EXHIBIT "A" <u>Scope of Services</u> Program Services Scheduling, GIS and Web Support

1. OBJECTIVE

The Florida Department of Transportation (FDOT) requires a Vendor to provide for services to support the District 4 Program Management Office. Support areas include but are not limited to: scheduling, geographic information systems (GIS), website programming, and data integration to support planned and ongoing production efforts as directed by FDOT. The Vendor shall function as an extension of FDOT's resources by providing qualified technical and professional personnel to perform, mostly at the District Headquarters offices, the duties and responsibilities assigned under the terms of this agreement.

The Vendor shall minimize to the maximum extent possible FDOT's need to apply its own resources to assignments authorized by the FDOT. The FDOT, at its option, may elect to expand, reduce, or delete work elements described in this scope of services document, provided such action does not alter the intent of this agreement.

The FDOT shall request services on an as-needed basis. There is no guarantee that any or all of the services described in this agreement will be assigned during the term of this agreement.

2. GENERAL SERVICES

The Vendor will provide administration, support, management and oversight services necessary to coordinate, plan, direct, control or perform the following services:

- o Emphasis will be placed on assisting the FDOT in the development, maintenance, and updating of the District's data integration initiatives, whereby multiple sources of information are distributed for multiple purposes, including but not limited to computer and web programming as outlined in paragraph 2.1; database administration, as detailed in paragraph 2.2 herein; and Geographic Information Systems (GIS) as detailed in paragraph 2.3 below.
- Emphasis will also be placed on assisting FDOT in the development, maintenance, and updating of the district scheduling system utilizing Oracle Primavera suite of software for production management; as detailed in paragraph 2.4 below.
- The VENDOR shall reasonably implement and maintain systems for District 4 to assist in bringing to completion as expeditiously as possible numerous projects within the Work Program for District 4.

2.1 Software and Web Development

The Vendor shall assist the FDOT in the development; maintenance and updating of the District's web applications/software and web sites in support of, but not limited to, the District's production process, whereby information are published and distributed for multiple purposes. These services may include but are not limited to the following:

- A. Development and implementation of web pages and web applications in support of streamlining of processes in the District.
- B. Maintenance and improvement of existing web pages and web applications in support of streamlining processes in the District.
- C. Development and implementation of computer programs using proven software development techniques and methods in support of automation of processes as necessary.
- D. Maintenance and improvement of existing computer programs using proven software development techniques and methods in support of automation of processes as necessary.
- E. Any other software development and technical assistance as necessary.

2.2. <u>Database Administration</u>

The Vendor shall assist the FDOT in the development, maintenance, and updating of the District's databases in support of integration initiatives, whereby multiple sources of information are distributed for multiple purposes. These services may include but are not limited to the following:

- A. Develop and implement new databases, tables, stored procedures and other data management processes supporting scheduling, GIS, and Web development Initiatives.
- B. Maintain existing database tables, stored procedures, and other data management processes supporting scheduling, GIS, and Web development initiatives.
- C. Develop and implement new databases, tables, stored procedures and other data management processes supporting other possible initiatives.
- D. Maintain existing database tables, stored procedures and other data management processes supporting other possible initiatives.
- E. Develop, maintain, and generate reports using available database reporting services in support of Production Management, Scheduling, GIS, Web Development, and other efforts.

F. Any other database related task and technical assistance as necessary.

It is anticipated that the following list of positions will be required to complete the tasks described in 2.1 and 2.2:

Junior Developer

This individual is expected to have a development skillset that will allow them to begin troubleshooting and developing FDOT applications and reports. The individual should have an understanding of SQL development. Typical education is a Bachelor's of Science in Computer Science, or nearly complete with one or equivalent combination of education and/or experience.

Mid-Level Developer

Builds on the Junior Developer level with typically 1 to 3 years of relevant experience. An understanding of existing FDOT systems is a plus.

Senior Developer

Builds on the Mid-Level Developer level by having an expert level understanding of FDOT applications, reports, and integrated enterprise applications. Typically has a minimum of 3 years relevant experience.

Enterprise Systems Developer

Builds upon the Senior Level Developer by having an expert understanding of a particular enterprise application with the ability to effectively coordinate and manage a team of developers to obtain a successful product.

Web Technical Lead

Builds upon Enterprise Systems Developer. This person should have a strong understanding of FDOT's Work Program with the ability to handle all aspects of the Software Development Life Cycle.

Web Project Manager

Builds upon the Web Technical Lead. Includes the ability to manage the resource allocation aspects of the consultant contract as it relates to billing and staffing.

2.3. Geographic Information System

The Vendor shall assist the FDOT in the development, maintenance, and updating of the District's Geographic Information System (GIS) in support of the District's GIS initiatives, whereby information of multiple origins and type are integrated and distributed for multiple purposes. These services may include but are not limited to the following:

- A. Development, implementation, maintenance, and operation of GIS web pages and applications in support of streamlining of processes and data analysis in the District.
- B. Development and implementation using proven software development techniques and methods of centralized generic GIS solutions for GIS users in a client-server and/or web-based environment.

- C. Maintenance and improvement using proven software development techniques and methods of existing GIS solutions for GIS users in a client-server and/or web-based environment.
- D. Update system software and databases as needed, including the documentation for the problems encountered during deployment and the measures to fix them.
- E. Any other GIS task and technical assistance as necessary.

It is anticipated that the following list of positions will be required to complete the tasks described in 2.3:

Junior GIS Analyst

This individual should be able to perform day to day maintenance and ad-hoc requests (map creation, etc.). Knowledge and use of ESRI products is required.

Mid-Level GIS Analyst

Builds upon the Junior GIS Analyst's abilities. Speed and experience level are the key difference. Typically, 1 to 3 years of experience is needed for this level. Knowledge of SDE, licensing, and data versioning is required.

Senior GIS Analyst

Builds upon the Mid-Level GIS Analyst's abilities. This individual should be an expert level user of GIS products to perform complex analysis and any ad-hoc query (map creation, etc.). Additionally, some script writing knowledge is also required. Knowledge of FDOT's enterprise systems and business practices/workflows is a plus. Advanced knowledge of SDE, licensing, and data management is required. Typically has a minimum of 3 years relevant experience. GISP Certification is preferred.

GIS Analyst Programmer

Builds upon the Senior GIS Analyst's abilities. This individual should be an expert level user of GIS products to perform complex analysis. Additionally, this individual should have the ability to develop scripts for consumption by our GIS systems.

GIS Application Developer

This individual should be an expert level user of GIS products to perform complex analysis. Additionally, this individual should have the ability to develop web-based GIS applications using a variety of script or .NET languages.

2.4. Scheduling System Operation and Maintenance

The VENDOR shall continually review current District 4 Oracle-Primavera based schedules and schedule templates. This review shall include analysis of template activities, milestones, activity codes, calendars, logic, and other items pertinent to the schedule. In this regard, the General Consultant shall provide the following:

A. Complete development and or maintenance of the various generic schedule templates required to reasonably match all of the common types of categories of projects in District 4.

- B. Following written procedures and practices, create and maintain critical-pathmethod schedules for projects in the Tentative Five-Year Work Program with logic and activity interdependency.
- C. Conduct periodic evaluations of the current processes, procedures, and practices to determine need for improvements, including recommendations.
- D. Develop Reports: Vendor shall develop standardized Oracle-Primavera based reports for District senior managers and project managers to assist in the review, update, and monitoring of project schedules.
- E. Perform scheduling data input (schedule updates), including earned-value information, for new and existing schedules of projects in the work program.
- F. Generate monthly reports for each project, existing and new.
- G. Coordinate District 4 project manager reviews and updates of project schedules.
- H. Prepare schedule reports, with emphasis on the Monthly Production Book, which requires accuracy, consistency, and reliability.
- I. Prepare schedule variance analysis, including earned-value, and review with the District project managers for possible remediation.
- J. Issue a monthly scheduling report of the status of all projects, including master schedules, detailed schedule for each project, and variance analysis reports. Create other reports as necessary (such as workload forecast, production management, project progress, earned value, accomplishment reports), or as requested by the District to effectively monitor performance.
- K. Provide training for District project managers, support staff, and others as needed.

It is anticipated that the following list of positions will be required to complete the tasks described in 2.4:

Junior Scheduling Analyst Trainee

New staff member brought in to learn the basics of FDOT scheduling with the intent of either going back to the bench or staying on full time. This individual may or may not have prior scheduling experience.

Junior Scheduling Analyst

A junior level analyst that has already learned the rudimentary basics of FDOT Scheduling. This involves working knowledge of Primavera, and how the FDOT uses it for scheduling projects, understanding of WBS and OBS, funding of projects and how funding impacts the project schedule. Typically has Junior Scheduling Analyst Trainee experience of at least two months.

Scheduler 1

An analyst with a solid understanding of the day to day operations of FDOT Scheduling. Able to independently assist PM's in resolving typical issues. Able to create monthly production reports for transportation projections, Uses independent judgment to determine resources required and technical approach to complete assigned tasks. Typically has six months to one year of experience as a Junior Scheduling Analyst.

Scheduler 2

Builds upon Scheduler 1's abilities. Has the knowledge and skills to create new reports, and project templates. Makes recommendations to team regarding improvements to current processes and procedures. Able to perform trending analysis. Typically has one to two years experience as a Scheduler 1.

Senior Scheduling Analyst

Builds upon Scheduler 2's abilities with an additional emphasis placed on the production management aspects of FDOT. This individual possesses a higher level understanding of the Work Program, Production, and related enterprise applications. Possesses a very high level of analytical ability. Typically has one to two years experience as a Scheduler 2.

Scheduling Consultant Lead

Builds upon the Senior Scheduling Analyst abilities. This individual possesses a senior level scheduling analyst skillset. Works along with FDOT Scheduling Administrator to make decisions for the improvement of processes. Supervises consultant staffing for scheduling, and coordinates the training of new employees.

Scheduling Contract Manager

Builds upon the Scheduling Consultant Lead. Includes the ability to manage the resource allocation aspects of the consultant contract as it relates to billing and staffing.

3. COOPERATION AND PERFORMANCE OF THE CONSULTANT

During the life of this agreement, the FDOT District Project Manager or other FDOT representative may conduct reviews of the various phases of the Consultant's operations. The Vendor shall cooperate with and assist the FDOT's personnel in conducting these reviews.

When deficiencies are indicated in a review, remedial action shall be immediately implemented by the Vendor in conformance with the FDOT's recommendations. In general, remedial action shall be required commensurate with the degree and nature of the deficiencies cited. Additional compensation shall not be allowed for remedial action taken to correct deficiencies by the Vendor.

4. FDOT RESPONSIBILITIES

The FDOT will furnish, without cost to the Vendor, the following services and data in connection with services authorized under terms of this agreement:

A. Provide all criteria and full information as to the FDOT's requirements.

- B. Furnish all FDOT procedures, standards, and policies applicable to the services.
- C. Furnish any specifications, schedule data, reports, drawings, and other information prep by and/or for the FDOT by others which are available to the FDOT and that FDOT considers pertinent to Vendor responsibilities, as described herein.
- D. Provide furnished office space and use of FDOT's computers applicable to the services. Approximately six office spaces will be used by eight total consultants.

5. COMPUTER SERVICES

The approved Vendor's may utilize the FDOT's data processing and computer services for programs requested by the Vendor and approved by the FDOT Computations based on computer programs, other than the FDOT's, must conform to the FDOT's prescribed formats.

6. CONTRACT MANAGEMENT

It shall be the Vendor's responsibility to produce progress reports, internal coordination, and assurance of compliance to all administrative procedures as they apply to the Vendor and the scope of services.

The Vendor shall provide all required staff for on-site work within one (1) day upon letter of authorization issuance.