Traffic Engineering Services

State Traffic Engineering and Operations Office, Traffic Services Section

I. Purpose

The purpose of this contract is to provide the Department with traffic engineering professional services and technical support for the Traffic Services Section in the State Traffic Engineering and Operations Office in Tallahassee. This contract will provide support for the traffic engineering safety programs, aging road user program, highway signing program, traffic studies, traffic signal operations, traffic engineering studies and other services.

II. Project Approach

The Department shall request consultant services on an as-need basis by individual Task Work Orders (TWOs). The Consultant's work will be managed by a Department Project Manager, who will provide a specific definition of work for each task to be performed by the Consultant. Each Task Work Order will be drafted by the Department Project Manager with approval from the Director of the State Traffic Engineering and Operations Office and provided to the Consultant Project Manager. All Task Work Orders must be executed by the Consultant and Department prior to any work on the task being initiated. Specific additional requirements may be contained in the individual Task Work Orders. The Consultant shall be aware that multiple Task Work Orders can be open concurrently. There is no guarantee that any or all of the services described in the Contract will be assigned during the term of this Contract. The Consultant will be allowed remote access to the Department's computer resources for any work under this contract.

The Consultant shall provide qualified professional and technical personnel to perform the assigned work. The Consultant's work shall be performed and/or directed by the key personnel identified in each Task Work Order. Any changes in personnel shall be subject to review and approval by the Department.

The Consultant shall ensure that all services requiring field activities are conducted professionally and in a manner that utilizes accepted safety methods and practices. All required engineering reports shall be signed, sealed, and dated by a Florida Registered Professional Engineer.

The services performed by the Consultant shall be in compliance with all applicable Department manuals, standards, guidelines, and policies, Florida Statutes, Florida Administrative Code, and standard engineering principles and practices. The Department's manuals and guidelines incorporate by requirement or reference all applicable State and Federal regulations. The current edition, including updates, of the Department's manuals and guidelines shall be used in the performance of this work. It shall be the Consultant's responsibility to acquire and utilize the necessary Department

standards and guidelines that apply to the work required to complete any task, including, but not limited to, American Association of State Highway and Transportation Officials (AASHTO) manuals; Manual on Uniform Traffic Control Devices (MUTCD); Traffic Engineering Manual (TEM); Safe Mobility for Life Program Policy; Safe Mobility for Life Branding Guidelines; Human Factors Guidelines or Developing Educational Materials; Manual on Uniform Traffic Studies (MUTS); Design Standards; Speed Zoning for Highways, Roads, and Streets in Florida; Intersection Control Evaluation Manual (ICE); Rule 14-51, Florida's Highway Guide Sign Program; current Department procedures and policies, Bulletins, Memos, Special Instructions, FDOT Design Manual; Manual of Uniform Minimum Standards for Design, Construction, and Maintenance of Streets and Highways (Florida Greenbook); Transportation Technology Geographic Information Services(GIS) Manual, GIS Policy and Data Governance Policy.

III. Deliverables

The Consultant shall submit to the Department at the end of each month an invoice for each completed Task Work Order or a justified percentage of work complete. The invoice shall reference the work order number, date(s) services provided, distribution of costs, and a total invoice amount. Upon approval and acceptance of all services and deliverables the Project Manager shall recommend payment for further processing with the Department.

IV. Description of Services

The following are a list of tasks that may be assigned to the Consultant:

A. Safe Strides 2 Zero

Provide technical support and consulting services to the traffic services section team. Tasks may include, but not limited to, roadway and intersection safety performance development and evaluation, SAS programing, GIS Dashboard development and customization, quality control reviews, performance measures, engineering countermeasure evaluation and crash modification factor (CMF) development. Other technical support services include roadway characteristic inventory and data acquisition, crash data analysis, crash tree development, risk-based safety evaluation and systemic safety analysis.

B. Safe Mobility for Life Program (SMFL)

Provide technical support to the program manager, and tasks may include quality control reviews, implementing action plans, performance measures, data metrics, and dashboards to be used for reporting and evaluation purposes. Provide technical expertise and support for each of the six (6) focus areas, Program Management, Data, and Evaluation, Outreach and Advocacy, Aging in Place, Prevention and Assessment, Licensing and Enforcement, and Transitioning from Driving. This may include, conducting meetings, developing resources, presentations, workshops, and/or trainings that meet the goals of each of the focus area teams.

Update annual aging road user priority by county and intersection data and conduct data analysis to support SMFL's proactive data-driven approach to reducing fatalities and serious injuries for aging road users.

Develop information and materials to educate on the use of autonomous vehicles as viable transportation options for older adults.

Implement the SMFL marketing and communications plan to develop social media campaigns and digital graphics that support our monthly educational calendar.

Re-design and maintain the Department's website SafeMobilityFL.com in accordance with DOT web standards to accommodate the needs of different stakeholders (older adults, family/caregivers, engineers, planners, health care providers, law enforcement, and community partners).

The Department may assign other traffic engineering and administrative tasks that are associated with the support of Safe Mobility for Life program area.

C. Traffic Studies

Provide technical support and consulting services for traffic studies. Tasks may include, but not limited to, any combination of the following traffic engineering and operational studies: Traffic Impact Studies, Traffic analysis using simulation software, qualitative assessments traffic volume data, spot speed studies, field inventory, intersection delay analysis, crash analysis, signal warrant analysis, intersection control evaluations, provide photographs, existing condition diagrams, conceptual improvement diagrams, arterial studies, roadway safety audits, travel time & delay study, traffic conflict, system timing, school zone studies, highway lighting justification, traffic hazard study, product evaluation, and cost/benefit analysis. No software purchases permitted on this contract.

The Department may assign other traffic engineering and administrative tasks that are associated with the support of the traffic studies area.

D. Highway Signing

Provide technical support to the program manager and tasks may include any of the following related to highway signing activities: conduct sign inventory; develop and review any signing master plans; conduct plan reviews; develop sign design(s) files; develop and review sections of the Traffic Engineering Manual; develop and update the Department's specialized signs.

The Department may assign other traffic engineering and administrative tasks that are associated with the support of the Highway Signing Program.

Develop Standard Plans for Florida's Highway Sign Library and develop sign design files for signs that are in the Standard Plans.

Develop an informational webpage of sign types, examples of good sign design and resources for the Highway Signing Program.

Develop a Frequently Asked Questions webpage for the Highway Signing Program.

Develop an interactive component to the Florida's Interstate Exit Numbers webpage with the existing GIS application.

Develop a marketing and communication plan to disseminate and raise awareness on good sign design, sign consistency and FDOT signing resources.

Identify opportunities to include highway signing to e-traffic and/or other GIS applications.

Identify existing sign inventory throughout the state that could be incorporated into a single GIS based location for internal use.

Coordinate with the GIS Office and Enterprise Data Steward when identifying needs for GIS data, applications and/or services.

Review and update TEM Chapter 2 Signs.

E. Design Services

Provide technical support and consulting services for the design and preparation of final plans as needed. Tasks may include, but not limited to, engineering reports and design documentation, contract documents phase submittals for roadway signing and markings, lighting, signalization and any other roadway or intersection features relating to vehicular, pedestrian and bicycle accommodations.

F. Other Services

The Department may assign other traffic engineering tasks that are associated with the support of the Traffic Services Section in the State Traffic Engineering and Operations Office. This may include, but not be limited to, project tracking, updating manuals, policies, and procedures, updating design standards for traffic control devices for multi-modal operations (bike, pedestrian, transit), preparing transportation reports, developing criteria and guidelines for transportation services initiatives, and providing education and training for state and local partners. Maintaining content for the Traffic Services Section on the FDOT.gov/Traffic website and eTraffic GIS portal. Updating and tracking current Traffic Engineering and Operations studies.

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 (TWO). 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 particular TWO.

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.

For a Task Work Order where Consultant staff are anticipated to work the majority of a 40 hour week at Department facilities, the Consultant will be reimbursed at the field rate, and staff who are anticipated to work on average the majority of the week at the home office should be reimbursed at the home rate.

The Consultant shall maintain an office and staff in Tallahassee as defined and agreed to in TWOs. Limited office space may be provided by the Department for technical staff where close 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 TWOs.

VII. 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 or not 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.

VIII. 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.

IX. 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.

X. 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 effect 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.