Exhibit "A" Scope of Services Forecasting and Trends Office Support

I. Purpose

The Department requires consultant services to support the Forecasting and Trends Office (FTO). This includes support for the Forecasting and Modeling and the Performance and Trends sections of FTO. The Forecasting and Modeling section maintains the Florida Standard Urban Transportation Model Structure (FSUTMS) used by Florida's 27 Metropolitan Planning Organizations (MPOs), seven FDOT Districts and the Florida Turnpike Enterprise. The Performance and Trends section provides analysis and reports of multimodal performance data and trends on Florida's transportation system. This includes onsite support staff, demographic analysis, analysis of multimodal transportation customer survey results, analysis of emerging transportation technologies, and calculation of multimodal mobility measures.

Services for the subject contract will be authorized as task assignments. Funding sources for services will be both work program and operating funds. The Department shall apprise the Consultant when a Task Word Order is funded by operating budget, which must be invoiced before the end of the Department's fiscal year. Work on operating funds Task Work Orders must be completed by June 30th, with a final invoice received by the Department no later than September 1st, of the fiscal year the funds are encumbered.

II. Summary of Services

The Consultant will be required to perform planning level data analysis, reporting, and other activities related to transportation planning such as system performance and mobility trends. The Consultant will also be required to provide planning expertise to maintain, modify, and upgrade various planning level applications of the Florida standard model. This includes planning for the Strategic Intermodal System (SIS), providing training materials specific to use of the model results for analyzing planning level transportation scenarios, as well as support for the modeling analysis used in urban, regional, and statewide short-range and long-range transportation modal system plans, corridors studies, and work program projects.

Specific tasks are identified in Section III of this Scope of Services.

III. Definition of Potential Consultant Tasks

Task A – Onsite Support Staff

It is anticipated that the Consultant team will provide qualified staff or teams to be physically located in the FTO or virtually working part-time or full-time with Department staff as determined through the individual agreed upon Task Work Order. The consultant will function as an extension of the Department's resources and will be expected to provide qualified personnel to perform the duties and responsibilities assigned under the terms of this agreement which include activities related to developing data business rules from transportation planning principles, performing data extraction and analysis, creating mobility performance measures with the associated geospatial data, utilizing travel demand models developed by the Department or Metropolitan Planning Organizations (MPOs), perform quality control, conducting studies, performing project management, performing stakeholder coordination meetings and

activities, assist in reviewing technical analysis and studies, develop reports and graphics, perform mapping, develop and conduct polling surveys, utilize department applications and tools, develop documentation and present information. Consultants working onsite will adhere to Department information technology and security and development standards, documentation initiatives, and respond in a timely manner to public data requests.

Task B - Framework for Florida Standard Urban Transportation Model Structure Next Generation (FSUTMS^{ng})

Increased data availability, diverging modeling practices, and a platform agnostic environment has led to a need for updating the Florida Standard Urban Transportation Model Structure, known as FSUTMS Next Generation or FSUTMS^{ng}. The consultant will assist in the integration of model inputs and outputs for use in district, MPO, or other regional travel demand models.

The consultant will develop and document an improved innovative model framework for the FSUTMS^{ng}. Guidance and procedures will be developed for transit, freight, land use, time of day, and multi-resolution methodologies. FSUTMS^{ng} will update model guidance to reflect the state of practice techniques, implement innovative methods to maximize direct customer use of model inputs/outputs, and enact new practices that allow customers to directly use the model results in corridor planning, alternative analysis, and trends analysis.

This task does not include data purchases, which must be done as a commodity purchase through the FDOT Commodities and Contractual Services Section.

Task C –Technical Support

Provide short term low manpower tasks where a quick planning analysis is needed to support the FTO. Provide support developing presentation materials, organizing, and conducting meetings as well as conference support. Provide support in developing and calculating multimodal transportation system performance measures, trends, and travel forecasts. The consultant may be required to assist the Department in the development and implementation of the FTO Business Plan. Products and services may include implementing strategies related to customers and their transportation system performance and travel forecasting needs, developing performance measure calculation methodologies for transportation system performance, integrating methodologies to streamline the data inputs for and calculations of transportation system performance and travel forecasts, and developing methodologies and tools to facilitate the distribution of transportation system performance, trends, and travel forecasting information.

Task D - Documentation and Presentation of Multimodal Transportation System Performance

Produce and maintain documentation of the Department's information on transportation system performance using tools and applications owned by the Department. Provide technical support to compile, analyze, and report transportation system performance, trends, and forecasts. Provide documentation and data governance as it applies to the visualizations, transportation system performance and trends. All visualizations, analysis, and documentation shall be located on FDOT enterprise systems on/premise and/or in the cloud and adhere to FDOT Transportation Technology policies and procedures.

The Consultant may be required to perform the following tasks:

Perform quality control and quality assurance on the inputs and outputs used in transportation system performance reporting and travel forecasting, allowing for efficient sharing of FTO products. Work with data owners to organize and integrate various data inputs used in calculating transportation system performance, trends, and travel forecasts such as air quality, census, land use, traffic operations, equity, and resiliency. Provide support to the Statewide Survey Colloquium to facilitate consistency and sharing of survey information with District and MPO partners. Facilitate greater access to the survey results using a variety of communication mechanisms and tools.

Task E – Mapping and Geospatial support

Provide GIS support for applications, mapping, system of engagement dashboards and other evolving practices the Department is using to deliver projects and share information. This includes setting up all deliverables in a way that FDOT and our partners can consume, analyze, and contribute to the Department's existing enterprise data. Perform GIS analysis and mapping of multimodal transportation system performance, trends, and travel forecasts.

Task G – Multimodal Transportation System Performance and Trends Analysis

The consultant is required, at the direction of the FDOT Project Manager, to define, develop, and evaluate multimodal performance measures. The consultant may be required to perform the following:

- Compile, integrate, analyze, report, coordinate, and distribute the Department's multimodal mobility performance measures for automobile, truck, aviation, bicycle, pedestrian, transit, rail, maritime modes, and freight flows.
- Summarize transportation system performance in dashboards or reports specific to the needs of the intended audience.
- Calculate the multimodal performance measures and store the output in a database, located inside the Department's environment for authoritative use by both internal and external stakeholders
- Provide the performance measures at the most granular level feasible.
- Perform studies for the development of improved performance measures
- Develop analytical techniques for reporting multimodal mobility performance measures
- Provide performance and other information to support the Strategic Intermodal System (SIS) prioritization efforts

Task I – Coordination, Support, and Training

Provide outreach, develop materials, and conduct meetings for stakeholders such as other Department offices, districts, and MPOs.

The consultant may be required to perform the following tasks:

- Coordinate multimodal mobility performance measures and related activities among stakeholders
- Assist with outreach efforts to increase usage of transportation system performance measures by other Department offices
- Provide technical assistance to the Department in the development and implementation
 of district or statewide training in specific subject areas pertaining to transportation
 system performance or forecasting and modeling.
- Develop training materials, provide training site logistics, work the training sessions, and evaluate and modify training materials.

Task J – Transportation Asset Management Plan (TAMP)

Provide support and develop the Transportation Asset Management Plan (TAMP) required by Federal Highway Administration (FHWA) to develop a risk-based asset management plan for the Nation Highway System (NHS) to improve or preserve the condition of the assets and the performance of the system per (23 U.S.C. 119(e)(1), MAP-21 § 1106).

The consultant may be required to perform the following tasks:

- Collaborate with the following FDOT Offices to obtain the required indicators and information for the TAMP
 - Office of Work Program and Budget
 - Office of Policy Planning
 - Office of Maintenance
 - State Materials Office
 - Transportation and Data Analytics Office
 - Office of the Comptroller
 - Other offices in FDOT as instructed by the FDOT project manager
- Perform a Risk Assessment in collaboration with representatives from the pavement, bridge, maintenance, and financial group
- Develop a risk register summarizing the findings of the risk assessment for Agency-Level, Program Level, and Asset Level risks
- Draft the TAMP to include all the required elements
- Provide the TAMP to management for review
- Respond in a timely manner to management comments making any necessary revisions to the TAMP
- Coordinate and assist in hosting a risk workshop to reassess and finalize the risk register.
 - Orient participants to the risk-based elements of TAMP
 - Identify and assess the threats and possible opportunities that affect delivery of the Department's activities
 - Prioritize risks
 - Understand possible risk treatments (mitigations)
 - Finalize the Risk Register

IV. Responsibilities of the Department

- 1. 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 work products and services.
- 2. The Department shall approve, prior to the initiation of any tasks described in this exhibit, a specific Task Work Order defining the work to be accomplished and the total

reimbursement due the Consultant. The Task Work Order shall specify the Department Task Work Order Manager, when it is different from the Project Manager.

- 3. The Department shall furnish, without charge, the following services and data to the Consultant for the performance of the requested services:
 - a. All criteria and full information as to the Department's requirements for the Consultant's services including objectives, constraints, budgetary limitations and time restraints.
 - b. All Department rules, policies, procedures, standards and other information applicable to the services.
 - c. All drawings, specifications, schedules, reports and other information prepared by and/or for the Department by others which are available to the Department and which the Department considers pertinent to the Consultant's responsibilities described herein.
 - d. Computer access (mainframe and personal) if needed by Consultant staff to perform assigned tasks. Specific computer access requirements will be specified in each individual Task Work Order.

V. Responsibilities of the Consultant

- 1. The Consultant shall provide an overall Project Manager, acceptable to the Department, who will be the primary point of contact with the Department for the scope, schedule, manpower coordination and completion of all Task Work Orders. The Consultant Project Manager shall appoint, with the concurrence of the Department Project Manager and Department individual Task Work Order Managers, a Consultant individual Task Work Order Manager. The Consultant Project Manager shall meet with the Department staff on a regular basis as requested by the Department Project Manager and shall provide monthly progress reports in a mutually agreeable format, by Task Work Order, no later than two weeks after the end of the billing cycle of each month unless agreed to by the Department Project Manager. These progress reports shall be the basis for evaluation and processing of invoices for payment, unless otherwise stated in the Task Work Order.
- 2. 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 particular Task Work Order.
- 3. 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 when staff is added.
- 4. The Consultant shall provide sufficient staff, either the specific staff person requested or acceptable staff at defined levels of expertise as agreed to by the Department's Task Work Order Manager, in a timely manner to complete all assigned work. If, at any time, the Department Task Work Order Manager determines that the number or expertise of

particular staff assigned to a specific task is inadequate, the Department Project Manager and the Task Work Order Manager shall coordinate with the Consultant Project Manager to ensure adequate staff with the proper level of expertise is made available to ensure the timely completion of the work.

- 5. The Consultant shall provide all agreed to services, products and documentation within the required time schedule as defined in the individual Task Work Order.
- 6. The Consultant shall provide monthly invoices for work performed within 15 days of the end of the month for work performed during the preceding month, unless specifically agreed to by the Department Project Manager. The Department shall apprise the Consultant when a Task Work Order is funded by "operating budget". Work associated with Task Work Orders that use operating budget must be completed by June 30th (last date of the of the fiscal year), with a final invoice received by the Department no later than September 1st. Budget reverts on September 30th if not paid out. A final invoice for "operating budget" Task Work Orders shall be provided no later than 30 days after the Task Work Order terminates.
- 7. The Consultant shall verify to the Department Project Manager that all computers used by Consultant staff have a resident anti-virus program acceptable to the Department.
- 8. The Consultant shall ensure that all documents and support forms have been prepared on software approved by the Department's Project Manager and stored as specifically agreed to in an individual Task Work Order. A sequential naming convention should be applied to the files and documentation provided to the Department. Specific project documentation requirements will be specified in the respective Task Work Orders.
- 9. The Consultant shall maintain an office and staff in the Forecasting and Trends Office as defined and agreed to in Task Work Orders. Limited short-term 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 Task Work Orders.
- 10. 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.

11.

VI. 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 thru overhead for the Consultant firm.

VII. 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.

VIII. 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.

IX. 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.

SCORING CRITERIA FOR EXPANDED LETTER OF RESPONSE

Project: Forecasting and Trends Office FDOT Financial ID No. (s):	e (FTO) Suppor	rt	
Consultant:			
Evaluator:			
Signature:	D	ate:	
Technical Plan Understanding of Scope Strategic Ideas for Transportation Per Forecasts Mapping and Geospatial Support Experience Providing Quality Data Go Approach to Documentation and Pres Transportation System Performance Innovative Concepts for FSUTMSng	(0 TO 60 PTS) rformance and overnance	(15) (10) (10) (10) (10) (05)	
Project/Task Manager Experience Commitment/Availability	(0 TO 10 PTS)	(05) (05)	
Management Plan Capability & Experience of the Team Quality Control Efforts Contract Management Approach	(0 TO 20 PTS)	(10) (05) (05)	
Other Considerations Communication/Coordination Efforts Transportation GIS Professionals (GIS)	(0 TO 10 PTS) SP) on the team	(05) 1 (05)	
Comments are to be addressed on the required to address each subsection tho		e be advised	that you are

Evaluator:		
Technical Plan	(0 TO 60 PTS)	
Project/Task Manager	(0 TO 10 PTS)	
·		
Management Plan	(0 TO 20 PTS)	
	 	
Other Considerations	(0 TO 10 PTS)	

Evaluator's Initials _____

Project: Forecasting and Trends Office (FTO) Support

Consultant: