WSDOT Transportation Systems Management and Operations Program Plan

BACKGROUND

Users of Washington’s transportation system face a variety of mobility challenges on a daily basis due to increasing traffic volumes, limited roadway capacity, and fiscal restraints. Mobility challenges are experienced in urban and rural areas by citizens, commercial fleets, and emergency responders alike. Some of the most significant impacts to system users come in the form of non-recurring congestion due to events such as collisions and hazardous weather.

State departments of transportation have historically addressed mobility issues by adding capacity via construction, while maximizing existing capacity through management and operations was a secondary consideration. Building new lanes and roads can temporarily alleviate issues stemming from recurring congestion (e.g. unchanging bottlenecks, commute peaks), however, research shows that Transportation Systems Management and Operations (TSMO) strategies provide uniquely effective benefit-to-cost improvements.

In light of the department’s commitment to Practical Solutions, the Federal Highway Administration’s (FHWA) recognition of TSMO’s crucial role in transportation mobility and safety, the growth and capability of vehicle and traffic technologies, and the desire of system users to see travel improved through cost-effective methods, the Washington State Department of Transportation (WSDOT) seeks to implement an agency TSMO Program Plan that will help the department meet the mobility challenges of today and tomorrow.

By building upon WSDOT’s recently completed TSMO program plan workshop, and the previously completed TSMO Capability Maturity Model assessment (CMM), the CONSULTANT will work with the STATE to complete a Plan that establishes a strategic framework for multi-modal TSMO throughout the department.

ABBREVIATIONS

AASHTO American Association of State Highway and Transportation Officials
CMM Capability Maturity Model
FHWA Federal Highway Administration
ITS Intelligent Transportation System
NOCoE National Operations Center of Excellence
SPM STATE Project Manager
STATE Washington State Department of Transportation
TSMO Transportation Systems Management & Operations
WSDOT Washington State Department of Transportation

SCOPE OF WORK

WSDOT Traffic Operations seeks a CONSULTANT to create a Program Plan that prescribes TSMO programming and investment strategies, project development actions, organizational arrangements, workforce capability needs, and collaborative relationships for the agency’s five identified TSMO functional areas:

1. Traditional Traffic Operations
2. Planning, Partnering, and Policy Development
3. ITS Improvements
4. Travel Demand Management
5. Cooperative Automated Transportation

The Program Plan should support the integration of TSMO concepts and initiatives into all elements of WSDOT practices from planning, design, construction and operations. The plan should have a high-level perspective, articulate a common vision for transportation system operations within WSDOT, develop objectives that guide the selection of TSMO strategies, and identify performance metrics that enable executives and managers to track progress toward goals.

The Plan is expected primarily address program implementation in the divisions of Headquarters Traffic Operations, Region Traffic Operations, Multi-Modal Planning, Public Transportation, and others as determined and agreed upon by the STATE and the CONSULTANT.

The levels of TSMO program detail to be applied within the Plan, depending on the functional area being addressed, will be:

- Level 1 – Strategic
- Level 2 – Programmatic
- Level 3 – Tactical

Implementation and integration of TSMO within WSDOT will be accomplished by incorporating national best practices, identifying critical activities, opportunities, and barriers to successful TSMO integration and implementation, referencing applicable FHWA, AASHTO and NOCoE guidance, and creating action plans that establish goals and interim steps that WSDOT will undertake as it deploys the plan statewide over a defined time period.

This plan should take into consideration the varying levels of TSMO integration within the department in order to address how, and on what timeline, different areas within the agency should implement TSMO to reach the next higher level of integration. The Program Plan should be in alignment with other WSDOT plans, such as the Statewide Strategic Plan. The plan should also be easily updatable to accommodate changes in TSMO capability as implementation occurs throughout the department.

The CONSULTANT will be responsible for supplying the personnel to meet or exceed the minimum requirements and responsibilities identified in this Scope of Work, and to submit required deliverables. Elements of work are expected to include, at a minimum, the items listed below. Additional or alternative activities may be included or substituted in the proposal, at the CONSULTANT’s discretion and with explanation, to achieve the objectives of the TSMO Program Plan.

**GENERAL ASSUMPTIONS**

- The STATE will provide to the CONSULTANT all data in the STATE’s possession relating to CONSULTANT’s services on the Project. The CONSULTANT will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the STATE.
- The STATE will provide comments on CONSULTANT work products within 14 working days of receipt of product, including comments from the Stakeholder Group(s).
- The Project Management Team and the Stakeholder Group are advisory to this project. The STATE will retain decision making authority for strategies and recommendations.
• Payments by the STATE to the CONSULTANT are contingent on the successful completion of deliverables. Unsuccessful and/or untimely delivery of contracted requirements constitutes cause for cancellation of the contract.

Element 1 – Managing
The CONSULTANT will provide project management and coordination for a duration of up to 24 months, or until completion of all basic elements required by this scope of work (Elements 1 through 7), whichever is shorter.

The CONSULTANT will submit a project schedule to the STATE for approval describing the timeline and steps that the CONSULTANT will take to complete the Plan in the required timeframe. The CONSULTANT will submit any subsequent project schedule changes to the STATE Project Manager (SPM) for approval.

The CONSULTANT will provide all services required to manage the project analysis, production, and follow up efforts, confer with the SPM on a bi-weekly basis, document and monitor progress, direct quality control activities, and close out the project.

The CONSULTANT will prepare and submit a monthly invoice and progress report to the STATE. The STATE will approve the format for the invoice and progress report. One hard copy including both the invoice and progress report will be submitted to the STATE. The progress report will document the activities performed and deliverables completed during the reporting period and identify key accomplishments, meetings attended, and current open issues relating to the work. It will also identify anticipated activities and deliverables for the following month and any issues that might impact scope, schedule, or budget.

DELIVERABLES:
• Prepare monthly progress reports
• Prepare and monitor project work plan and schedule
• Communicate bi-weekly with SPM in 30-minute conference calls
• Maintain project files for all relevant project information, documents, and emails.

Element 2 - Discovery
The CONSULTANT will research, discover, copy, compile, and store any documents necessary to accomplish the completion of the Plan. This may include plans, policies, studies, written guidance, and manuals produced by WSDOT, or other outside agencies and organizations, that are relevant to TSMO, or with which the WSDOT TSMO Program Plan must align (e.g. Statewide ITS Architecture Plan, ).

The CONSULTANT will conduct a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, with input from agency personnel, to better understand the challenges WSDOT faces with TSMO implementation, and prepare a facilitation or collaboration plan to help guide further steps in the Program Plan creation and implementation process.

The STATE will assist CONSULTANT in identifying and acquiring relevant documents, and help schedule and facilitate meetings with appropriate WSDOT staff during the course of the project.
DELIVERABLES:

- Research and compile relevant documents
- Conduct a SWOT analysis
- Prepare a facilitation or collaboration plan

Element 3 – Building

The CONSULTANT will conduct stakeholder outreach by seeking out and interviewing appropriate WSDOT employees. Stakeholders shall include individuals from regional traffic offices such as Regional Traffic Engineers and other areas as determined necessary as well as Headquarters Divisional Directors from areas such as Planning, Design, Public Transportation, etc. The CONSULTANT will document the feedback received, and any analysis or lessons learned, as it pertains to WSDOT’s current and future TSMO implementation.

The CONSULTANT will work with the STATE to create any necessary stakeholder groups to help inform the process of Program Plan creation. Essential to these stakeholder groups is the identification of TSMO supporters or “champions” in agency decision-making positions, to include those outside the agency.

The CONSULTANT will also facilitate executive level meetings with the SPM to keep agency leadership updated on Program Plan progress, and to answer any questions they may have, at appropriate points during the project.

The STATE will assist CONSULTANT in seeking out, identifying, and communicating with stakeholders, supporters and leaders, and provide feedback during the SWOT and facilitation plan elements.

DELIVERABLES:

- Identify central support that is available
- Determine key stakeholders
- Build stakeholder group(s)
- Interview stakeholders
- Meet at appropriate intervals with executives

Element 4 - Defining

The CONSULTANT will create a strong “business case” to form the basis for WSDOT’s adoption of a TSMO Program Plan. From that business case the CONSULTANT will draft an agency TSMO Program mission statement, vision and goals.

The CONSULTANT will present a content outline and proposed model of how the Plan is expected to look to the SPM for approval. The CONSULTANT will also describe how the Plan connects to other agency or state plans, policies and processes (e.g. Statewide Strategic Plan).

DELIVERABLES:

- Articulate the business case for TSMO
- Create the mission, vision, and goals
• Confirm a content outline and proposed model of Plan layout
• Connect TSMO to other plans and processes

Element 5 - Mapping

The CONSULTANT will map out the plans, operations, and processes within each of the agency’s five functional TSMO areas that the Plan will pull together.

The CONSULTANT will assess the agency’s current level of TSMO integration in each of the five functional TSMO areas, and propose the level(s) of detail (strategic, programmatic, and tactical) that the Plan will focus on for each of those areas.

The CONSULTANT will describe a central program strategy in the Plan, to include roles and responsibilities for the offices and staff that have a central role in Plan implementation, along with strategies to support the agency’s regions in their implementation of the Plan.

To ensure that the department has a foundation for implementing the plan, both statewide and regionally, the CONSULTANT will create an early action plan with specific, time-bound action items that will initiate the process toward full Program Plan implementation.

The STATE will provide input and feedback to the CONSULTANT to help accomplish these items.

DELIVERABLES:
• Map the planning and operations processes that the Plan pulls together
• Assess current TSMO integration and propose levels to be addressed
• Articulate the central program strategy to implement TSMO and include roles and responsibilities for agency personnel
• Develop statewide strategies to support the regions
• Create an early action plan with specific, time-bound action items

Element 6 - Creating

The CONSULTANT will create the TSMO Program Plan. The Plan will: align with the background and scope of work as described herein; adhere to the PROPOSAL accepted by the STATE; and comply with the requirements of the contract.

The CONSULTANT will ensure that the Plan specifies areas for investment to further TSMO integration throughout the agency; articulates statewide and regional performance metrics; identifies workforce development needs; and articulates a framework for regions to develop their own TSMO Program Plans.

The CONSULTANT will submit timely drafts of the Plan to the SPM according to the project schedule. The STATE will forward drafts to the appropriate stakeholder group(s) for review and written feedback, and then provide feedback to the CONSULTANT.

DELIVERABLES:
• Submit Plan drafts for review and feedback
• Specify targeted investment areas to further agency TSMO
• Develop statewide and regional performance metrics
• Identify workforce development needs
• Develop a framework for regions to deploy program plans

Element 7 - Delivering

The CONSULTANT will deliver a completed TSMO Program Plan that has been reviewed and approved through the SPM, as stipulated in the scope and elements of work above.

The CONSULTANT will submit a prioritized implementation plan for the TSMO Program Plan, therein describing the steps and timelines WSDOT will employ to integrate the TSMO Program Plan throughout the agency.

The CONSULTANT will develop TSMO communications material for executives and managers to introduce the Plan to the agency’s staff. These communication materials may be in various formats and should be tailored to differing audiences.

In addition, the CONSULTANT will create and deliver structured TSMO webinars and workshops for the department, customized to accommodate the varying levels of TSMO awareness and prior integration found throughout the agency.

DELIVERABLES:
• Deliver the completed WSDOT TSMO Program Plan
• Create prioritized implementation plan for Plan integration
• Develop TSMO communications material
• Create and deliver TSMO webinar(s) and workshops

Element 8 – Maintenance

Subject to availability of funds and time constraints, CONSULTANT will provide services after TSMO Program Plan delivery (elements 1-7) to help ensure that the plan remains relevant beyond Plan completion. This element may be a part of the main contract or by addendum, and will cover a period of no less than 24 months.

DELIVERABLES:
• Periodic updates and edits to the Program Plan
• Revisions when over-arching agency plans change, or significant reorganizations occur
• Other items as agreed upon by the STATE and consultant

Element 9 – Optional Follow-on Work

In the interest of maximum effective Plan deployment and implementation into the future, other elements of work may be added after completion of the initial contract (elements 1-7) to achieve ongoing TSMO Program Plan success.

Upon determination and agreement between the STATE and the CONSULTANT, such deliverables may be attached to the original contract by addendum, with a commitment of no more than 24 additional months.
DELIVERABLES may include, but are not limited to:

- Additional TSMO business process development for investment, planning and management
- Services to individual Regions in their creation/implementation of TSMO Program Plans
- Creation of education materials, workshops, and training courses for agency staff
- Development of a TSMO strategy decision framework
- Support and updates for existing agency TSMO website content
- Other items that ensure ongoing implementation of the TSMO Program Plan