March 3, 2025

Request for Proposals – TSMO & Regional ITS Architecture Document

The Ames Area Metropolitan Planning Organization (AAMPO) invites consultants to submit a proposal for the development of a Traffic Systems Management and Operations (TSMO) and Regional Intelligent Transportation Systems (ITS) Architecture Document.

Project Information

Budget:
This project will be funded as summarized below. Note that consultants **should NOT include a fee with their proposal submittal.**

TSMO & Regional ITS Architecture Document Funding

Funding Source	Amount
AAMPO Federal Planning Funds	$120,000
City of Ames Local Road-Use Tax Fund	$30,000
TOTAL:	**$150,000**

For project billing, the selected consultant must provide the AAMPO with monthly invoices accompanied by a detailed progress report.

Timeline:
Work may begin no earlier than July 1, 2025. The TSMO & ITS Architecture Document should be adopted by the AAMPO Transportation Policy Committee no later than June 30, 2026.

Location:
The TSMO & ITS Architecture Document should encompass the entire AAMPO's current Metropolitan Planning Area (MPA) Boundary (see **Appendix A**).

Project Scope

The services to be performed by the consultant include:

- Development of a Traffic Systems Management and Operations (TSMO) and Regional Intelligent Transportation Systems (ITS) Architecture Document for the AAMPO. The document should, at a minimum, have the following components:

    1. Introduction
        - Explanation of the purpose and importance of TSMO, the goals and content of the document, and identification of regional stakeholders

2. Existing Conditions & ITS Architecture
   - A thorough analysis of the current state of the transportation system including:
     - Summary of existing TSMO strategies
     - Summary of current traffic signal timing and traffic data collection methodologies
     - Comprehensive overview of the region's existing and soon-to-be-built ITS architecture, including hardware, software, communication protocols, and integration with existing systems
     - Assessment of current regional traffic patterns and areas of congestion or inefficiency (summarized using existing traffic models and transportation plans – no new modeling will be required for this task)
     - Identification of special events that have potential to cause significant shifts/spikes in traffic volumes in the Ames region
3. Needs Assessment
   - Based on the evaluation of existing conditions, identify specific areas of need that should be addressed to improve traffic management and operations in the Ames region (including identifying any gaps in infrastructure, technology, and operations that need to be addressed).
4. Strategic Goals & Objectives
   - Based on the results of the needs assessment as well as regional and national transportation policies, establish clearly defined goals and objectives for improving traffic management and operations in the Ames region.
5. Operations & Implementation Plan
   - A detailed description/procedure for implementing proposed TSMO strategies including:
     - Establishing operational procedures (can focus on topics such as: signal timing (including adaptive signal timing), traffic data and automatic traffic signal performance measure (ATSPM) collection, special event management, detours due to construction or emergency closures, day-to-day operations, driver information systems, etc.)
     - Identifying roles and responsibilities for stakeholders (including establishment of opportunities for intra-agency coordination)
     - Establishing performance measures to evaluate the effectiveness of TSMO strategies and ensuring the goals and objectives are being met
     - Providing detailed timelines, milestones, and identifying resources needed for deploying TSMO strategies
     - Outlining financial and staffing requirements for implementing TSMO strategies
     - Exploring scalability and expansion opportunities for ITS infrastructure and TSMO strategies beyond the current planning area
6. Maintenance Plan
   - Establish guidelines for maintaining ITS and TSMO systems, ensuring long-term sustainability
   - Outline potential costs and considerations regarding the maintenance and continued operation of ITS and TSMO systems

7. Emerging Technology & Trends
   - Discuss emerging trends and anticipated technological developments pertaining to ITS or TSMO
   - Discuss planning for emerging technologies (such as the integration of vehicle-to-infrastructure systems in the future)
8. Risk Mitigation & Limitations
   - Outline potential implementation barriers, limitations of ITS technology, potential funding limitations, and risks pertaining to the ITS network or TSMO strategies

- The consultant will be expected to conduct any supplemental activities required to develop the aforementioned TSMO & ITS Architecture Document such as: coordinating stakeholder engagement, traffic & GIS data processing, review of existing plans and procedures related to TSMO or ITS architecture, ensuring the document adheres to best practices regarding TSMO, and coordinating potential meetings with vendors or consultants about TSMO or ITS products and services.

Proposal Evaluation

Criteria:
Each proposal will be scored based on the following criteria:

1. **Project Understanding & Approach (50%)**
   Proposal demonstrates a thorough understanding of the project scope and TSMO. Project details the development of a TSMO and Regional ITS Architecture Document that includes all components specified in this RFP and that complies with regional and national best practices.

2. **Previous Experience (20%)**
   Proposal discusses the consultant's and personnel's relevant previous experience working on TSMO documents, ITS architecture documents, traffic network master plans, or other similar and relevant TSMO or ITS-themed plans, studies, or projects. Proposal demonstrates that the consultant has the sufficient knowledge and experience required for creating a TSMO & Regional ITS Architecture Document.

3. **Project Team & Key Personnel (20%)**
   Proposal provides an overview of the project team's organizational structure, including identifying all key personnel and their anticipated role in the project. Project team staff members identified in the proposal have sufficient knowledge and experience to perform their identified role in the project.

4. **Understanding of the AAMPO (5%)**
   Proposal demonstrates that the consultant has a thorough understanding of the AAMPO, its organization and structure, and its planning area.

5. **Project Management (5%)**
   Proposal contains a detailed project schedule that is reasonable for the adoption of the final TSMO & Regional ITS Architecture Document by June 30, 2026. Schedule should include all key project task timeframes and identify key project milestones. Proposal demonstrates that the consultant team has the necessary availability and ability to adhere to the proposed project schedule.

Proposal details the anticipated primary methods of communication with AAMPO staff. Proposal includes routine check-ins/meetings with AAMPO staff throughout the life of the project. Proposal details the method of monthly invoicing and progress report monitoring.

Evaluation Process:
A project evaluation team will score all received proposals using the aforementioned criteria. The award of a professional services contract will be based upon the final proposal scores. Negotiations will begin with the consultant with the top-ranked proposal. Should an agreement not be reached, negotiations would proceed with the next highest ranked consultant.

Submittal

Length/Format:
Proposals must be limited to 20 pages, not including the cover page or cover letter. Proposals must be submitted via email as a PDF file.

Deadline:
Proposals must be submitted to kyle.thompson@cityofames.org by **4:00 PM Monday, March 31, 2025** (U.S. Central Time).

Thank you for your interest in working with the Ames Area MPO! Feel free to visit our website at www.aampo.org for more information about the AAMPO.

Sincerely,

Kyle Thompson, P.E., PTP
Transportation Planner
Ames Area MPO

Attachment A – AAMPO MPA Boundary