelight will provide a fix to all critical issues, either temporary or permanent, to return the signal to full functionality within 8 hours of the original request.

After the initial contract expires, additional warranty, maintenance, and/or support service can be purchased for a reasonable cost. When purchased, Intelight's support and maintenance agreement will provide phone, email, webinar, and on-site support, software bug fixes, and new releases on an annual basis. The agency can choose to purchase a maintenance agreement at any time regardless of continuous support program purchases. If the agency does not require support, software upgrades can be purchased for a reduced price at any time after the warranty period has expired.

4.2 Administrative Support

Project management is a vital ingredient to the success of any project. At the center of the Team's project approach is project management to manage the schedule and technical performance requirements in an effective and efficient manner. This section describes the Team's project management methodology for implementation of the ATMS software and hardware.

The Team's project management objectives are to:

- Establish a comprehensive plan that provides the necessary status information to the project team and the LFUCG.
- Communicate information to the LFUCG on a regular and timely basis,
- Identify problem areas early and initiate corrective action.

The Team's project manager will coordinate the installation, configuration, migration, integration, training, acceptance testing, and maintenance tasks for the ATMS software and hardware. To accomplish these tasks, The Team's project management methodology encompasses the following areas:

- Planning and scheduling
- Performance monitoring
- Project reviews
- Project quality assurance

The Team understands the importance of a well-organized work plan, so our project methodology is described in detail below. Additionally, our product Quality Assurance process is provided in detail below so that the LFUCG understands and trusts that the product they receive has been reviewed and managed in advanced for quality. Of course, despite everyone's best efforts, issues can arise. Our proposed Quality Management plan describes the processes used to handle such occasions, and is flexible for modifications in order to meet the LFUCG's needs.

4.2.1 Project Management

4.2.1.1 Planning and Scheduling

The Team's project manager will confirm and adjust as necessary the project schedule. The scheduling objectives are as follows:

- Review the project schedule with LFUCG's project manager.
- Each task in the schedule will be confirmed or adjusted to include:
    - Starting and ending time for each activity
    - Activities on the critical path
    - Amount of slack or float time available for the noncritical path activities
    - Responsible party for the task

4.2.1.2 Project Kick-Off

The project manager will setup a kick-off meeting to discuss the project. If an on-site visit is required, the project manager can adjust the project schedule accordingly with the LFUCG project manager's approval. After the kick-off meeting we will:

- Work with the LFUCG to review the server requirements.
- Begin implementation of the project schedule.

4.2.1.3 Performance Monitoring

The project manager will monitor technical performance and schedules on weekly basis. Any deviation from the plan will be identified and the required corrective actions implemented. The following activities will be performed as part of performance monitoring:

- Monitor performance with respect to schedule and analyze the impact of delays.
- Implement corrective actions to address deviations from baseline schedule.
- Hold informal discussions with individual project personnel and subcontractors on specific tasks in addition to the regularly scheduled project team meetings.

4.2.1.4 Project Reviews

Communication is essential to the successful outcome of any project. Our primary objective is to keep the LFUCG abreast of the developments that may impact the project. Internally, we promote open communication between Intelight members and the Project Manager.

To facilitate such communications, we will hold regular bi-weekly status meetings with the LFUCG to discuss the project status, any open action items, and any concerns. If the need arises, these meetings will be held weekly.

Additionally, the Project Manager, will submit a written monthly progress report to the LFUCG. Typical subjects covered in this report include the following:

- Summary of activities during the month
- Planned activities for the next month
- Concerns or problems encountered and planned solutions
- Assignment of or changes in key personnel
- Up-to-date project schedule
- Status of open items
- Closed items
- Status of deliverables, such as documentation, equipment, or plans

4.2.2 Value Engineering

Detailed planning on the front end of this project will be crucial to prevent financial overruns. We will utilize the team's extensive experience on similar projects to mitigate risks and control costs.

4.2.2.1 Cost Control

Cost Control is a key component of successful project management. Project cost is controlled effectively through a combination of detailed project setup at the beginning of the project, combined with recurring project reviews with LFUCG, and internal project reviews (IPR).

As cost, schedule, and scope are the three sides of the project management triangle, effective cost control requires that all three sides are equally managed and controlled. A key factor for effective cost control is that all project expectations are sufficiently discussed and mutually agreed upon – deliverables, scope and schedule; and that the respective level of effort is realistically costed in the price proposal and the eventual contract.

Recurring project reviews are used to track percentage of completion of the project. In case of schedule or scope changes (either as requested by the LFUCG or as a result of an external event), possible cost impact will be assessed.

4.2.2.2 Risk Management

In a perfect world, there are no risks. As any project operates in the real world, uncertainties do exist. One key to effective risk management is a proactive assessment during project setup (definition of project work plan), which defines key risks that the project may be exposed to. Risk avoidance and risk mitigation planning guarantees that the project is prepared for any foreseeable risks.

Risks can fall into multiple categories: technical, external, organizational and internal. It is important to agree on the level of risk tolerance – what level of risks can be accepted by the project stakeholders? A risk impact matrix can be used as a tool to quantify the impact of specific risks on the project (its scope, budget and schedule), taking into account the individual risk probability. Risks can be prioritized according to their potential implication. Risks whose occurrence would create unacceptable outcomes need to be avoided. For risks where a guaranteed avoidance is not feasible or where the occurrence of the specific risk could be tolerated, risk mitigation steps will be defined that guarantee that the project goals are satisfied.

5 FEATURES OF CENTRAL ATMS

5.1 Technical Requirements

C.1	**Ability to operate concurrently with CENTRACS 2.0 for duration of system migration.**	**Yes, MaxView can operate concurrently with CENTRACS 2.0 for the duration of system migration. MaxView will communicate with those controllers migrated to the MaxView system without interfering with those controllers still communicating with the CENTRACS system.**
1	Central Software shall have the ability to monitor and control all 2070 controllers being used by LFUCG regardless of the manufacturer.	MaxView is capable of monitoring all 2070 controllers, regardless of manufacturer, so long as the controller firmware and communications protocol is support by the MaxView system.
2	**Central software shall have the ability to interface fully with controllers including capability for efficient upload and download of the complete set of NTCIP parameters.**	**MaxView provides a full interface to the supported controllers, including an efficient upload and download of the complete NTCIP parameters.**
3	The Central ATMS Application shall be compatible with Microsoft IIS ver. 8.5 or later with the database hosted on LFUCG's server using Microsoft SQL Server 2014.	MaxView is compatible with Microsoft IIS version 8.5 or later and with Microsoft SQL Server 2014.
4	**The Central ATMS Client shall be Internet browser neutral.**	**MaxView operates in most modern web browsers that support the Silverlight plugin. These include Internet Explorer, Firefox and Safari.**
5	Central ATMS Main Interface shall be a graphical user interface showing the main map and shall support multiple client windows. At a minimum, it shall have direct access to a System Menu, Signal Control Menu, Database Management Menu, Alarms Menu, and Windows Menu.	MaxView provides a modern graphical user interface that includes a main map and allows the user to open multiple client windows. Common operations are easily accessed through a main menu bar and context-based menus accessed via a right mouse click.
6	**Global Alarm Status – The Main ATMS System Window shall have a Notification Area which displays active and unacknowledged alarms as well as an optional feature to send out notifications.**	**The MaxView main windows includes a notification area at the top which displays the number of active, unacknowledged alarms. The MaxView alarm system can be configured to send alarm notifications via email and/or SMS text.**

7	System, Section, Group, and Intersection Tree shall be customizable allowing for search by map, tree, number, groupings, corridors, etc. and to access external links associated with that intersection. Each user shall be able to set up intersection groupings based on their logon id.	The MaxView System Device tree view allows users to customize the grouping of devices within the system. The tree view also provides the ability to search for particular devices based upon criteria such as name, number, etc.
8	**Incident and Traffic Conditions shall be available in real time with the ability to turn on/off in map view.**	**MaxView utilizes Bing Maps as the main map source. These maps include the Bing Traffic Data feed which provides links on the map color-coded according to traffic conditions and a list of current traffic events such as construction, accidents, etc.**
9	Main System Map may support any one of the following sources: Google, Bing, ESRI (preferred), Open Street maps, or other standard mapping source and be able to incorporate LFUCG GIS services layers into the map. The system map shall be intuitive and easy to use providing varying levels of detail depending on the zoom and display options. The user may select one device or multiple devices for viewing at one time.	In addition to Bing Maps, MaxView supports other map sources such as ArcGIS, Open Street Maps and other tiling services. Each user can be configured to use a different map. Users can select one or more devices for viewing at one time.
10	**Intersection View shall show detailed configuration and operational status including plan, phasing, coordination, overlap, pedestrian actuation, left-turn type, optional time-space information between several intersections, etc.**	**The MaxView intersection view shows the detailed configuration and status information for each selected device.** **The Time Space diagram can be opened when multiple intersections are selected.**
11	Intersection View Configuration shall be done internally without the need for additional software. It shall show graphics for all typical operation scenarios and allow for the creation of templates that can be easily copy/paste/modify for similar intersections.	MaxView graphics configuration is included within the MaxView user interface and allows the user to easily configure device graphics. Users can easily save a configured graphic as a template and apply this to additional intersection graphics.
12	**System Status shall be readily available showing server operation, connection status, and user status.**	**MaxView includes a Device Status window that shows the operational status of each device. Additionally, MaxView includes a Device Communications Status window that shows the status of communications to each connected device. A list of users**

		logged into the system as well as a log of server operations and events is provided through the main window.
13	Device and Communication method shall be capable of supporting a variety of controllers deployed in the field conforming to NTCIP 1201 and 1202 mandatory and optional objects.	MaxView includes full support for a number of NTCIP-based controllers such as the ASC/3 and Cobalt controllers. Additionally, MaxView provides a device type of Generic ASC 1202 for supporting NTCIP-based devices which are not yet implemented as a specific type within MaxView.
14	**Device Database Editing and Management shall allow for live editing and upload/download comparisons between the ATMS database and field controller data. Archived data shall be available for comparison, backups, and easily accessible for data retrieval.**	**The MaxView Live Front Panel Editor allows a user to directly edit values in a connected controller without having to perform full uploads and downloads. The MaxView Database Management system provides for full uploads and downloads along with database comparisons. This system also provides a history of controller database interactions and allows a user to easily return to a previous version of the controller database.**
15	At a minimum, the Central ATMS Software shall support any combination of the following communications methods: Ethernet, fiber optic, wireless Ethernet, cellular, Ethernet over copper, serial over IP, Ethernet over dialup, direct serial, and serial via modem.	MaxView supports these communications methods.

5.2 Ability to Adapt to Emerging Technologies

5.3 Successful Deployments

We proudly present the following projects showing our capability to provide large-scale, world-class, modern solutions to agencies that strive for world class operations.

5.3.1 Georgia Department of Transportation

Supply of MaxView Central System, 2070 1C CPU hardware with MaxTime Software, Database Conversion, and Integration Support

Intelight is supplying the Georgia Department of Transportation and local agencies with multiple MaxView central traffic management systems to support over 9,000 traffic signal controllers statewide. The project is also upgrading the existing controller CPU's to an Intelight 1C CPU module with a turn-key deployment including full database conversions, CPU programming, testing, and installing; and MaxView system configuration. We are providing a complete solution that modernizes the State's traffic signal controller hardware and software along with the central system software.

Agencies | Georgia Department of Transportation (and all agencies statewide)
Contact | **Alan Davis, PE, PTOE**
Title | State Signal Engineer
Phone | 404-635-2832
Email | Aladavis@dot.ga.gov
Cost | $12,000,000.00
PM | Mike Clance
Team | Craig Gardner, Tom Stiles, Whitney Nottage, John Privitt, Grant Gardner

The GDOT system being provided requires usability by several local agencies and consultants alike. The system will be configured such that users will see all signals, agencies will have editing rights on their signals, and consultants the state contracts for maintenance will have editing rights on the signals they operate and maintain, while the state will have editing and administration rights on all signals. Being a statewide deployment, Intelight is assisting the state in stakeholder coordination – reaching out to all local agencies around the state to educate the agencies on the system being provided and coordinating the installation. Intelight will be doing the intersection configurations within MaxView including intersection graphics, intersection phasing, intersection grouping, user groups and permissions, alarm configuration, etc.

5.3.2 Utah Department of Transportation

Supply of MaxView Central Software System, MaxTime Local Controller Software, and Traffic Signal Controller Hardware

The Utah Department of Transportation (UDOT) selected Intelight to supply our Central Software System, Local Controller Software, and controller hardware through competitive Request for Proposal process. The MaxView central system is replacing the State's current i2 Central System and will communicate with a combination of Intelight MaxTime, Econolite ASC/3, and Econolite Cobalt controllers. Under this contract the State is also replacing all existing Siemens and Econolite ASC/2 controllers with Intelight ATC controllers running MaxTime local controller software. The MaxView system has been installed and currently has over 1,600 traffic signals.

Agencies | Utah Department of Transportation and all agencies statewide
Contact | **Mark Taylor, P.E. PTOE**
Title | Director Traffic Signal Operations
Phone | 801.887.3714
Email | mark.taylor@utah.gov
Cost | $859.700.00
PM | Tom Stiles
Team | Craig Gardner, Mike Clance, John Privitt, Grant Gardner

UDOT is a nationally recognized for providing world-class operations to the people of Utah through the use of active system and signal management, installing and maintaining innovative products based on the latest technology available, and by "thinking outside the box". Intelight is excited to partner with UDOT to help them continue their vision as well as gain invaluable input for feature development and system enhancements.

UDOT selected Intelight based on our use of current IT industry technology, willingness to collaborate with our customers to drive useful and effective software development, customer based support model, and our longstanding support of open standards such as NTCIP and ATC platforms.

5.3.3 City of Tucson, AZ

Supply of MaxView Central System, Traffic Signal Controllers, Integration Support

Agencies | City of Tucson
Incl. AZDOT Southern Region
Contact | **Michael Hicks**
Title | ITS Manager
Phone | 520.837.6666
Email | michael.hicks@tucsonaz.gov
Cost | $750,000.00
PM | Tom Stiles
Team | Craig Gardner, Mike Clance, John Privitt, Grant Gardner

Intelight supplied the City Tucson with a MaxView central traffic management system to support over 600 Econolite ASC/2 and ASC/3 traffic signal controllers. The MaxView system was installed to fully manage controllers from multiple manufacturers. This open solution allows the City of Tucson to perform a more cost-effective upgrade over competing products of a proprietary nature. Per the agency's request, the MaxView system was easily installed by the customer. In fact, the customer required significantly less support than anticipated due to the simple packaging and ease of the MaxView system configuration. Intelight provided full upload/download support for the Econolite controllers via NTCIP communications for no additional license or development fees. Through this project, Tucson has also begun evaluating Intelight signal controllers running MaxTime local intersection software.

5.3.4 City of Peoria, AZ

Advanced Transportation Controller (ATC) Hardware, NTCIP Compliant Ramp Meter Controller Software, Custom Software and ATC Application Development Services

Agencies | City of Peoria
Contact | **Steve McKenzie**
Title | Assistant City of Peoria Engineer
Phone | 623-773-77944
Email | steve.mckenzie@peoriaaz.gov
Cost | $234,350.00
PM | Tom Stiles
Team | Craig Gardner, Mike Clance, John Privitt, Grant Gardner

Intelight supplied the City of Peoria with a MaxView Central System to communicate with 150+ ASC/2 and ASC/3 Controllers over NTCIP (Full Support). The City of Peoria is now beginning to purchase Intelight Controllers for new signals.

5.3.5 City of Santa Monica, CA

Advanced Transportation Controller (ATC) Hardware, NTCIP Compliant Ramp Meter Controller Software, Custom Software and ATC Application Development Services

Agencies | City of Santa Monica
Contact | **Andrew Maximous**
Title | Traffic Operations Engineer
Phone | 310-458-8411
Email | Andrew.maximous@smgov.net
Cost | $124,430.00
PM | Tom Stiles
Team | Craig Gardner, Mike Clance, John Privitt, Grant Gardner

Intelight supplied the City Santa Monica with a MaxView Central System to communicate with 175 BiTrans 170 controllers over AB3418; added multiple "add-on" features for the customer inclusive in the original price – Q1/2013

5.3.6 Additional Projects

In addition to the projects detailed above, below is a list of additional (but not inclusive) projects. References can be provided upon request.

Agency / Institution	Scope of Equipment/Services
San Clemente, CA	Supply of a MaxView System with 100 Intelight NEMA controllers with MaxTime to replace a longstanding PEEK system and controller installation.
Arlington County, VA	Supply of MaxView Central System and NEMA controllers for 300 intersections.
City of Anaheim, CA	Supply of MaxView Central System to communicate with a variety of controller types. Intelight is adding NTCIP support for VMS signs under this project. Anaheim is unique in that they have been running multiple manufacturers systems for 10+ years.

5.4 Additional Information

5.4.1 How is Proposed Solution Superior to Other Solutions

Intelight's MaxView® Advanced Traffic Management System (ATMS) software is a modern client/server application built using the Microsoft Silverlight and .NET Framework platforms and stores all configuration and logging data in a SQL server database. By leveraging the Silverlight platform, Intelight is able to deliver a true web based thin-client platform with MaxView, while also delivering a rich client experience, including an incredibly responsive main map, multiple client windows and other rich client interactions. MaxView is not adapted from an older legacy system and as such is not constrained by legacy interaction models or design standards, but instead is reimagined to embrace the modern web and modern web technologies.

Out of the box, intersection configuration and integration can begin within an hour of starting the MaxView System installation. Furthermore, MaxView can stream background image tiles from a City-based GIS server, or from Open Street Maps. This feature allows an intersection to be configured in less than 10 minutes.

Following is additional information regarding unique features of the MaxView System as well as additional information describing the overall development process, long-term goals, and innovative, customer service driven culture of Intelight that make MaxView a superior solution.

5.4.1.1 Simple Installation and Deployment

The MaxView server installation is contained in a single self-executing installer that verifies all pre-requisites and then installs the MaxView services and provisions an empty default database. The installer is also used to upgrade the MaxView services and to migrate any data as required.

MaxView server installation can be completed and a fully functional system can be operational in less than 10 minutes from start to finish.

5.4.1.2 Industry Standard Management Tools

As described above MaxView is a modern ATMS system built on proven web technologies. As such the core components and services are simple to deploy, manage and troubleshoot using available off the shelf tools.

All MaxView application and field communications services are hosted within Microsoft Internet Information Server. Microsoft IIS is a leading enterprise ready web server, which securely powers hundreds of thousands of websites every day. As such there are many deployment and monitoring tools that can be employed by a LFUCG or agency as desired. One such tool is Microsoft AppFabric, which provides real-time monitoring and reporting of the MaxView services, and is configured by default during deployment.

5.4.1.3 No Client Installation

As MaxView is a true thin client there is no need to install or configure any client software on the MaxView workstations. The only client requirement is a PC or Mac with a modern web browser and the Microsoft Silverlight plugin. If the Silverlight plugin is not already installed it will be downloaded and installed automatically when the MaxView client is loaded.

As MaxView is web based, there are no ports to configure or additional client application services or components to install or manage with all traffic between the client and server routed over port 80. This also enabled seamless remote connections over existing VPN networks without any advanced configuration.

The MaxView client can also be "installed" onto any number of client machines with a single click from the Web Browser. Once installed the application functions in the same way but is available from the start menu on the client computer.

5.4.1.4 Automatic Client Upgrades

The MaxView thin client architecture enables a seamless auto-upgrade whenever a new server version is deployed. Whether the client is connected through the Web Browser or an installed Client, when a new server version of the data set is detected it is automatically downloaded and loaded in seconds. There is no installer to run and the new version of the client is available within seconds. As the deployed application version is maintained on the server there are no legacy clients to manage or worry about. In this way the IT requirements of managing a MaxView system are drastically reduced.

5.4.1.5 Self-Describing Controller Metadata

When connected to a controller running MaxTime, the MaxView service requests specific information about the set of database tables and objects available within the local firmware when the controller first comes online. In this way, *the controller essentially self-describes the set of database tables and features that it has available when it is first connected to the system.*

This means that the MaxView system is future proof against additional database updates and changes in the field—whenever a new controller firmware is deployed the full set of database tables and editors are automatically available in MaxView® without having to reinstall or update the MaxView® services to support the new database tables and new features in future local software versions.

With this functionality intersections in the field can be upgraded without the worry of coordinating an equivalent upgrade in the central system.

5.4.1.6 Simple Intersection Configuration

- Fully customizable drag and drop based intersection configuration with support for customizable user templates
- Support for multiple status objects including vehicle phase status, pedestrian phase status, phase call status, ped call status, preempt status, detector status and many more.

- Support for automatic detailed aerial photos for each intersection view with support for custom backgrounds if required
- Drag and drop intersection placement on main map for easy system configuration
- Support for customizable intersection templates to easily add new intersections based on existing configurations

5.4.1.7 Advanced Database Editor

- Advanced database editor with support for a Live Front Panel editor that allows a user to see field operating signal timings and full status in real time
- Support to upload and compare field databases on a recurring schedule or one time manually
- Filterable event log of all database upload and download events with change tracking and user comments
- Support to seamlessly switch between an archived server databases and the Live Front Panel editor for a given intersection
- Support to save an existing system database to another controller to easily copy timings and configurations to other intersections across the system.
- Intuitive in line help for all database fields with range checking while entering data
- Support for fully controller driven database editor configuration, which eliminates the need to configure the controller software version as the controller reports the set of available tables directly to MaxView®
- Ability to view local controller stored databases in factory and user folders directly from MaxView®
- Full support to copy and paste between multiple editors and outside programs such as Microsoft Office
- Support to print or export the selected table with one click from the database editor

5.4.1.8 Drag-and-Drop Calendar Based Scheduler:

- Advanced drag and drop calendar based TOD scheduler that supports single commands or commands with advanced recurrences
- Simple drag and drop support to update or move commands to another day or time
- Pre-programmed Quick Commands that can be dragged on to the schedule and moved as needed to simplify programming
- Support for advanced command recurrence including: Daily, Weekly, Monthly and Yearly with configurable end date
- Supports the ability to apply commands at the System, Section or Group level and then override commands at each child level—this allows a user to program the common schedule and then just set the exceptions as needed

5.4.2 Plans for Future Software Upgrades and Product Development

Intelight has spent the past several years investing in features and functionality to match MaxView head to head with major competing projects. Today, with the exception of minor features specific to individual customers (which can be added in a reasonable time frame to comply with customer

needs) MaxView includes the status quo as well as unique and advanced functionality beyond the standard industry products.

Intelight continuously invests in improving the MaxView platform. As a MaxView customer, Lexington-Fayette Urban County Government can expect at least two major feature releases a year that enhance the software by adding additional features and scenarios. Intelight is committed to customer driven development, so sees these releases as a key value add for customers who can help shape the future of the MaxView platform.

For the next year, Intelight is committed to bringing the following innovation to the MaxView platform:

- Advanced signal health analysis platform
    - Supports real time machined learned analysis of several large operation areas including:
        - Timing Health
        - Detector Health
        - Cabinet Health
        - Communication Health
        - Priority and Preempt Health
- Routable Real-time Time Space Diagram
- Replay of signal operation across a given time frame using high resolution Purdue data.
- Advanced if-then-else logic based operation
- Full publish/subscribe based communication protocols to remove 1/second polling of field devices.

5.4.3 Benefits City of Lexington-Fayette Urban County Government Can Expect to Realize within 3 to 5 Years

As discussed above Intelight is committed to maintaining MaxView as the most state of the art central ATMS system. The features described are being driven and sometimes funded by Utah DOT, Georgia DOT, and Minnesota DOT and over the next year will be available to all of our customers in a software upgrade (included under warranty or maintenance contracts). With our key partners and on our own, Intelight plans to continue investment in the platform for the years to come.

Given the rate of accelerating technology change, the modern design and components of the MaxView platform are well position to capitalize on the innovation being driven across the modern web including more and more mobile-based experience. By investing in the MaxView platform Lexington-Fayette Urban County Government can realize these enhancements across their ATMS solutions over the next 3 to 5 years.

To achieve this goal, the MaxView framework was developed as a module system whereas the following components could be individually updated to new technologies over time, thus future proofing the MaxView system as a forward moving, evolving platform. *Intelight does not sell MaxView as a "completed system" rather an off the shelf system that will be constantly improved and adapted to match the dynamic innovations of the traffic signal and information technology industries.*

Major Components:

- Communications Framework (Center to Field Communications);
- Database Platform (Data Hosting and Archiving, Configuration Information);

- Webserver Platform (Hosting and API/Center to Center Interface);
- Software Logic Layer (Features and Operations);
- User Interface Layer (Display and Front End Presentation).

Over the next few years, Intelight anticipates that the LFUCG will also benefit from MaxView by providing:

- Significant reduction in the time spent maintaining system updates and client workstations: MaxView does not require 3rd party or client applications to be installed on client workstations, therefore the system administrator only needs to update the primary server software. – *Available Now!*
- A vendor-customer relationship based on innovation and the desire from both parties to maintain a world class system and signal network with new features, user interface improvements, and prompt, effective customer service that is not governed by a profit driven model. – *Available Now!*
- Smoother and semi-automated workflows for signal flash responses and multi-user interaction. – *Available Now!*
- New HTML5 User Interface – Cross platform presentation layer that is compatible with most popular web browsers, provides a modern, consistent interface (with other web pages and desktop like web applications), one user interface that automatically adapts across multiple device platforms (no need for a separate interface for desktop computers and mobile interfaces, no need for custom android or apple applications) – *Result of upcoming feature work*
- Ability to receiving automated alerts generated from real-time 1/10th second resolution data regarding the health of your system (including signal timing performance, device communications, detector health, cabinet health, etc.); – *Result of upcoming feature work*
- Ability to connect to any new controller models added to the system for no additional fee; – *Result of upcoming feature work*

5.4.4 Software Licensing

Intelight's business model is built on "all-inclusive pricing." Therefore, CCTV, VMS, Traffic Responsive, and future software modules are all included under one license, in one software version. In addition, all customers receive the same software build with all components and functionality. Intelight does not release custom software versions or lock or disable feature functionality between different customers. This allows us to serve all our clients with one unique version and provides easy management of all software updates across the board.

5.4.4.1 Software Updates

All software upgrades, including maintenance and functionality upgrades will be provided to the Agency at no cost during the initial and extended warranty periods. The agencies will be automatically notified when a new software release is available. The notice will include a description of the changes to the new version and will provide a download web-site link (user account required) for the agency to obtain the software and release notes.

To update the system software, the user downloads the single, executable file from Intelight's website. After confirming an installation prompt, the system begins to update and typically updates in as little as 5 minutes.

6 FEATURES OF THE LOCAL CONTROLLER AND SOFTWARE

Our team is proposing the Intelight 1-C CPU with Linux operating system and the latest version of MaxTime local controller software. Our software and hardware solution meets, and exceeds the required functionality within this proposal.

6.1 Technical Requirements

C.3	**Compatibility with selected central system**	**MaxTime is compatible with the proposed central software, MaxView, with 100% functionality**
C.3	Meet current ATC standards	MaxTime meets ATC standard v5.2b and draft standard v6
1	**The unit shall provide similar functionality as the Intelight 2070-1C CPU module running the latest version of MaxTime (or equivalent).**	**Intelight is proposing the Intelight 2070-1C CPU module running the latest version of MaxTime.**

7 COST PROPOSAL

Below is a table of the 6 items in the Scope of Requested Services

	Qty	per unit	Extended
1. **Central ATMS Installation** – Vendor shall provide an ATMS system capable or running up to (500) field devices (controllers) and coordinate with TE and Information Technology (IT) staff in installing the required software on virtual servers currently at LFUCG. If the ATMS is different than CENTRACS 2.0, both systems will need to run together throughout the system migration to ensure continuous system integrity.	500	$325	$162,500
2. **Data Conversion** – Vendor shall convert individual controller data stored in the central ATMS from OASIS to the compatible format. There are approximately (375) signalized intersection controllers, (15) lane use controllers, and (12) combination intersection/lane use controllers where three center lanes shift throughout the day.	402	$250	$100,500
3. **Local Controller Software and Rack Mounted CPU Modules** – Vendor shall provide no less than (425) 1-C CPU modules with the selected Linux based, local software pre-installed. Software and modules shall be compatible with the selected central ATMS and meet current Advanced Transportation Controller (ATC) Standards. Supplier must be able to deliver at least (50) modules per month until all are received. Vendor is not expected to upload individual intersection data or perform CPU module change-outs other than for instructional purposes.	425	$1260	$535,500
4. Testing and Training – Vendor shall test and confirm that the central ATMS functions and operates in accordance with the characteristics and specifications as promised. The vendor and/or system developer shall provide on-site training and a written User's Manual for all ATMS and Local Equipment. The manual shall include system drawings, network diagrams, administrative instructions, operator instructions, and trouble shooting.	1	$8,000	$8,000

5. **Develop Draft Systems Acceptance Test Plan and Training Material** – The vendor shall develop and submit for approval a System Acceptance Test (SAT) Plan for the ATMS. The SAT shall be conducted by the Vendor and LFUCG Traffic Engineering personnel at the TMC where the ATMS is hosted as a part of the implementation in accordance with the approved delivery and test procedures.	1	$11,000	$11,000
6. **Conduct System Acceptance Testing and Training with LFUCG Staff** – The vendor shall conduct the SAT at the LFUCG TMC and provide user training for the TE personnel upon successful completion of the System Acceptance Test. deliverables: Final System Acceptance Test plan, Final Training Materials, Conduct Training Deliverables: Final System Acceptance Test plan, Final Training Materials, Conduct Training. **Deliverables:** Final System Acceptance Test plan, Final Training Materials, Conduct Training	1	$18,000	$18,000
Total			$835,500

INTELIGHT
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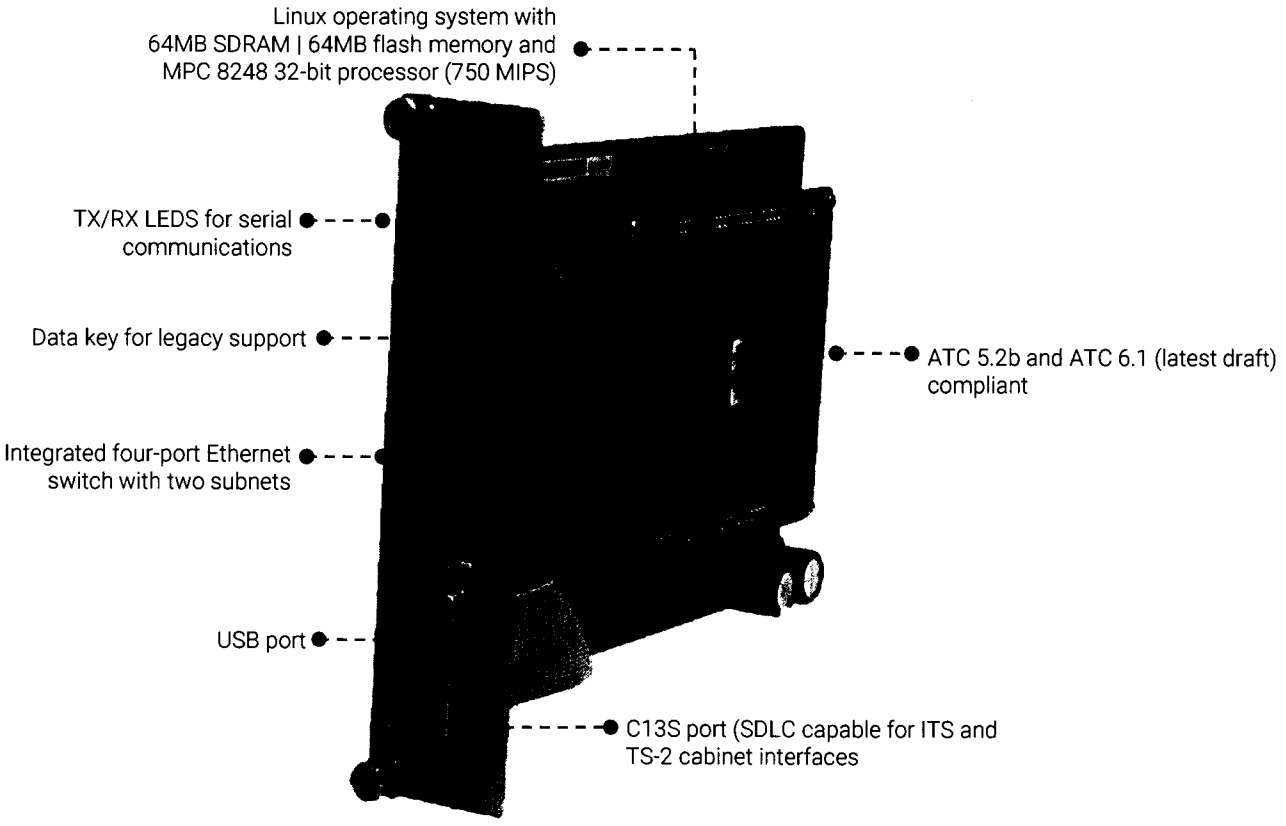
2070-1C

CPU Carrier Board Module

Overview

Intelight's 2070-1C can update your 2070L and 2070E controllers to Intelight's ATC-compliant Linux hardware platform. Upgrading your controller maintains the investment made in the existing infrastructure while taking advantage of the current standards platform and ATC/Linux-based controller software offerings.

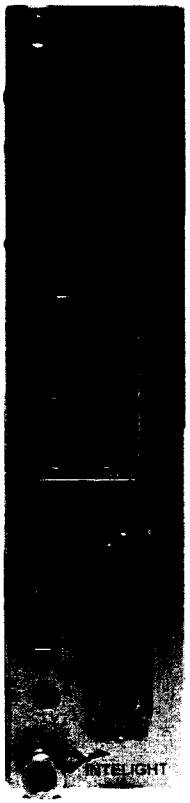


Specifications

- Compliant with latest ATC 5.2b, ATC 6.1 (latest draft)
- Compliant with Caltrans 2009 TEES (2070-1C)
- Open Linux O/S architecture for hosting various 2070 software applications
- Runtime libraries per ATC5.2b (ATC 6.1 latest draft)
- Full support for all required ATC 6.1 software drivers under the latest Linux kernel release v 3.0
- Environmentally hardened (operating ambient temperature from -40C to +80 C)

Features

- 2070 slot carrier module with front panel support for
  - 2070 standard 1X module
  - 3.3v DataKey socket
  - 4x RJ45 Ethernet ports
  - TEES compliant D type 25pin C13S port
- Engine Board CPU Module
  - Fully 2070 hardware and software compliant with latest national ITE/NEMA/AASHTO 2070 standard
  - Motorola (Freescale) MPC8248, 32-bit, 400 MHz, PowerPC instruction
  - 64MB of DRAM
  - 64MB of Flash Memory
  - 7 serial ports (SP1-6, SP8)
  - RTC time reference with extended hold up



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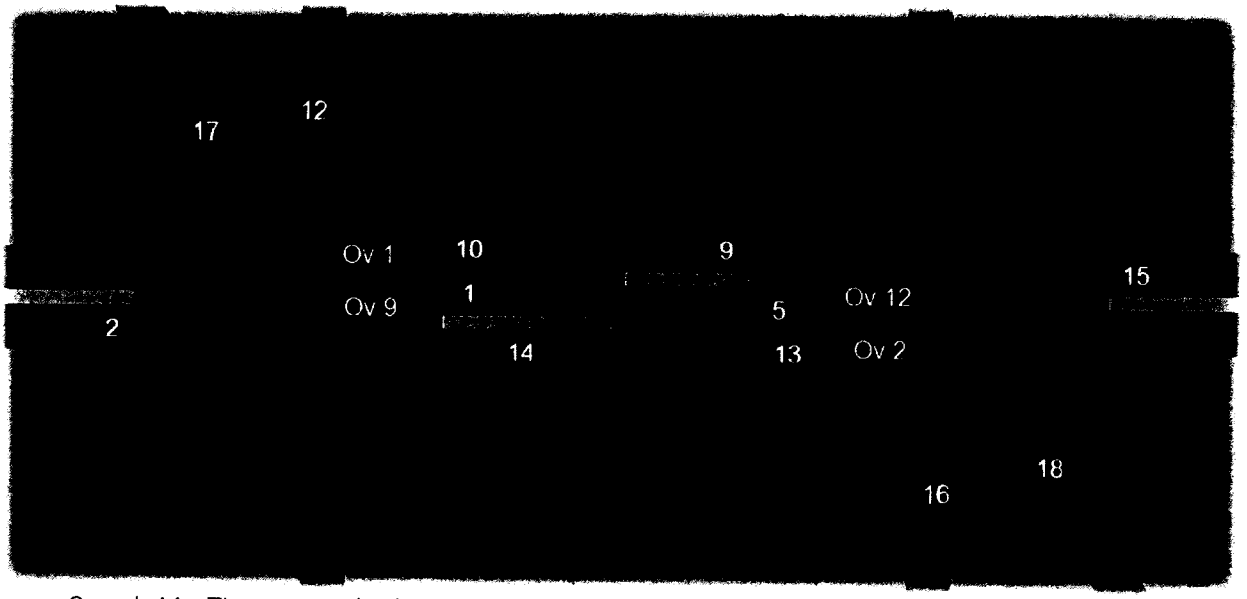
MaxTime

Local Controller Software

Overview

Using the Linux platform, Intelight's award-winning MaxTime local controller software was built directly from the current NTCIP, NEMA, MUTCD, and FHWA (including NTCIP v2.06 and ATC v5.2) standards as opposed to adapting older software to the newer standards. In addition to being the most complete NTCIP compliant Linux-based platform in the industry, MaxTime has been intuitively designed with logical menu structures and providing built-in user functions that typically require complex logic strings or modified controller operations. Contact Intelight today to see how MaxTime can help update your signal operations system to 21st century technology.



Sample MaxTime status display as viewed from front panel, tablet or smartphone (no app required)

Highlights

- Monitor and configure timings wirelessly from a laptop, tablet, or smartphone without database editor or third party software
- Runs exclusively on Linux O/S
- Supports serial and/or Ethernet communications
- 40 Phases, 16 Rings, 20 Sequences, 32 Overlaps
- 10 phase tables, 10 detector tables (select by TOD)
- Built-in master/closed loop functionality (included)
- Peer-to-peer communications (included)
- Locally adaptive transit prioritor (included)
- Full NTCIP MIB supplied with software license
- Preconfigured or user-defined cabinet support (332, 336, TS-1, TS-2, ITS)

Revised 02/2017

Unique Functionality

- Peer-to-peer communications between controllers
- Intuitive and advanced user logic programming
- Onboard web server (edit database through web browser, no proprietary database editor)
- Monitor and modify timings from Windows and Apple computers, IPADs, tablets, smartphones without special software
- Store and switch between hundreds of timing databases on controller
- Easy, automated software updates via network or USB flash drive (no need for terminal servers or proprietary installer programs)

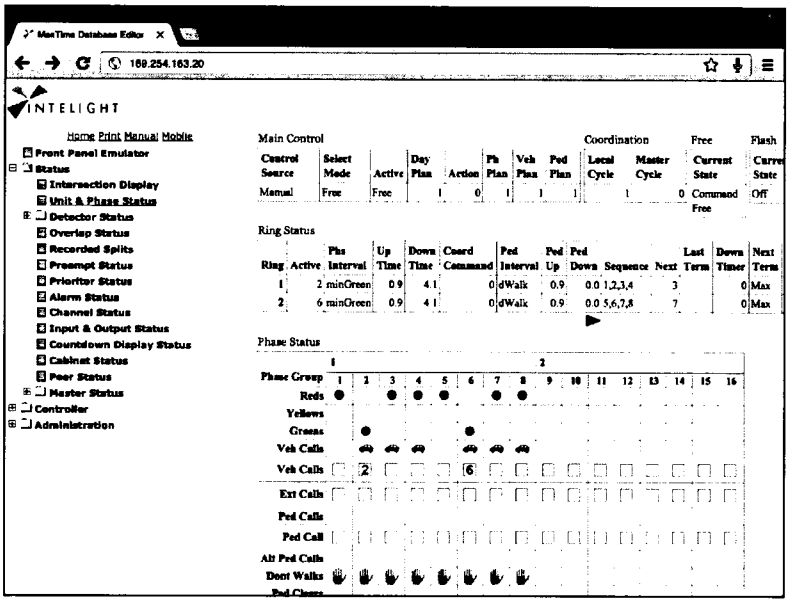
Support Advanced Intersection Configurations

- Single Point Urban Interchange (SPUI)
- Continuous Flow Intersections (CFI)
- Diverging Diamond Interchange (DDI)
- Compound intersections with multiple approaches
- Light Rail Transit (LRT) applications
- HAWK/pedestrian hybrid beacons
- Preemption routing

MaxTime front panel user interface

Features and usability

- Extended pedestrian features including: delayed walk, delayed, green, and alternate walk/FDW timing per 2009 US MUTCD
- Multiple overlap types including :
  - NTCIP: types 1 through 3
  - Flashing Yellow Arrow (FYA) displays
  - Flashing Red Arrow (FRA) displays
  - Protected/Permissive Canadian operation
  - Light Rail Transit (LRT) bar indications
  - Pedestrian (normal and minus green/yellow)
  - Right-turn with conflicting pedestrian
- 128 independently programmable coordinated or free timing patterns
- Master/slave closed loop operation included
- Linux-based (facilitates memory and processor power expansion in future)
- Advanced phase Intervals
  - Min green 2
  - Pre-green/walk,
  - Delay green/walk
  - Pre-clearance
  - Alternate pedestrian times (extended push time)



Sample MaxTime status display as viewed from front panel, tablet or smartphone (no app required)

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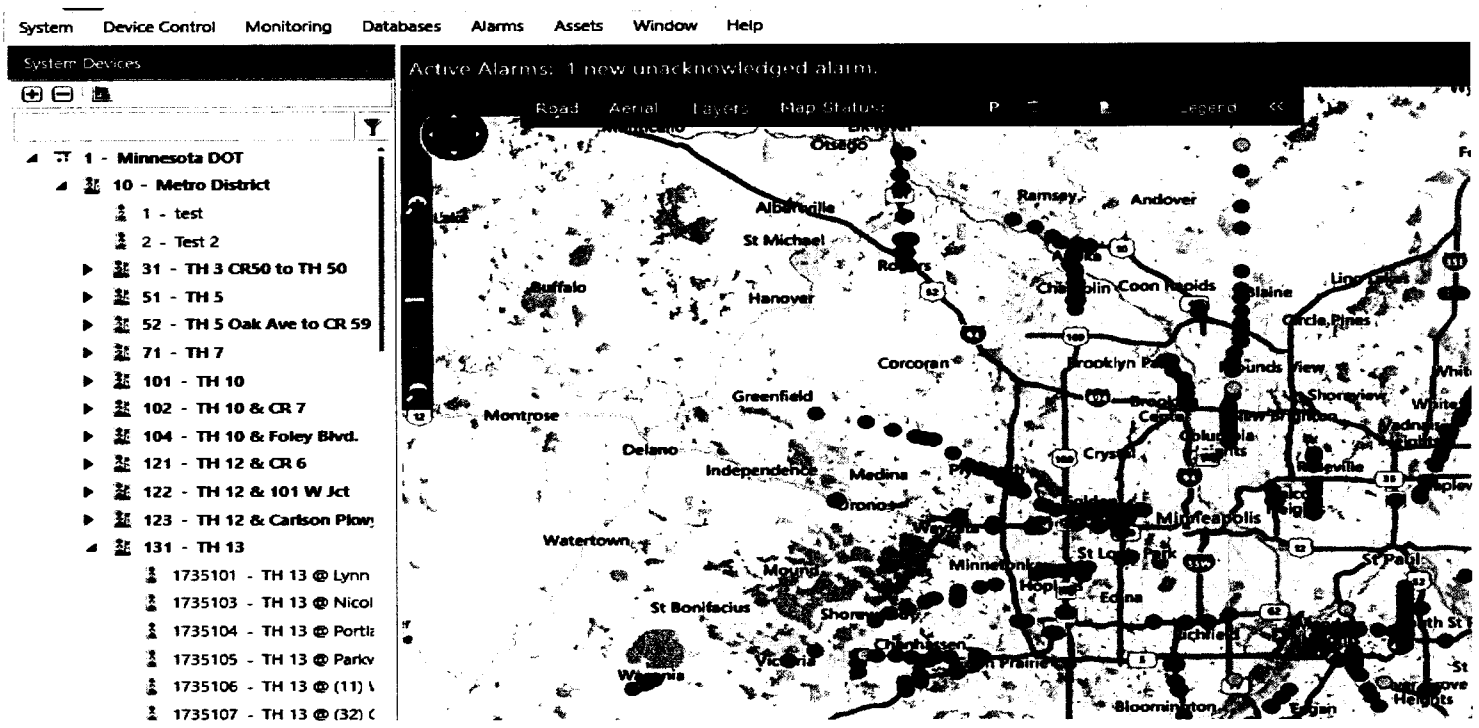
MaxView

Advance Transportation Management System

Overview

- Fast installation with less configuration
- • Users Simply connect to the network and direct their browsers to the System server.
- • No Software to Install on Client User PCS Lower cost & More Scalable
- • Less maintenance - the constant maintenance of distributed PC operating systems is eliminated with Thin Clients
- • MaxView's flexible server configuration allow greater scalability. Improved At-A-Glance Management
- • Traffic and Incident Information is displayed on the map without additional cost or plug-ins
- • Panoramic and camera views can be displayed at the intersection levels
- • Split Monitor that operates in FREE
- • Real-time Time/Space Diagram



Highlights

- Manage your entire traffic network from a real-time map
- All servers and controllers in one tree
- See which devices are online and follow graphically the network path from the devices back to servers
- User and group level access management

Multi user

- Simultaneously connect two or more system servers
- Switch between your sessions using a mouse click or keystroke

Instant graphs and reports

- MaxView includes online real-time data graphs and usage charts, with the ability to do trend analysis

Event Logging

- MaxView retains and displays a history of system events that can be used to monitor operations and/or troubleshoot

Revised 02/28/2017

Unique Functionality

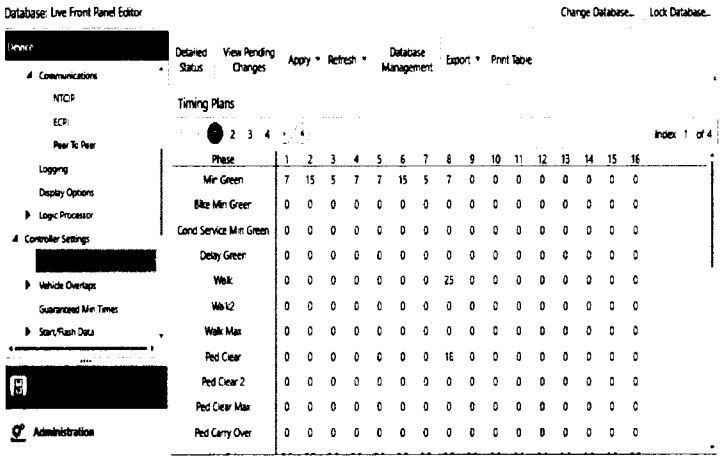
- Easy to configure maps; no external programs necessary
- Expanded status displays and event monitoring
- Outlook style time of day scheduler
- Day, month and timeline views
- Drag and drop scheduling
- Modify multiple intersection timings from single screen
- Real-time split monitoring in Coordination and Free
- Real-Time analysis tools and event monitoring

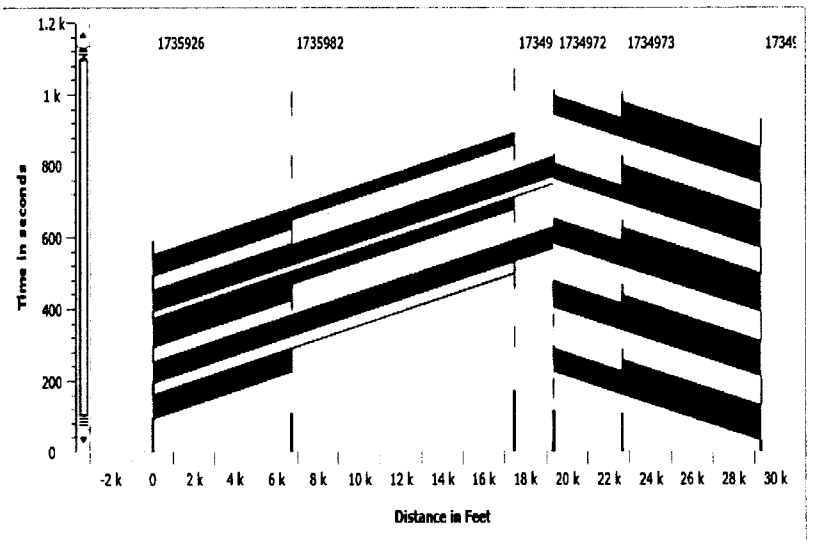
Support Advanced System Configurations

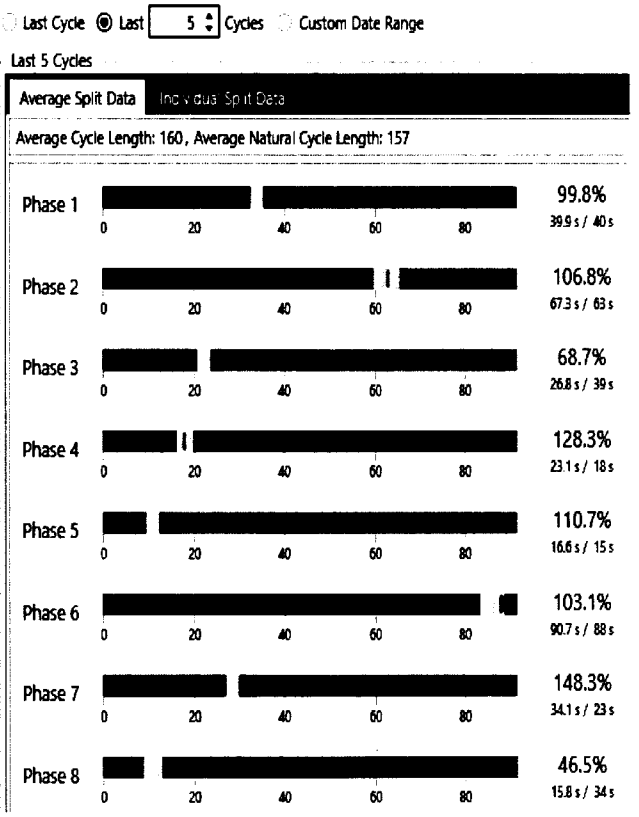
- Ability to embed hotlinks and shortcuts into the intersection displays and tabs
- Custom user configurations for maps based on user
- Dynamic status views by zoom level

Features and usability

- Time Space Diagram
- Split Monitor
- VOS graphing
- Event Monitoring
- Alarms and Alerts







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Traffic Control Products

INTELIGHT
THE INTELLIGENT TRAFFIC SOLUTION

STANDARD WARRANTY
SOFTWARE PRODUCTS

WARRANTY

Intelight warrants that this Software product will perform substantially in accordance with the accompanying written materials for a minimum period of 3 years from the date of receipt.

Intelight does not warrant that the operation of the Software will be uninterrupted or error free, and any support services provided by Intelight shall be substantially as described in applicable written materials provided to Licensee by Intelight, and Intelight support engineers will make commercially reasonable efforts to solve any problems. In the event that this software product fails to execute its programming instructions, Licensee's exclusive remedy shall be to return the software to Intelight obtain replacement(s).

LIMITATION OF WARRANTY

To the extent permitted by applicable statutory law, Intelight makes no other warranty, either expressed or implied, with respect to this Software product.

SUPPORT HELPDESK

Intelight will make available for the term of this Warranty, during normal business hours of 8AM to 5PM PST Monday to Friday, a telephone and email helpdesk facility for the purposes of:

(a) assisting the Customer with the proper use of the Software;

(b) determining the causes of errors in the Software; and/or

(c) fixing errors in the Software as reasonably possible.

RESPONSE AND RESOLUTION TIMES

Intelight will use all reasonable endeavours to respond to requests for Services made through the helpdesk for the duration of this Warranty; and use all reasonable endeavours to resolve issues raised by the Customer, promptly and in accordance with the following response time matrix.

Severity	Examples	Response Time	Resolution Time
Critical	System is unavailable and users cannot log in. Multiple acceptance test cases fail.	4 hr	3 business days Hotfix Release
Serious	Intersection polling fails repeatedly throughout a 24 hour period or product crashes	6 hr	5 business days Hotfix Release

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	during commonly used scenarios and acceptance test case fails.		
Moderate	Product crashes or does not function as expected during edge case or rarely used scenarios but some acceptance test cases fail.	24 hr	10 business days Hotfix Release
Minor	Product occasionally does not work as expected during edge case scenarios that to not block core acceptance test cases.	24 hr	3-6 months Next Major Release

All claims under this Warranty must be made in writing to Intelight and a support ticket number (SN) must be obtained. Upon issuance of a support ticket Intelight support engineers will make commercially reasonable efforts as describe above to resolve the issue.

HOTFIX RELEASE

Intelight will for the lifetime of the product, as needed to address product defects,

- provide copies of all such software Hotfix Release to the Customer promptly following the general release of the relevant Hotfix Patches to the customers; and,
- apply such Hotfix Release to the Software promptly following the general release of the relevant Hotfix Release to the customers of the Supplier through remote access

If the hardware or operating system in use by the Customer is deemed not to be sufficient for installation of the Hotfix Release, then the Customer shall be responsible for the cost of any new hardware or software as may be required.

MAJORE RELEASE UPGRADES

Intelight will for the term of this Warranty,

- give to the Customer reasonable prior notification of the general release of an Upgrade of the covered software products.
- provide copies of all such software Upgrades to the Customer promptly following the general release of the relevant Upgrade to the customers; and,
- apply such Upgrades to the Software promptly following the general release of the relevant Upgrade to the customers of the Supplier through remote access or on-site support if required.

If the hardware or operating system in use by the Customer is deemed not to be sufficient for installation of the Upgrade release, then the Customer shall be responsible for the cost of any new hardware or software as may be required.

Statement of Warranty
Standard

INTELIGHT
THE INTELLIGENT TRAFFIC SOLUTION

LIMITS OF COVERAGE

Intelight will not be held liable to the purchaser or any other party for any incidental or consequential damage or loss resulting from the failure of the covered product. The total liability of Intelight Inc. shall not exceed the amount of the purchase price of the covered product. The sole remedy of the purchaser shall be repair or replacement of the covered product as described above.

This Agreement does not include repair services due to damage caused by rain, fire, flood, lightning, tornado, windstorm, hail, earthquake, explosion, smoke, aircraft, motor vehicle, collapse of building, strike, riot, power failure or fluctuation, or other case originating by reason of other than normal operation of the software, or the Customers negligence or misuse of the software.

This Agreement does not cover support, repair or warranty of any hardware or 3rd party software installed as part of the Software.

City of Lexington, KY

Accepted By: **Intelight Inc.**	Accepted By:
Signature: [signature]	Signature: _____
Name: Scott Carlson	Name: _____
Title: Regional Manager	Title: _____
Date: 8-16-17	Date: _____

Intelight, Inc.
3450 S Broadmont Ste 126. Tucson, Arizona 85713
Tel: +1 (520) 795-8808, Fax: +1 (520) 795-8811

INTELIGHT

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To Whom It May Concern

Subject: Statement of Warranty April 12, 2017

Dear Valued Customer,

This letter is to inform Customers about the warranty terms and conditions of our products.

Warranty: Intelight Inc. warrants our products to be free of defects in material and workmanship for the standard period of two years following delivery. Should a defect occur in a product covered by warranty and during the warranty period, Intelight Inc. will repair, or if repair is not possible, replace the covered product.

Exclusions: This warranty does not cover loss or theft, nor does coverage extend to damage caused by misuse, abuse, unauthorized modification or tampering, improper storage, improper installation, lightning strike, power surge, flood, other natural disasters.

Remedy: All claims under this warranty must be made promptly through an authorized dealer or Intelight's website: www.intelight-its.com. Once approved, the purchaser will be issued a Return Material Authorization from Intelight Inc. Once received, Intelight will, at its option, repair or replace any parts found to be defective. All transportation costs associated with the repair or replacement of covered product to a repair facility designated by Intelight Inc. are the responsibility of the purchaser.

Limitation of Liability: Intelight Inc. will not be held liable to the purchaser or any other party for any incidental or consequential damage or loss resulting from the failure of the covered product. The total liability of Intelight Inc. shall not exceed the amount of the purchase price of the covered product. The sole responsibility of Intelight Inc. shall be repair or similar replacement of the covered product as described above.

Out of Warranty Returns: If a Customer chooses to return a product manufactured by Intelight, Inc. that is out of warranty (either by date or specific problem), a fee not less than $100.00 will be charged in addition to return shipping charges. The Customer will then be notified by quote for approval of any additional charges to repair or replace said unit. At its sole discretion, Intelight may deem a returned product "Out of Warranty" if the purchaser or authorized dealer does not confirm the product is malfunctioning prior to the return.

Sincerely,

Sue Johnson

Sue Johnson
Quality Manager

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