



LAKE COUNTY FLORIDA

MODIFICATION OF CONTRACT

1. Modification No.: 1 Effective Date: 25 May 16	2. Contract No.: 16-0218 Effective Date: 25 May 16
3. Contracting Officer: Susan Dugan Telephone Number: (352) 343-9768	5. Contractor Name and Address: Metric Engineering Inc. Attn: Dale Cody, PE, PTOE 615 Crescent Executive Court, Suite 524 Lake Mary, FL 32746
4. Issued By: Procurement Services Lake County Administration Building 315 W. Main St., Suite 441 Tavares, Florida 32778-7800	
6. SPECIAL INSTRUCTIONS: Contractor is required to sign Block 8 showing acceptance of the below written modification and <u>return this form to address shown in Block 4 within ten (10) days after receipt</u> , preferably by certified mail to ensure a system of positive receipts. Retain a photocopy of the signed copy of this modification and attach to original of contract, which was previously provided.	
7. DESCRIPTION OF MODIFICATION: To correct a scrivener's error, substitute the attached scope of work that was included in the initial solicitation document for the scope of work initially included as Exhibit A of the executed contract.	
8. Contractor's Signature REQUIRED Signature: <u>[Signature]</u> Title: <u>SVP</u> Date: <u>7/27/16</u>	9. Lake County, Florida By: <u>[Signature]</u> Senior Contracting Officer <u>27 July</u> Date
10. Distribution: Original – Connie Rogers, Finance Copies - Contractor Bid File	

ATTACHMENT 1
LAKE SUMTER METROPOLITAN ORGANIZATION
Scope of Services
Intelligent Transportation System (ITS) Master Plan

1.0 PURPOSE

The Lake Sumter Metropolitan Planning Organization (LSMPO) is requesting proposals from qualified consultants to provide professional services for developing an Intelligent Transportation System (ITS) Master Plan in the Lake County area. This master plan will evaluate the current systems in the Lake County Area (“county”), determine future needs and formulate an implementation strategy for the future development and maintenance of the ITS. The Master Plan shall incorporate various methodologies accounting for emerging technologies in vehicles and devices used in the transportation infrastructure and communication system in conformance with the national, statewide, and regional architectures.

The Consultant will provide a final comprehensive report that will contain all essential technology information and recommend a system-wide implementation methodology. The Plan shall be in sufficient detail to format a sound basis for design, plans specifications, and estimates to phase implementation of the projects. The report shall contain all necessary background research, technical analysis, and coordination with local and regional agencies.

A detailed list of services is provided under the Section 2.0 Consultant's Tasks.

2.0 CONSULTANT'S TASKS

Task 1-Determine ITS Vision, Goals and Objectives

The Consultant will determine an ITS Vision, Goals and Objectives for the project. The LSMPO 2035 Long Range Transportation Plan (LRTP) goals and objectives, the LSMPO Transportation Improvement Program (TIP) Report, Florida Department of Transportation (FDOT) Transportation System Management and Operation (TSMO) plan and FDOT District 5 ITS Architecture/System Engineering Plan (SEMP) will serve as supporting document for the development of this task. Other documents or resource materials that are applicable to this task shall also be utilized. The project will enable emerging technologies in social media and “Big Data” as part of the vision to meet the goals and objectives; and, establish a business case for investments in ITS. The Goals and Objectives shall be based on the National ITS Architecture.

As part of this task the Consultant will work with the LSMPO staff to establish a Steering Committee for the project consisting of local stakeholders identified by the LSMPO, local municipalities and transportation agencies. The Consultant will meet with the stakeholders on a periodic basis to familiarize them with the basic concepts of ITS and will solicit their guidance in the development of the ITS Vision,

Goals and Objectives.

In addition to creating a vision, goals and objectives for the ITS Master Plan, the Consultant will establish a **Business Case** for investing in technology. Cost-benefit analysis, case studies and lessons learned from the ITS industry will be summarized to show that ITS strategies are a wise funding choice and have safety, mobility, environmental and social benefits.

Task Product

The Consultant will summarize information from the documents and resource materials described above with preliminary Task 2 information regarding Existing Conditions, Infrastructure and Inventory to facilitate a discussion with the Steering Committee. The ITS Vision will be initially developed and then supported by measurable goals and objectives.

LSMPO Responsibility

The LSMPO will make available to the Consultant, upon request, any data information or resources available with the LSMPO pertaining to the work to be performed under this Task; and aid in the identification of similar products with the LSMPO stakeholders or members of the Steering Committee. LSMPO will review such documentation and provide comments, where applicable.

Task 2 - Document Existing Conditions/Infrastructure

The Consultant will document the existing conditions of ITS related systems and networks currently deployed and planned in the County. The Consultant will document and/or evaluate transportation systems that are relevant to the plan. Work shall include the following:

- Evaluation of the Advanced Traffic Management System (ATMS) and the equipment currently in use;
- Identification of major traffic generators;
- Identification of park and ride facilities;
- Identification of inter-modal facilities;
- Identification of evacuation routes.

In addition the Consultant will document:

- The communications systems and networks that are used by local municipalities and modal agencies. Systems may include traffic signal interconnections; wireless networks, radio systems and other potential communications networks.
- The availability of fiber and conduit in the Florida Department of Transportation's infrastructure running throughout the county. The Consultant will conduct a qualitative assessment of the adequacy of these different systems.
- The agreements, protocols and procedures for data collection and dissemination between the municipalities and modal agencies; including ways that transportation related information is disseminated by information service providers (ISP's) to travelers in the county. This documentation will identify the sources of information used by each of the ISP's.
- Where and if ITS is considered and included in recent transportation studies, such as in the LSMPO's 2035 Long Range Transportation Plan, and other programmed construction projects that include ITS.

Additionally, the Consultant will document the information flows associated with the identification and response to traffic incidents in the county. This will include the nature of the information exchanged and the media that are used for the exchange of information among the following organizational units:

- Lake County 911/Communications Center
- Lake County Sheriff's Office

- Lake County Fire Rescue
- Lake County Emergency Medical Services
- Lake County Public Works
- Lake County Emergency Operation Center
- Florida Highway Patrol
- Florida Department of Transportation
- Other municipalities and multi-modal agencies including, Transit within Lake County

Task Product

The Consultant will document all existing traffic control and ITS/ATMS devices, infrastructure and policies currently in use or planned in the county. A full evaluation of the functional components of the transportation network and organizational units described above will be conducted.

Documentation will include the condition, capability, and operability with ITS standards. The documentation and evaluation will also inventory the different Geographic Information Systems (GIS) and schemes for data collection, management, reporting and archiving. This information will be used for conceptual planning. In addition to documenting the relevant transportation systems, the Consultant will also document the communication systems and networks that are used by local municipalities and the different modal agencies.

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task. The LSMPO shall review such documentation and provide comments, where applicable.

Task 3 - Identify Transportation ITS Needs

The Consultant will use a combination of Task 1: ITS Vision, Goals and Objectives and Task 2: Existing Conditions/Infrastructure to identify deficiencies in the county's transportation and ITS systems. The Consultant will utilize comments received from the Steering Committee, and through the assessment of information provided by the County and local municipalities describing the existing conditions. Findings will be summarized in an easy to interpret format that lends to the identification of relative priorities for each of the identified problems and needs.

The Consultant will include discussion of a Traffic Management Center (TMC), focusing on location, type, size, and recommendations and requirements based on the County's present and future needs. Discussion will include information regarding central software and specific elements of a TMC, such as servers, video walls, encoders/decoders, workstations, racks, switches, etc. Further information such as capability of the TMC, detailed list of required equipment for a functional TMC, staffing needs, staff roles and responsibilities, maintenance costs, and cost estimates, shall also be included.

Task Product

The Consultant will document the findings of this task in a Technical Memorandum; in which, a thorough discussion and review of all transportation, ITS and TMC needs shall be included. The document will include identification and justification for such needs, which are most applicable to the function, operation and geographic needs of the county.

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task. The LSMPO shall review such documentation and provide comments, where applicable.

Task 4 - Identification of Applicable ITS Strategies

The Consultant will review the transportation problems and needs identified in Task 3: Identify ITS Needs. This review will determine the nature and cause(s) of each problem or need, and determine if there are any candidate ITS improvements or strategies that can address or mitigate the problem or need. The Consultant will consider the potential for future technologies and how they may be utilized to meet the needs of the county. Potential transit related ITS strategies shall also be considered. After candidate ITS improvement strategies have been identified, the candidates will be screened by the Consultant to establish an initial priority for each of the projects. Where possible the anticipated benefits and life cycle cost of each candidate will be quantified to aid in comparison.

The Consultant will propose strategies to document operations and maintenance needs, define performance requirements and identify existing and future ATMS deployment on Lake County arterial roadways. This plan will determine the cause of each transportation problem and identify candidates for ITS improvement or strategies to help improve traffic conditions.

Part of this approach will be to utilize, by linking and managing an ITS network with an ATMS system, Transportation System management and Operations (TSM&O) principles. TSM&O is a performance driven approach for solving traffic related problems and minimizing congestion, through the utilization of ITS, signal system control and other management and operational strategies to locate and correct the causes of delays in real time. The objective of the TSM&O program is to improve the efficiency of the existing transportation network through performance monitoring, active arterial management and coordinating freeway and arterial management strategies, such as incident management. The TSM&O program also considers future technologies and the importance of improving the efficiency of a system.

Task Product

The Consultant will submit strategies as a Technical Memorandum documenting the process used to determine the needs and identifying the potential ITS solutions.

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task. The LSMPO shall review such documentation and provide comments, where applicable.

Task 5 - Regional ITS Architecture (RITSA)

The Consultant will refer to the FDOT District 5 Regional Architecture in recommending implementation of improvements. The Regional Architecture helps to define the elements of the ITS system and the standard information that is exchanged between these elements.

The Consultant will work with the LSMPO staff and the Steering Committee to determine the capabilities that are relevant to the county's problems and needs, and to customize these capabilities to suit the county. The Consultant will work with the local governments and agencies to develop an architecture that reflects

their needs.

The Consultant will review both the existing National ITS Architecture for identification of any new applicable market packages as well as the existing Statewide Florida ITS Architecture (SITSA) as it applies to Lake County. The State of Florida has an existing process for updating the SITSA through the Change Management Board (CMB), the Consultant will discuss with both the steering committee and the FDOT ITS representative(s) the process by which any updates to the SITSA are considered by the CMB.

Task Product

The Consultant will provide a Technical Memorandum documenting the review and evaluation of the county's Regional ITS Architecture (RITSA).

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task. The LSMPO shall review such documentation and provide comments, where applicable.

Task 6 - Concept of Operations

The Consultant will provide a Concept of Operations (CONOPS) that defines the roles and responsibilities for maintenance, operation and management of ITS in the county. Including, the level of information sharing, status and control between agencies.

The Concept of Operations (CONOPS) provides an overview of the project/system to be deployed. Specific details as to the current system, the transportation situation being addressed, identification of any desired changes, assumptions and constraints or operational issues, specifics on using/operating the project/system, methods to train and involve stakeholders, and requirements for project/system support and maintenance. In order for the CONOPS to be most effective, the document shall be updated as elements change are added or deleted. Stake holders, who will have an interest in or participate in the project or system, will be consulted to determine their needs and preferences.

The CONOPS will summarize the needs and preferences of each stakeholder and how they will interact and utilize the project/system. In some instances where conflicts between the needs and preferences of various stakeholders arises, the CONOPS document will address these conflicts and document the resultant outcome (which items will be implemented by the project or system and which items have been considered but will not be included). Ultimately, the CONOPS will serve as a record of the project/system needs, requirements, interactions, agreements and constraints in regard to all parties involved from the conception through maintenance of the desired product.

The Consultant will meet with each of the stakeholders upon project award to discuss their project roles and needs; to determine the current state of the anticipated deployment of any proposed ITS projects. This assessment will enable the Consultant to determine if any suggestions can be made regarding possible change to technologies or operational concepts described being planned for deployment, which could provide equal or better results with less initial and future costs. Suggestions will be forwarded to the Project Manager for consideration and any approved changes would be added to the Master Plan document.

Task Product

The Consultant will update the Concept of Operations (CONOPS) and Requirements document.

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task. The LSMPO and stakeholders will provide approval for any suggestions made by the Consultant for the completing the CONOPS.

Task 7 - Prioritized ITS Master Plan

The Consultant will develop a prioritized ITS Master Plan that is based on the information obtained from Task 1- 6 and from the Steering Committee input. The plan will describe the existing ITS systems and projects programmed in the TIP. This will define the baseline conditions of the ITS Master Plan. Using information collected from previous tasks, a list of potential ITS projects will be developed to address deficiencies in the existing and planned infrastructure consistent with the ITS Vision, Goals, and Objectives from Task 1. The potential projects will take into consideration current systems found to operate with legacy equipment and are found to be difficult to maintain or are in need of replacement or modernization; as, well as new systems to address identified Transportation ITS needs.

To prioritize the list of potential ITS projects, the Consultant will develop screening criteria and apply this criteria to each of the projects. The screening criteria will be defined with the Steering Committee's input and will include factors such as:

- Meet ITS Vision and Goals
- Meets identified need
- Mitigates and identify transportation problems
- Improves safety of the transportation network
- Improves dissemination of transportation related information
- Improves identification and response to traffic incidents
- Reduces recurring congestion along arterial systems
- Connections to other alternate facilities for diverting traffic during incidents
- Sustainability
- Emerging technologies
- Life cycle cost, short and longer range staffing requirements
- Consistent with Regional/National ITS Architecture
- Bid Data

Each of the defined screening criteria will be organized into a screening matrix where numerical scales will be assigned for each potential project. The resulting matrix will become a tool for prioritizing the list of potential projects. The Consultant will meet with the Steering Committee to discuss the results of the screening process and to present the prioritized list of projects for approval and incorporation in the ITS Master Plan.

Following the screening process, the Consultant will develop an ITS Deployment Plan identifying the recommended implementation timeline e.g.:

- Short Term or immediate activities 1-5 years.
- Long Term 6+ years for projects.

The Deployment Plan will also provide an assessment for each project summarizing information, such as project benefits, assumptions, cost estimates and potential funding sources or cost sharing recommendations.

- Project description
- If needed, level of SEMP required
- Benefits
- Assumptions
- Relationship of project to the System Architecture
- Cost Estimates- Initial and ongoing, including personnel
- Potential implementing entity
- Potential funding sources or cost sharing recommendations.

The plan shall also define the agency roles related to the projects such as funding, implementation, operating and maintaining. Development of performance measures will be necessary for efficient project prioritization both at the LSMPO level as well as at the state level.

The Consultant will also provide an implementation Plan in keeping with the requirements of the Code of Federal Regulations Title 23 (23 CFR). This implementation Plan will incorporate the results of the work performed on this project, and other information provided by the LSMPO.

Task Product

The Consultant will document the prioritized ITS Master Plan, ITS Deployment Plan and Implementation Plan identified within this task as a Technical Memorandum. A thorough discussion and review of all elements described will be included with identification and justification for such actions.

LSMPO Responsibility

The LSMPO shall make available to the Consultant, upon request, any data available in the LSMPO's files pertaining to the work to be performed under this Task.

Other

Efficient Use of Manpower and Materials

The Consultant will provide qualified personnel that provide the highest level of competence in the tasks involved in this project. The Consultant will maintain efficiency through diligent communication and documentation. Individual project responsibilities, lines of communication, project progress, issues, and resources will be constantly monitored and allocated budget and schedule progression will be monitored on a weekly basis, and deviations are identified and subsequently corrected immediately in order to minimize the impact to the project cost and/or schedule. All of these items will be monitored and developed for all phases of the project in order to provide the most efficient and effective use of manpower and materials.

Methods to Minimize Costs

An essential part of the Consultant's job will be to ensure that the project is completed within the approved budget. Project budget m requires monitoring all costs associated with the project and taking corrective actions when variances occur. The Consultant will use the agreed-upon baseline budget created for the project to track expenditures and measure the performance of the project. The Consultant will ensure that the project budget is applied, monitored and updated, and the product is delivered within expected budget.

When tracking project finances, the Consultant will identify budget variances as they occur and will document the Budget Variance Report component of the Project Status Report. Identify budget variances as they occur and focus on the following financial component of the project.

1. Understand the reasons for either positive or negative variances in the budget.
2. Make adjustments to the budget to reflect any changes or revise cost estimates.
3. Communicate any budget changes or issues in the early stages of project development.
4. Obtain approval for any budget adjustments.

Deliverables

The CONSULTANT will prepare a technical memorandum for Tasks 1– 7 to be submitted electronically for review and comment. The results of each task will be compiled into a concise draft report to be submitted electronically for review and comment. After all comments have been received, the Consultant will prepare a final report and submit three (3) copies, bound full-color copies. Digital copies of the final report (in Adobe PDF format) and all supporting documentation will be supplied to the department.

3.0 SCHEDULE

All tasks included in this scope of services, Exhibit 'A' shall be completed within eighteen (18) months from receipt of the Notice to Proceed. The LSMPO may grant a time extension if request is made within thirty (30) days of expiration of agreement.

**AGREEMENT BETWEEN
THE LAKE~SUMTER METROPOLITAN PLANNING ORGANIZATION (MPO)
AND METRIC ENGINEERING, INC.
FOR THE INTELLIGENT TRANSPORTATION SYSTEM
MASTER PLAN**

RFP 16-0218

This is an Agreement between the Lake~Sumter Metropolitan Planning Organization, by and through its Governing Board, hereinafter referred to as the MPO, and Metric Engineering, Inc., a Florida corporation, its successors and assigns, hereinafter referred to as CONSULTANT.

WITNESSETH:

WHEREAS, the MPO publicly submitted a Request for Proposals (RFP), #16-0218, to retain a consultant to provide professional services for developing an Intelligent Transportation System (ITS) Master Plan for the MPO member governments; and

WHEREAS, the CONSULTANT desires to perform such services subject to the terms of this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual terms, understandings, conditions, promises, covenants and payment hereinafter set forth, and intending to be legally bound, the parties hereby agree as follows:

Article 1. Recitals and Purpose

1.1 The foregoing recitals are true and correct and incorporated herein.

1.2 The Master Plan will evaluate the current systems in Lake County, determine future needs and formulate an implementation strategy for the future development and maintenance of the ITS. The Master Plan shall incorporate various methodologies accounting for emerging technologies in vehicles and devices used in the transportation infrastructure and communication system in conformance with the national, statewide, and regional architectures.

Article 2. Scope of Professional Services

2.1 On the terms and conditions set forth in this Agreement, MPO hereby engages CONSULTANT to provide the services more particularly described in **Exhibit A**, attached hereto and incorporated herein by reference. The CONSULTANT hereby agrees that time is of the essence in completing this Project and CONSULTANT shall complete all tasks within the time frame stated herein.

2.2 All tasks set forth in **Exhibit A** shall be completed within eighteen (18) months from the date the Notice to Proceed is issued. The MPO may grant extensions of time if a request is made within thirty (30) days of the expiration of this Agreement. The Agreement pricing shall prevail for the full duration of the initial term and any renewal term(s) subsequently approved. Continuation of the Agreement beyond the initial term, and any option subsequently exercised, is a MPO prerogative and not a right of the CONSULTANT. This prerogative may be exercised only when such continuation is clearly in the best interest of the MPO.

2.3 The CONSULTANT shall coordinate, cooperate, and work with any other consultants retained by the MPO. CONSULTANT acknowledges that nothing herein shall be deemed to preclude the MPO from retaining the services of other persons or entities undertaking the same or similar services as those undertaken by the CONSULTANT or from independently developing or acquiring materials or programs that are similar to, or competitive with, the services provided under this Agreement.

2.4 Any work that commences prior to and that will extend beyond the expiration date of the current Agreement period shall, unless terminated by mutual written agreement between MPO and CONSULTANT, continue until completion at the same prices, terms and conditions.

2.6 Pursuant to Section 119.0701, Florida Statutes, CONSULTANT shall comply with the Florida Public Records' laws, and shall:

1. Keep and maintain public records required by the MPO to perform the services identified herein.
2. Upon request from the MPO's custodian of public records, provide the MPO with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided for by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the CONSULTANT does not transfer the records to the MPO.
4. Upon completion of the contract, transfer, at no cost, to the MPO all public records in possession of the CONSULTANT or keep and maintain public records required by the MPO to perform the service. If CONSULTANT transfers all public records to the MPO upon completion of the contract, CONSULTANT shall destroy any duplicate public records that are exempt, or confidential and exempt, from public records disclosure requirements. If CONSULTANT keeps and maintains public records upon completion of the contract, CONSULTANT shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the MPO, upon request from the MPO's custodian of public records, in a format that is compatible with the information technology systems of the MPO.

IF CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS, PAM RICHMOND, AT LAKE-SUMTER MPO, 1616 SOUTH 14TH STREET, LEESBURG, FL 34748, OR AT 352-315-0170, OR VIA EMAIL AT prichmond@lakesumtermmpo.com.

Article 3. Payment

3.1 Payment shall be made in accordance with the Fee Estimate set forth in **Exhibit B**, attached hereto and incorporated herein by reference. In no event shall the contract amount exceed **\$279,868.90** unless a change order has been executed in accordance with the MPO's Purchasing Policies and Procedures. A copy of the MPO's Purchasing Policies and Procedures shall be made available upon request.

3.2 The CONSULTANT shall submit monthly invoices by the tenth (10th) calendar day of each month to the MPO at 1616 South 14th Street, Leesburg, Florida, 34748. The invoices shall reflect the type of service provided to the MPO. All invoices shall contain the RFP number, date and location of delivery or service, and confirmation of acceptance of the goods and/or services by the appropriate MPO representative.

3.3 The MPO shall make payment on all invoices in accordance with the Florida Prompt Payment Act, Chapter 218, Part VII, Florida Statutes. Failure to submit invoices in the prescribed manner will delay payment, and CONSULTANT may be considered in default of contract and the contract may be terminated.

3.4 Other than the fees set forth in **Exhibit B**, the CONSULTANT shall not be entitled to payment for any expenses, fees, or other costs it may incur at any time and in any connection with its performance hereunder. The CONSULTANT hereby agrees that the fees set forth in **Exhibit B** are fully loaded and includes all overhead and administrative expenses.

3.5 In the event a specific project is to be funded by state or federal monies, the CONSULTANT hereby agrees to comply with all requirements of the state or federal government applicable to the use of the monies, including receiving no payment until all required forms are completed and submitted.

3.6 CONSULTANT shall utilize the U.S. Department of Homeland Security's E-Verify system in accordance with the terms governing use of the system to confirm the employment eligibility of:

- A. All persons employed by the CONSULTANT during the term of this Agreement to perform employment duties for the MPO under this contract; and
- B. All persons, including subcontractors if any, assigned by the CONSULTANT to perform work pursuant to the contract.

Article 4. MPO Responsibilities

4.1 MPO shall promptly review the deliverables and other materials submitted by CONSULTANT and provide direction to CONSULTANT as needed. MPO shall designate one MPO staff member to act as MPO'S Project Manager.

4.2 MPO shall reimburse CONSULTANT in accordance with the provisions of Article 3 above for required services timely submitted and approved and accepted by MPO in accordance with the terms of this Agreement.

4.3 MPO will provide to the CONSULTANT all necessary and available data, photos, and documents the MPO possesses that would be useful to the CONSULTANT in the completion of the required services.

Article 5. Special Terms and Conditions

5.1 **Qualifications.** Firms or individuals will be registered with the State of Florida and have obtained at least the minimum thresholds of education and professional experience required by the statutes to perform the services contained herein. The CONSULTANT shall either be registered or have applied for registration with the Florida Department of State in accordance with the provisions of Chapter 605 or 607, Florida Statutes, as applicable.

5.2 **Termination.** This Agreement may be terminated by the MPO upon thirty (30) days advance written notice to the other party; but if any work or service/Task hereunder is in progress but not completed as of the date of termination, then this Agreement may be extended upon written approval of the MPO until said work or service(s)/Task(s) is completed and accepted.

A. Termination for Convenience. In the event this Agreement is terminated or cancelled upon the request and for the convenience of MPO with the required 30 day advance written notice, MPO shall reimburse CONSULTANT for actual work satisfactorily completed and reasonable expenses incurred.

B. Termination for Cause. Termination by MPO for cause, default, or negligence on the part of CONSULTANT shall be excluded from the foregoing provision. Termination costs, if any, shall not apply. The 30-day advance notice requirement is waived in the event of termination for cause.

C. Termination Due to Unavailability of Funds in Succeeding Fiscal Years. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year, this Agreement shall be canceled and the CONSULTANT shall be reimbursed for services satisfactorily performed and the reasonable value of any non-recurring costs incurred but not amortized in the price of the supplies or services/Tasks delivered under this Agreement.

5.3 **Assignment or Subletting of Contract.** This Agreement shall not be assigned or sublet except with the written consent of the Executive Director on behalf of the MPO. No such consent shall be construed as making the MPO a party to the assignment or subcontract or subjecting the MPO to liability of any kind to any assignee or subcontractor. No assignment or subcontract shall under any circumstances relieve the CONSULTANT of liability and obligations under this Agreement and all transactions with the MPO must be through the CONSULTANT. In the event the CONSULTANT is acquired in whole or in part by another entity, including any takeovers effectuated by a stock buyout, or other similar acquisition process, the CONSULTANT shall notify the MPO immediately. The MPO shall have the option of terminating this contract in the event the acquiring entity does not meet with the MPO's approval.

5.4 **Insurance.** CONSULTANT shall purchase and maintain, at its expense, from a company or companies authorized to do business in the State of Florida and which are acceptable to MPO, policies of insurance containing the following types of coverage and minimum limits of liability protecting from claims which may arise out of or result from the performance or nonperformance of services under this Agreement by the CONSULTANT or by anyone directly or indirectly employed by CONSULTANT, or by anyone for whose acts CONSULTANT may be liable. Failure to obtain and maintain such insurance as set out below will be considered a breach of contract and may result in termination of the contract for default. CONSULTANT shall not commence work under the Agreement until MPO has received an acceptable certificate or certificates of insurance evidencing the required insurance, which is as follows:

(i) General Liability insurance on forms no more restrictive than the latest edition of the Commercial General Liability policy (CG 00 01) of the Insurance Services Office or equivalent without restrictive endorsements, with the following minimum limits and coverage:

Each Occurrence/General Aggregate	\$1,000,000/\$2,000,000
Products-Completed Operations	\$2,000,000
Personal & Adv. Injury	\$1,000,000
Fire Damage	\$50,000
Medical Expense	\$5,000
Contractual Liability	Included

(ii) Automobile liability insurance, including owned, non-owned and hired autos with the following minimum limits and coverage:

Combined Single Limit	\$1,000,000
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(iii) Workers' compensation insurance in accordance with Chapter 440, Florida Statutes, and/or any other applicable law requiring workers' compensation (Federal, maritime, etc). If not required by law to maintain workers' compensation insurance, the CONSULTANT must provide a notarized statement that if he or she is injured, he or she will not hold the MPO responsible for any payment or compensation for that injury.

(iv) Employer's liability insurance with the following minimum limits and coverage:

Each Accident	\$1,000,000
Disease-Each Employee	\$1,000,000
Disease-Policy Limit	\$1,000,000

(v) Professional liability and/or specialty insurance (medical malpractice, engineers, architect, consultant, environmental, pollution, errors and omissions, etc.) as applicable, with minimum limits of \$1,000,000 and annual aggregate of \$2,000,000.

(vi) **The Lake~Sumter Metropolitan Planning Organization and its Governing Board** shall be named as additional insured as their interest may appear on all applicable liability insurance policies.

(vii) Certificates of insurance shall provide for a minimum of thirty (30) days prior written notice to the MPO of any material change or cancellation of the required insurance. It is the CONSULTANT's specific responsibility to ensure that any such notice is provided within the stated timeframe.

(viii) Certificates of insurance shall identify the RFP number, contract, project, etc., in the Description of Operations section of the Certificate.

(ix) The Certificate holder shall be: LAKE-SUMTER METROPOLITAN PLANNING ORGANIZATION, AND ITS GOVERNING BOARD, 1616 SOUTH 14TH STREET, LEESBURG, FL 34748

(x) Certificates of insurance shall evidence a waiver of subrogation in favor of the MPO, that coverage shall be primary and noncontributory, and that each evidenced policy includes a Cross

Liability or Severability of Interests provision, with no requirement of premium payment by the MPO.

(xi) CONSULTANT shall be responsible for subcontractors, if any, and their insurance. Subcontractors are to provide certificates of insurance to the CONSULTANT evidencing coverage and terms in accordance with the CONSULTANT's requirements.

(xii) All self-insured retentions shall appear on the certificate(s) and shall be subject to approval by the MPO. At the option of the MPO, the insurer shall reduce or eliminate such self-insured retentions, or the CONSULTANT or subcontractor shall be required to procure a bond guaranteeing payment of losses and related claims expenses.

(xiii) The MPO shall be exempt from and in no way liable for any sums of money which may represent a deductible or self-insured retention in any insurance policy. The payment of such deductible or self-insured retention shall be the sole responsibility of the CONSULTANT and/or subcontractor providing such insurance.

(xiv) Neither approval by the MPO of any insurance supplied by the CONSULTANT, nor a failure to disapprove that insurance, shall relieve the CONSULTANT of full responsibility for liability, damages, and accidents as set forth herein.

5.5 Indemnity. CONSULTANT shall indemnify and hold MPO and its agents, officers, commissioners or employees harmless for any damages resulting from failure of CONSULTANT to take out and maintain the above insurance. Additionally, CONSULTANT agrees for good and valuable consideration in the amount of ten dollars (\$10.00) to indemnify, and hold the MPO and its Governing Board, and its officers, commissioners, and employees free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities to the extent caused by the negligent act, error or omission of the CONSULTANT, its agents, employees or representatives, in the performance of CONSULTANT's duties set forth in this Agreement.

5.6 Independent Contractor. CONSULTANT agrees that it shall be acting as an independent contractor and shall not be considered or deemed to be an agent, employee, joint venturer, or partner of MPO. CONSULTANT shall have no authority to contract for or bind MPO in any manner and shall not represent itself as an agent of MPO or as otherwise authorized to act for or on behalf of MPO.

5.7 Ownership of Deliverables. Upon completion of and payment for a task CONSULTANT agrees all Tasks and/or deliverables under this Agreement, and other data generated or developed by CONSULTANT under this Agreement or furnished by MPO to CONSULTANT shall be and/or remain the property of MPO. CONSULTANT shall perform any acts that may be deemed necessary or desirable by MPO to more fully transfer ownership of all Tasks and/or deliverables to MPO, at MPO's expense. Additionally, CONSULTANT hereby represents and warrants that it has full right and authority to perform its obligations specified in this Agreement. CONSULTANT and MPO recognize that CONSULTANT's work product submitted in performance of this Agreement is intended only for the project described in this Agreement. MPO's alteration of CONSULTANT'S work product or its use by MPO for any other purpose shall be at MPO's sole risk.

5.8 Return of Materials. Upon the request of the MPO, but in any event upon termination of this Agreement, CONSULTANT shall surrender to the MPO all memoranda, notes, records, drawings, manuals, computer software, and other documents or materials pertaining to the services hereunder, that were furnished to the CONSULTANT by the MPO pursuant to this Agreement. CONSULTANT may keep copies of all work product for its records.

5.9 NO CLAIM FOR DAMAGES OR ANY CLAIM OTHER THAN FOR AN EXTENSION OF TIME SHALL BE MADE OR ASSERTED AGAINST THE MPO BY REASON OF ANY DELAYS. No interruption, interference, inefficiency, suspension or delay in the commencement or progress of the work from any cause whatsoever, shall relieve the CONSULTANT of the CONSULTANT's duty to perform or give rise to any right to damages or additional compensation from the MPO. The CONSULTANT expressly acknowledges and agrees that the CONSULTANT shall receive no damages for delay. The CONSULTANT's sole remedy, if any, against the MPO shall be the right to seek an extension to the contract time. However, this provision shall not preclude recovery of damages by the CONSULTANT for hindrances or delays due solely to fraud, bad faith or active interference on the part of the MPO. Otherwise, CONSULTANT shall be entitled to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

The parties will exercise every reasonable effort to meet their respective obligations hereunder. Notwithstanding the above, the parties shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any government law or regulation, acts of nature, acts or omissions of the other party, government acts or omissions, fires, strikes, natural disasters, wars, riots, transportation problems and/or any cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred.

5.10 Retaining Other Consultants. Nothing herein shall be deemed to preclude the MPO from retaining the services of other persons or entities undertaking the same or similar services as those undertaken by the CONSULTANT or from independently developing or acquiring materials or programs that are similar to, or competitive with, the services provided under this Agreement.

5.11 Accuracy and Warranty. The CONSULTANT is responsible for the professional quality, technical accuracy, timely completion and coordination of all the services furnished hereunder. The CONSULTANT shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in its designs, drawings, reports or other services. Any corrections shall be made within thirty (30) calendar days after such deficiencies or non-conformances are verbally reported by the MPO. CONSULTANT agrees that the products and services provided under this Agreement shall be covered by the most favorable commercial warranty that CONSULTANT gives to any customer for comparable products and services.

5.12 Truth in Negotiation Certificate. For all lump-sum or cost-plus fixed fee agreements exceeding \$195,000, the firm awarded the agreement must execute a truth in negotiation certificate stating that the wage rates and other factual unit costs are accurate, complete and current, at the time of contracting. Any agreement requiring this certificate shall contain a provision that the original agreement price and any additions shall be adjusted to exclude any significant sums by which the MPO determines the agreement price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such agreement adjustments shall be made within one (1) year following the end of the contract. Execution of this Agreement constitutes execution of the Truth in Negotiation Certificate.

5.13 Codes and Regulations. All work completed under this Agreement shall conform to all applicable federal, state and local statutes, codes, regulations and ordinances.

5.14 Public Entity Crimes. A person or affiliate who has been placed on the convicted vendor list following a conviction of a public entity crime may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity in excess of the threshold

amount provided in Florida Statutes, section 287.017 for Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

5.15 Prohibition Against Contingent Fees. CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the award or making of this Agreement.

5.16 Conflict of Interest. CONSULTANT agrees that it will not engage in any action that would create a conflict of interest in the performance of its obligations pursuant to this Agreement, or which would violate or cause others to violate the provisions of Part III, Chapter 112, Florida Statutes, relating to ethics in government. Further, CONSULTANT hereby certifies that no officer, agent, or employee of MPO has any material interest either directly or indirectly in the business of CONSULTANT conducted here and that no such person shall have any such interest at any time during the term of this Agreement unless approved by the MPO.

5.17 Copyrights. Any copyright derived from any agreement derived from this Agreement shall belong to the author. The author and the CONSULTANT shall expressly assign to the MPO nonexclusive, royalty free rights to use any and all information provided by the CONSULTANT in any deliverable and/or report for the MPO's use which may include publishing in MPO documents and distribution as the MPO deems to be in the MPO's best interests. If anything included in any deliverable limits the rights of the MPO to use the information, the deliverable shall be considered defective and not acceptable and the CONSULTANT will not be eligible for any compensation.

5.18 Right to Audit. The MPO reserves the right to require CONSULTANT to submit to an audit by any auditor of the MPO's choosing. CONSULTANT shall provide access to all of its records which relate directly or indirectly to this Agreement at its place of business during regular business hours. CONSULTANT shall retain all records pertaining to this Agreement and upon request make them available to the MPO for five (5) years following expiration of the Agreement. CONSULTANT agrees to provide such assistance as may be necessary to facilitate the review or audit by the MPO to ensure compliance with applicable accounting and financial standards. Additionally, CONSULTANT agrees to include the requirements of this provision in all contracts with subcontractors and material suppliers in connection with the work performed hereunder.

If an audit inspection or examination pursuant to this section discloses overpricing or overcharges of any nature by the CONSULTANT to the MPO in excess of one percent (1%) of the total contract billings, in addition to making adjustments for the overcharges, the reasonable actual cost of the MPO's audit shall be reimbursed to the MPO by the CONSULTANT. Any adjustments and/or payments which must be made as a result of any such audit or inspection of the CONSULTANT'S invoices and/or records shall be made within a reasonable amount of time, but in no event shall the time exceed ninety (90) days, from presentation of the MPO's audit findings to the CONSULTANT.

Article 6. General Conditions

6.1 This Agreement is made under, and in all respects shall be interpreted, construed, and governed by and in accordance with, the laws of the State of Florida. Venue for any legal action resulting from this Agreement shall lie in Lake County, Florida.

6.2 Neither Party may assign any rights or obligations under this Agreement to any other party unless specific written permission from the other party is obtained.

6.3 The captions utilized in this Agreement are for the purposes of identification only and do not control or affect the meaning or construction of any of the provisions hereof.

6.4 This Agreement shall be binding upon and shall inure to the benefit of each of the parties and of their respective successors and permitted assigns.

6.5 This Agreement may not be amended, released, discharged, rescinded or abandoned, except by a written instrument duly executed by each of the parties hereto.

6.6 The failure of any party hereto at any time to enforce any of the provisions of this Agreement will in no way constitute or be construed as a waiver of such provision or of any other provision hereof, nor in any way affect the validity of, or the right thereafter to enforce, each and every provision of this Agreement.

6.7 During the term of this Agreement CONSULTANT assures MPO that it is in compliance with Title VII of the 1964 Civil Rights Act, as amended, and the Florida Civil Rights Act of 1992, in that CONSULTANT does not on the grounds of race, color, national origin, religion, sex, age, disability or marital status, discrimination in any form or manner against CONSULTANT employees or applicants for employment. CONSULTANT understands and agrees that this Agreement is conditioned upon the veracity of this statement of assurance.

6.8 CONSULTANT shall at all times comply with all Federal, State and local laws, rules and regulations.

6.9 The employee(s) of CONSULTANT shall be considered at all times its employee(s) and not an employee(s) or agent(s) of MPO. CONSULTANT shall provide employee(s) capable of performing the work as required. The MPO may require CONSULTANT to remove any employee it deems unacceptable. All employees of the CONSULTANT shall wear proper identification.

6.10 Any individual, corporation, or other entity that attempts to meet its contractual obligations with the MPO through fraud, misrepresentation or material misstatement, may be debarred for up to five (5) years. The MPO as a further sanction may terminate or cancel any other contracts with such individual, corporation, or entity. Such individual or entity shall be responsible for all direct or indirect costs associated with termination or cancellation, including attorney's fees.

6.11 CONSULTANT shall act as the prime consultant for all required items and services and shall assume full responsibility for the procurement and maintenance of such items and services. CONSULTANT shall be considered the sole point of contact with regards to all stipulations, including payment of all charges and meeting all requirements of this Agreement. All subcontractors will be subject to advance review by the MPO in terms of competency and security concerns. No change in subcontractors shall be made without consent of the MPO. CONSULTANT shall be responsible for all insurance, permits, licenses and related matters for any and all subcontractors. Even if the subcontractor is self-insured, the MPO may require the CONSULTANT to provide any insurance certificates required by the work to be performed.

6.12 With the consent of CONSULTANT, other agencies may make purchases in accordance with the contract. Such purchases shall be governed by the same terms and conditions as stated herein with the exception of the change in agency name.

6.13 The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

6.14 Wherever provision is made in this Agreement for the giving, service or delivery of any notice, statement or other instrument, such notice shall be in writing and shall be deemed to have been duly given, served and delivered, if delivered by hand or mailed by United States registered or certified mail or sent by facsimile, addressed as follows:

If to CONSULTANT:
Dale W. Cody, PE, PTOE
615 Crescent Executive Court, Ste 524
Lake Mary, Florida 32746

If to MPO:
MPO Executive Director
Lake~Sumter MPO
1616 South 14th Street
Leesburg, Florida 34748

Each party hereto may change its mailing address by giving to the other party hereto, by hand delivery, United States registered or certified mail notice of election to change such address.

Article 7. Scope of Agreement

7.1 This Agreement is intended by the parties hereto to be the final expression of their Agreement, and it constitutes the full and entire understanding between the parties with respect to the subject hereof, notwithstanding any representations, statements, or agreements to the contrary heretofore made.

7.2 This Agreement contains the following Exhibits:

Exhibit A	Scope of Services
Exhibit B	Fee Schedule

{Remainder of page left intentionally blank.}

Agreement between the MPO and Metric Engineering, Inc. for ITS; RSQ 16-0218

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: MPO through its MPO Governing Board, signing by and through its Chair, and by CONSULTANT through its duly authorized representative.

CONSULTANT:
Metric Engineering, Inc.
CA # 2294



Dale W. Cody
Senior Vice President of Production

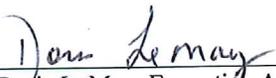
This 20th day of May 2016.

Agreement between the MPO and Metric Engineering, Inc. for ITS; RSQ 16-0218

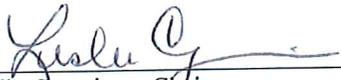
MPO

LAKE~SUMTER MPO, through its
GOVERNING BOARD

ATTEST:



Doris LeMay, Executive Assistant



Leslie Campione, Chairman

This 25 day of may, 2016.

Approved as to form and legality:



Melanie Marsh
MPO Attorney

EXHIBIT A: SCOPE OF SERVICES

LAKE SUMTER METROPOLITAN ORGANIZATION

Scope of Services

Intelligent Transportation System (ITS) Master Plan

1.0 PURPOSE

The Lake Sumter Metropolitan Planning Organization (LSMPO) is requesting proposals from qualified consultants to provide professional services for developing an Intelligent Transportation System (ITS) Master Plan in the Lake County area. This master plan will evaluate the current systems in the Lake County Area (Referred to as county), determine future needs and formulate an implementation strategy for the future development and maintenance of the ITS. The Master Plan shall incorporate various methodologies accounting for emerging technologies in vehicles and devices used in the transportation infrastructure and communication system in conformance with the national, statewide, and regional architectures.

The Consultant will provide a final comprehensive report that will contain all essential technology information and recommend a system-wide implementation methodology. The Plan shall be in sufficient detail to format a sound basis for design, plans specifications, and estimates to phase implementation of the projects. The report shall contain all necessary background research, technical analysis, and coordination with local and regional agencies.

A detailed list of services is provided under the Section 2.0 Consultant's Tasks.

2.0 CONSULTANT'S TASKS

Task 1- Determine ITS Vision, Goals and Objectives

The Consultant will determine an ITS Vision, Goals and Objectives for the project. The LSMPO 2040 Long Range Transportation Plan (LRTP) goals and objectives, the LSMPO Transportation Improvement Program (TIP) Report, LSMPO Congestion Management Plan, Florida Department of Transportation (FDOT) Transportation System Management and Operation (TSMO) plan and FDOT District 5 ITS Architecture/System Engineering Plan (SEMP) will serve as supporting document for the development of this task. Other documents or resource materials that are applicable to this task shall also be utilized. The project will enable emerging technologies in social media and "Big Data" as part of the vision to meet the goals and objectives; and, establish a business case for investments in ITS. The Goals and Objectives shall be based on the National ITS Architecture.

As part of this task the Consultant will work with the LSMPO staff to establish a Project Team for the project consisting of local stakeholders identified by the LSMPO, local municipalities and transportation agencies. The Consultant will meet with each of the stakeholders upon project award to discuss their project roles and needs; to determine the current state of the anticipated deployment of any proposed ITS projects. This assessment will enable the Consultant to determine if any suggestions can be made regarding possible change to technologies or operational concepts described being planned for deployment, which could provide equal or better results with less initial and future costs. Suggestions will be forwarded to the Project

Manager for consideration and any approved changes would be added to the Master Plan document. In addition, the Consultant will meet with the stakeholders on a periodic basis to familiarize them with the basic concepts of ITS and will solicit their guidance in the development of the ITS Vision, Goals and Objectives.

In addition to creating a vision, goals and objectives for the ITS Master Plan, the Consultant will establish a **Business Case** for investing in technology. Cost-benefit analysis, case studies and lessons learned from the ITS industry will be summarized to show that ITS strategies are a wise funding choice and have safety, mobility, environmental and social benefits.

Task Product

The Consultant will summarize information from the documents and resource materials described above with preliminary Task 2 information regarding Existing Conditions, Infrastructure and Inventory to facilitate a discussion with the Project Team. In addition, a list of stakeholders should be developed. Finally, the ITS Vision will be initially developed and then supported by measurable goals and objectives.

LSMPO Responsibility

The LSMPO will coordinate with the County to make available to the Consultant, upon request, any data information or resources available from the LSMPO and County pertaining to the work to be performed under this Task; and aid in the identification of similar products with the LSMPO stakeholders or members of the Project Team. LSMPO and County will review such documentation and provide comments, where applicable.

Task 2 - Document Existing Conditions/Infrastructure

The Consultant will document the existing conditions of ITS related systems and networks currently deployed and planned in the County. The Consultant will document and/or evaluate transportation systems that are relevant to the plan. Work shall include the following:

- Evaluation of the Advanced Traffic Management System (ATMS) and the equipment currently in use;
- Identification of major traffic generators;
- Identification of park and ride facilities;
- Identification of inter-modal facilities to include transit and rail;
- Identification of evacuation routes.

In addition the Consultant will document:

- The communications systems and networks that are used by local municipalities and modal agencies. Systems may include traffic signal interconnections; wireless networks, radio systems and other potential communications networks.
- The availability of fiber and conduit in the Florida Department of Transportation's infrastructure running throughout the county. The Consultant will conduct a qualitative assessment of the adequacy of these different systems.

- The agreements, protocols and procedures for data collection and dissemination between the municipalities and modal agencies; including ways that transportation related information is disseminated by information service providers (ISP's) to travelers in the county. This documentation will identify the sources of information used by each of the ISP's.
- Where and if ITS is considered and included in recent transportation studies, such as in the LSMPO's 2040 Long Range Transportation Plan, and other programmed construction projects that include ITS.

Additionally, the Consultant will document the information flows associated with the identification and response to traffic incidents in the county. This will include the nature of the information exchanged and the media that are used for the exchange of information among the following organizational units:

- Lake County 911/Communications Center
- Lake County Sheriff's Office
- Lake County Fire Rescue
- Lake County Emergency Medical Services
- Lake County Public Works
- Lake County Emergency Operation Center
- LakeXpress
- Florida Highway Patrol
- Florida Department of Transportation
- Other municipalities and multi-modal agencies including, Transit within Lake County

Task Product

The Consultant will document all existing traffic control and ITS/ATMS devices, infrastructure and policies currently in use or planned in the county. A full evaluation of the functional components of the transportation network and organizational units described above will be conducted.

Documentation will include the condition, capability, and operability with ITS standards. The documentation and evaluation will also inventory the different Geographic Information Systems (GIS) and schemes for data collection, management, reporting and archiving. This information will be used for conceptual planning. In addition to documenting the relevant transportation systems, the Consultant will also document the communication systems and networks that are used by local municipalities and the different modal agencies.

LSMPO Responsibility

The LSMPO will coordinate with the County to make available to the Consultant, upon request, any data available in the LSMPO's and County's files pertaining to the work to be performed under this Task. The LSMPO in coordination with the County shall review such documentation and provide comments, where applicable.

Task 3 - Identify Transportation ITS Needs

The Consultant will use a combination of Task 1: ITS Vision, Goals and Objectives and Task 2: Existing Conditions/Infrastructure to identify deficiencies in the county's transportation and ITS systems. The Consultant will utilize comments received from the Project Team, and through the assessment of information provided by the County and local municipalities describing the existing conditions. Findings will be summarized in an easy to interpret format that lends to the identification of relative priorities for each of the identified problems and needs.

The Consultant will include discussion of a Traffic Management Center (TMC), focusing on location, type, size, and recommendations and requirements based on the County's present and future needs. The Consultant shall also include discussion on the ability to implement, operate and maintain a TMC. Discussion will include information regarding central software and specific elements of a TMC, such as servers, video walls, encoders/decoders, workstations, racks, switches, etc. Further information such as capability of the TMC, detailed list of required equipment for a functional TMC, staffing needs, staff roles and responsibilities, maintenance costs, and cost estimates, shall also be included.

Task Product

The Consultant will document the findings of this task in a Technical Memorandum; in which, a thorough discussion and review of all transportation, ITS and TMC needs shall be included. The document will include identification and justification for such needs, which are most applicable to the function, operation and geographic needs of the county.

LSMPO Responsibility

The LSMPO will coordinate with the County to make available to the Consultant, upon request, any data available in the LSMPO's and County's files pertaining to the work to be performed under this Task. The LSMPO and County shall review such documentation and provide comments, where applicable.

Task 4 - Identification of Applicable ITS Strategies

The Consultant will review the transportation problems and needs identified in Task 3: Identify ITS Needs. This review will determine the nature and cause(s) of each problem or need, and determine if there are any candidate ITS improvements or strategies that can address or mitigate the problem or need. The Consultant will consider the potential for future technologies and how they may be utilized to meet the needs of the county. Potential transit related ITS strategies shall also be considered. After candidate ITS improvement strategies have been identified, the candidates will be screened by the Consultant to establish an initial priority for each of the projects. Where possible the anticipated benefits and life cycle cost of each candidate will be quantified to aid in comparison.

The Consultant will propose strategies to document operations and maintenance needs, define performance requirements and identify existing and future ATMS deployment on Lake County arterial roadways. The Consultant shall consider the LSMPO's Congestion Management Plan and Complete Street's Policy. This plan will determine the cause of each transportation problem and identify candidates for ITS improvement or strategies to help improve traffic conditions.

Task 6 - Concept of Operations

The Consultant will provide a Concept of Operations (CONOPS) that defines the roles and responsibilities for maintenance, operation and management of ITS in the county. Including, the level of information sharing, status and control between agencies.

The Concept of Operations (CONOPS) provides an overview of the project/system to be deployed. Specific details as to the current system, the transportation situation being addressed, identification of any desired changes, assumptions and constraints or operational issues, specifics on using/operating the project/system, methods to train and involve stakeholders, and requirements for project/system support and maintenance. In order for the CONOPS to be most effective, the document shall be updated as elements change are added or deleted. Stake holders, who will have an interest in or participate in the project or system, will be consulted to determine their needs and preferences.

The CONOPS will summarize the needs and preferences of each stakeholder and how they will interact and utilize the project/system. In some instances where conflicts between the needs and preferences of various stakeholders arises, the CONOPS document will address these conflicts and document the resultant outcome (which items will be implemented by the project or system and which items have been considered but will not be included). Ultimately, the CONOPS will serve as a record of the project/system needs, requirements, interactions, agreements and constraints in regard to all parties involved from the conception through maintenance of the desired product.

Task Product

The Consultant will update the Concept of Operations (CONOPS) and Requirements document.

LSMPO Responsibility

The LSMPO will coordinate with the County to make available to the Consultant, upon request, any data available in the LSMPO's and County's files pertaining to the work to be performed under this Task. The LSMPO, County and stakeholders will provide approval for any suggestions made by the Consultant for the completing the CONOPS.

Task 7 - Prioritized ITS Master Plan

The Consultant will develop a prioritized ITS Master Plan that is based on the information obtained from Task 1- 6 and from the Project Team input. This plan shall take into account the 2040 LRTP, LSMPO Congestion Management Plan and the regional ITS policy. The plan will describe the existing ITS systems and projects programmed in the TIP. This will define the baseline conditions of the ITS Master Plan. Using information collected from previous tasks, a list of potential ITS projects will be developed to address deficiencies in the existing and planned infrastructure consistent with the ITS Vision, Goals, and Objectives from Task 1. The potential projects will take into consideration current systems found to operate with legacy equipment and are found to be difficult to maintain or are in need of replacement or modernization; as, well as new systems to address identified Transportation ITS needs.

- Cost Estimates- Initial and ongoing, including personnel
- Potential implementing entity
- Potential funding sources or cost sharing recommendations.

The plan shall also define the agency roles related to the projects such as funding, implementation, operating and maintaining. Development of performance measures will be necessary for efficient project prioritization both at the LSMPO level as well as at the state level.

The Consultant will also provide an implementation Plan in keeping with the requirements of the Code of Federal Regulations Title 23 (23 CFR). This implementation Plan will incorporate the results of the work performed on this project, and other information provided by the LSMPO.

Task Product

The Consultant will document the prioritized ITS Master Plan, ITS Deployment Plan and Implementation Plan identified within this task as a Technical Memorandum. A thorough discussion and review of all elements described will be included with identification and justification for such actions. This task is to include an Excel spreadsheet on staffing, O&M, opportunity costs, benefit-costs, maintenance costs, etc. In addition, a Technical Memorandum will be developed listing the projects. Finally, a Technical Memorandum will be developed listing any ITS standards that are required.

LSMPO Responsibility

The LSMPO will coordinate with the County to make available to the Consultant, upon request, any data available in the LSMPO's and County's files pertaining to the work to be performed under this Task.

Other

Efficient Use of Manpower and Materials

The Consultant will provide qualified personnel that provide the highest level of competence in the tasks involved in this project. The Consultant will maintain efficiency through diligent communication and documentation. Individual project responsibilities, lines of communication, project progress, issues, and resources will be constantly monitored and allocated budget and schedule progression will be monitored on a weekly basis, and deviations are identified and subsequently corrected immediately in order to minimize the impact to the project cost and/or schedule. All of these items will be monitored and developed for all phases of the project in order to provide the most efficient and effective use of manpower and materials.

Methods to Minimize Costs

An essential part of the Consultant's job will be to ensure that the project is completed within the approved budget. Project budget m requires monitoring all costs associated with the project and taking corrective actions when variances occur. The Consultant will use the agreed-upon baseline budget created for the project to track expenditures and measure the performance of the project. The Consultant will ensure that the project budget is applied, monitored and updated, and the product is delivered within expected budget.

When tracking project finances, the Consultant will identify budget variances as they occur and will document the Budget Variance Report component of the Project Status Report. Identify budget variances as they occur and focus on the following financial component of the project.

1. Understand the reasons for either positive or negative variances in the budget.
2. Make adjustments to the budget to reflect any changes or revise cost estimates.
3. Communicate any budget changes or issues in the early stages of project development.
4. Obtain approval for any budget adjustments.

Deliverables

The CONSULTANT will prepare a technical memorandum for Tasks 1- 7 to be submitted electronically for review and comment. The results of each task will be compiled into a concise draft report to be submitted electronically for review and comment. After all comments have been received, the Consultant will prepare a final report and submit three (3) copies, bound full-color copies. Digital copies of the final report (in Adobe PDF format) and all supporting documentation will be supplied to the LSMPO and the County.

3.0 SCHEDULE

A schedule shall be developed in Microsoft Project. All tasks included in this scope of services, Exhibit 'A' shall be completed within eighteen months from receipt of the Notice to Proceed. The LSMPO may grant a time extension if request is made within thirty (30) days of expiration of agreement.

EXHIBIT B: CONSULTANT FEE SCHEDULE

Prepared By:
Mr. Dale W. Cooy, P.E., PTOE
619 Crescent Executive Court, Suite 524
Lake Mary, Florida 32746

Lake-Seminole Metropolitan Planning Organization (MPO)
and ITS Governing Board
Project Name: Lake County ITS Master Plan
Metric Engineering, Inc.

Lake County ITS Master Plan
May 15, 2016

Task Work Order Description:
Date Estimated:

Basic Activity	Project Manager		Senior Engineer		Senior Specialist		Project Engineer		Designer		CAD		Subcontract		Staff		Total
	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	
Task 1 - Coordinate ITS Vision, Goals and Objectives	\$250.00	12.00	\$111.00	30.00	\$160.00	30.00	\$145.00	120.00	\$115.00	40.00	\$70.00	50.00	\$50.00	50.00	\$50.00	120.00	\$30,287.44
Task 2 - Document Existing Conditions/Infrastructure	\$2,652.04	12.00	\$2,652.04	30.00	\$50.00	30.00	\$50.00	40.00	\$4,110.00	10.00	\$1,100.00	50.00	\$50.00	50.00	\$50.00	120.00	\$26,027.12
Task 3 - Identify Transportation ITS Needs	\$3,057.00	10.00	\$3,057.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$34,083.44
Task 4 - Identification of Alternative ITS Strategies	\$3,782.00	10.00	\$3,782.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$42,094.44
Task 5 - Conduct Observations	\$2,582.00	10.00	\$2,582.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$27,115.40
Task 6 - Present ITS Master Plan	\$2,950.00	11.00	\$2,950.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$29,215.00
Meetings	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$5,000.00
Total	\$14,000	\$41,622.56	\$8,727.28	45.00	\$8,777.44	67.00	\$8,777.44	67.00	\$4,010.00	40.00	\$1,100.00	50.00	\$50.00	50.00	\$50.00	2,387.00	\$176,030.20

Basic Activity	Specialist		Senior Engineer		Senior Specialist		Project Engineer		Designer		CAD		Subcontract		Staff		Total
	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	Rate/Hr	Man Hrs	
Task 1 - Coordinate ITS Vision, Goals and Objectives	\$147.00	40.00	\$100.00	30.00	\$160.00	30.00	\$145.00	120.00	\$115.00	40.00	\$70.00	50.00	\$50.00	50.00	\$50.00	120.00	\$28,287.44
Task 2 - Document Existing Conditions/Infrastructure	\$2,652.04	12.00	\$2,652.04	30.00	\$50.00	30.00	\$50.00	40.00	\$4,110.00	10.00	\$1,100.00	50.00	\$50.00	50.00	\$50.00	120.00	\$26,027.12
Task 3 - Identify Transportation ITS Needs	\$3,057.00	10.00	\$3,057.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$34,083.44
Task 4 - Identification of Alternative ITS Strategies	\$3,782.00	10.00	\$3,782.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$42,094.44
Task 5 - Conduct Observations	\$2,582.00	10.00	\$2,582.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$27,115.40
Task 6 - Present ITS Master Plan	\$2,950.00	11.00	\$2,950.00	30.00	\$145.00	30.00	\$145.00	20.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	120.00	\$29,215.00
Meetings	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$50.00	50.00	\$5,000.00
Total	\$6,000	\$17,622.40	\$8,727.28	45.00	\$8,777.44	67.00	\$8,777.44	67.00	\$4,010.00	40.00	\$1,100.00	50.00	\$50.00	50.00	\$50.00	2,387.00	\$176,030.20

Meeting:
LUPOTAC
Lake County Public Works
Lake County Public Safety
Lake County Community Services
Lake County EUS

Total Metric Engineering, Inc.
Total Traffic Engineering Data Solutions, Inc.
Grand Total Amount

No. of Meetings: 1
No. of Staff: 2
Hours: 4
Total Hours: 24
Includes Presentation: 6

Task Work Order Description:
Date Estimated: