I. Purpose

Florida DEPARTMENT of Transportation’s (DEPARTMENT) Managed Lanes (ML) Program is focused on implementation of express lanes networks in the major urbanized areas of the State. Managed Lanes provide customers travel options, offer a more predictable travel time, and deliver a long-term solution to manage congestion. This scope outlines professional services support to the State Traffic Engineering and Operations Office (STEOO) for the Managed Lanes Programs. The CONSULTANT will plan and implement the Managed Lanes program. At the request of the DEPARTMENT the CONSULTANT will perform the tasks outline below.

II. General Tasks

Program Management Support: The CONSULTANT manages projects and tasks, performs quality assurance services, and provides technical services to support the ML Program. A CONSULTANT Program Manager (PrgM) is selected with input from the DEPARTMENT project manager. The PrgM has knowledge, skills and expertise to deliver the ML program and carry out the mission. The PrgM must have a sound understanding of Systems and Policy Planning, Project Development and Environment, Design, Construction, Traffic Engineering and Operations, Maintenance, Safety, Systems Engineering, Study and Work Program functions.

The PrgM must have strong Project Management (PM) skills including production scheduling, activity planning, quality reviews, stakeholder consultations, generating ideas, and leading the ML Program.

Program Management Support Tasks

- Coordinate the ML Program functions and activities
- Manage Task Work Orders (TWO)
- Scheduling and resource assignments including the identification of home office versus in-house consultant staff utilization
- Develop work plans outlining how the TWO deliverables will be achieved
- Furnish weekly and monthly progress reports
- Perform quality control and quality assurance services
- Deliver administrative and technical services
- Track project budgets and maintain burn rates
- Consider efficiencies in resource identification and utilization
- Monitor and provide quality control with all deliverables
- Perform other Project Management Support Tasks

Training Development Support: The CONSULTANT develops training materials and modules for use by the DEPARTMENT, stakeholders, and contractors with the DEPARTMENT and for possible use of the modules by external partners. This support must be consistent with DEPARTMENT’s Statewide TSM&O (Transportation Systems Management and Operations) Excellence Program (STEP) training initiative.

Training Development Support Tasks

- Develop training materials
- Develop Computer Based Training (CBT) modules
- Coordinate continuing education units (CEUs), PE credit, and AICP credits for the training modules
- Coordinate with the DEPARTMENT’S Training Management and Design office to put the CBT’s and instructor led training into the Learning Curve system
- Work with partners to identify training and delivery opportunities
- Monitor and update training materials and guidance as the state of practice evolves
- Scheduling, coordinating, and assistance in conducting District and Central Office trainings
- Perform other Training Development Support Tasks as necessary

**General Engineering and Support:** The CONSULTANT provides general systems engineering, design standards and specifications reviews, Request for Proposal (RFP) preparation and reviews, technical analysis, recommendations, planning, design, integration, and operations support. The CONSULTANT must develop and/or implement specifications, design standards, project plans, integration plans, testing plans, and system validation plans.

**General Engineering and Support Tasks**
- Develop and Review standards and specifications
- Develop and maintain technical documentation
- Prepare engineering and technical white papers as necessary
- Studies on topics for implementing the ML Program
- Develop Regional and project level systems engineering management plans
- Perform safety analysis including benefits and costs associated with project activities
- Conduct Traffic operational analysis including use of Highway Capacity Software (HCS) and microsimulation tools
- Review and develop design criteria packages and plans, solicitation packages, and contract documents and addendums
- Perform other General Engineering and Support Tasks as necessary

**General Outreach and Studies Support:** The CONSULTANT provides logistical and staff support to conduct outreach to internal DEPARTMENT offices, districts, as well as external stakeholders and partners. This support includes scheduling meeting dates, times and locations as well as providing staff support for meeting facilitation, material preparation, recording action items and completion of follow up action items from previous meetings.

**Outreach and Studies Support Tasks**
- Schedule, coordinate, and assist in conducting District workshops and meetings
- Provide staff support for meeting facilitation and meeting material preparation
- Record action items from the meeting/workshop as well as perform follow up activities for previous meeting action items
- Plan and conduct stakeholder outreach workshops
- Develop and maintain SharePoint
- Prioritize study needs
- Perform other Outreach and Studies Support Tasks as necessary

**III. Managed Lanes Tasks**
**Program Development Support:** The CONSULTANT develops and updates, as directed by the DEPARTMENT, the Managed Lane Program Business Plan, gap analysis, strategic planning and visioning, Managed Lane action plans, programmatic cost estimates, Implementation plans, and program schedules. The CONSULTANT conducts studies, analyzes issues, develops white papers and technical memorandums, and strategic action plans to support the Managed Lanes Program.

**Program Development Support Tasks**
- Gap analysis and strategic planning
- Managed Lanes Business Plan
- Managed Lanes Action Plan
- Maintain schedule tracking different phases of Managed Lanes Projects around the state

**Managed Lanes Data Analysis and Evaluation:** The CONSULTANT develops models and architectures for data collection, storage, security, and analysis. The CONSULTANT develops crash and mobility data analysis and before/after evaluation reports. The CONSULTANT develops interactive visualization tools to display performance measures. Example tools include dashboard and automated decision support systems and benefit/cost analyses utilizing available tools.

**Managed Lanes Data Analysis and Evaluation Tasks**
- Model architectures for developing safety and mobility studies of Managed Lanes facilities
- Before and After studies on Managed Lanes facilities
- Interactive visualization tools and dashboards to display the Managed Lanes performance measures

**General Planning Support:** The CONSULTANT provides data collection, needs assessment, concept development and concept evaluation for the ML Program. The CONSULTANT supports the ML Program by developing white papers, technical memorandums, programmatic cost estimates, implementation plans, and schedules. The CONSULTANT performs before/after evaluation reports containing safety and operational analysis. The CONSULTANT develops reporting tools such as dashboards and automated decision support systems for processing data and performance measures into information for analysis purposes.

**General Planning Support Tasks**
- Perform and document data collection and origin/destination analysis
- Perform before/after evaluation of safety and operational performance
- Develop, maintain, and review Corridor/Interstate Master Plans, Action Plans, Business and Strategic Plans
- Augment the existing SIS (Strategic Intermodal System) Needs Plan and Cost Feasible Plan process for use in defining the Corridor Build Out on Managed Lanes facilities
- Develop, maintain, and review systems engineering plans, Concept of Operations, State/Regional/Project ITS (Intelligent Transportation System) architectures, system requirements and high-level design
- Provide planning level traffic analysis and project traffic forecasting and document the results
- Conduct planning level operational and simulation analysis and document the findings
- Perform and document feasibility and study concept analysis
• Perform and publish GIS mapping and analysis
• Develop and review Policy, Procedure, and Manuals

**General Systems Engineering Management Support:** The CONSULTANT develops and maintains system engineering documents to ensure the Department meets the requirements of 23 CFR, Part 940, the DEPARTMENT’s Systems Engineering and ITS Architecture Procedure 750-040-003-c, and the *Agency for State Technology (AST) Chapter 74-1 F.A.C.* to support the Managed Lanes Program.

**General Systems Engineering Management Support Tasks**

- Develop and update project level architectures, systems engineering documents and ConOps documents
- Develop and review Regional, Corridor, and Project Level Concept of Operations
- Develop and review Regional Traffic Management Center (RTMC) Express Lanes operational procedures or guidelines
- Develop and review traffic incident management procedures and guidelines for express lanes
- Develop the Systems Engineering Management Plan (SEMP) and follow the checklist
- Develop procurement documents, including Requests for Proposals (RFP), scope of services, and project cost estimates.

**Statewide Express Lanes Software (SELS) Change Management and Enhancement Support:** The CONSULTANT organizes proposed SELS enhancements to be reviewed at the Change Management Team (CMT) meetings. The CONSULTANT develops the agenda, attends meetings, records meeting results and decisions, develops presentation materials, and manages action items. The CONSULTANT assists with integration assignments, independent SELS software verification and validation, SELS software concept of operations, user needs and preliminary requirements. The CONSULTANT reviews SELS design/development and SELS factory acceptance testing.

**Statewide Express Lanes Software (SELS) Change Management and Enhancements Support Tasks**

- Support for SELS change management activities
- Independent verification and validation of SELS software enhancements
- Develop SELS software concept of operations/requirements
- Reviews SELS design and SELS factory acceptance testing review
- Development and review of SELS operational parameters for the Level of Service Table and Delta Density Table
- Document existing and/or proposed processes
- Develop and deliver training and technical assistance
- SELS SharePoint development and maintenance

**IV. Deliverables**

Deliverables will be defined in each Task Work Order.

**V. Responsibilities of the Department**
The Department shall provide a Project Manager who shall be responsible for all coordination with the Consultant pertaining to all contractual matters, invoicing and reporting. The Department may also designate a manager for each Task Work Order who shall be responsible for working with the Consultant Project Manager to define the specific work to be performed and the schedule for completion of each task, the Consultant staffing to be provided, and the cost. The Department Project Manager shall be responsible for approval of any additional staffing to be provided including additional consultant staff (approval must be coordinated with the Procurement Office), and shall give approval of all products and services.

VI. Responsibilities of the Consultant

The Consultant shall provide and maintain an up-to-date list of staff with agreed-to classifications and approved salaries (subject to the contract Exhibit “B”) that would be available to be assigned to specific Task Work Orders. No consultant staff, except those specifically identified in a Task Work Order or those specifically agreed to by the Department Project Manager, shall charge time to that Task Work Order.

Consultant must request approval from the Department’s Project Manager for any modifications or additions to the list of available staff prior to the initiation of any work by that individual. If applicable, new job classifications may be added to the contract via contract amendment. Consultant shall submit a copy of the resume and payroll register before new staff can be added.

The Consultant shall have a total of two (2) full-time equivalents (FTE): One (1) at the DEPARTMENT and one (1) FTE staff at the CONSULTANT Office to bring in expertise as needed.

The Consultant shall maintain an office and staff in Tallahassee, Florida as defined and agreed to in Task Work Orders. Limited short-term office space may be provided by the Department for technical staff where proximity with Department staff is necessary for the work being performed. Such arrangements will be made between the Consultant Project Manager and the Department Project Manager on an “as needed” basis, and will be expressly stipulated in the individual Task Work Orders. All Task Work Orders where services are anticipated to be wholly and exclusively performed utilizing Department space or field personnel will be compensated at reduced overhead compensation, or field office rates.

VII. Conflict of Interest

The CONSULTANT or any affiliate is not eligible to pursue advertised work in the CONSULTANT’s area of oversight or any project for which the CONSULTANT developed the Scope of Services, or RFP in accordance with FDOT Procedure No. 375-030-006, Conflict of Interest Procedure for Department Contracts.

VIII. Personnel Qualifications

The Consultant shall assign only competent technical and professional personnel qualified by the necessary experience and education to perform assigned work. The Consultant is responsible for ensuring that staff assigned to work under this Agreement has the training established by the Department as a prerequisite for consultant staff to perform work. If the required training is such that it can be applied by the trainee to work on other contracts, (regardless of whether the trainee would work on other agreements), the cost of the trainee’s time and expenses associated with the training is not directly billable to the Department on this contract, and shall only be recoverable through overhead for the Consultant firm.
IX. **Subconsultant Services**

Services assigned to any subconsultants must be approved in writing and in advance by the Department Project Manager, Procurement Office, and the Consultant Project Manager in accordance with this Agreement. All subconsultants must be technically qualified by the Department to perform all work assigned to them. Additional subconsultants with specialized areas of expertise may be required to complete specific Task Work Order assignments. Any subconsultant to be hired and all work assignments to be performed, and all rates of compensation shall be agreed to by the Department Project Manager, Procurement Office and the Consultant Project Manager and documented in the contract file prior to any work being performed by the subconsultant. Any new subconsultant must be added to the contract via contract amendment (in coordination with the Procurement Office) prior to any issuance of work on a Task Work Order.

X. **Consultant Not Employee or Agent**

The Consultant and its employees, agents, representatives, or subconsultants/subcontractors are not employees of the Department and are not entitled to the benefits of State of Florida employees. Except to the extent expressly authorized herein, Consultant and its employees, agents, representatives, or subconsultants/subcontractors are not agents of the Department or the State for any purpose or authority such as to bind or represent the interests thereof, and shall not represent that it is an agent or that it is acting on the behalf of the Department or the State. The Department shall not be bound by any unauthorized acts or conduct of Consultant.

XI. **Ownership of Works and Inventions**

The Department shall have full ownership of any works of authorship, inventions, improvements, ideas, data, processes, computer software programs, and discoveries (hereafter called intellectual property) conceived, created, or furnished under this Agreement, with no rights of ownership in Consultant or any subconsultants/subcontractors. Consultant and subconsultants/subcontractors shall fully and promptly disclose to the Department all intellectual property conceived, created, or furnished under this Agreement. Consultant or subconsultant/subcontractor hereby assigns to the Department the sole and exclusive right, title, and interest in and to all intellectual property conceived, created, or furnished under this Agreement, without further consideration. This Agreement shall operate as an irrevocable assignment by Consultant and subconsultants/subcontractors to the Department of the copyright in any intellectual property created, published, or furnished to the Department under this Agreement, including all rights thereunder in perpetuity. Consultant and subconsultants/subcontractors shall not patent any intellectual property conceived, created, or furnished under this Agreement. Consultant and subconsultants/subcontractors agree to execute and deliver all necessary documents requested by the Department to affect the assignment of intellectual property to the Department or the registration or confirmation of the Department’s rights in or to intellectual property under the terms of this Agreement. Consultant agrees to include this provision in all its subcontracts under this Agreement.