

## **Exhibit "A"**

### **Scope of Services**

#### **Florida Department of Transportation District 5, Districtwide Continuing Services Contract (CSC) for Transportation Statistics Highway Data Collection and Analysis**

**FM No.: 445258-1-12-01**

This Exhibit forms an integral part of the Agreement which provides for services by the **CONSULTANT** in connection with the [Districtwide] Transportation Statistics Continuing Services Contract (CSC) of “Transportation Statistics Highway Data Collection and Analysis.”

#### **I. OBJECTIVES**

The main objectives of this contract are to provide professional and technical services in collecting and analyzing highway and traffic data, as well as to serve as an extension to the FDOT Planning and Environmental Management Office (PLEMO). The activities to be performed by the **CONSULTANT** may include, but are not limited to, Roadway/Traffic Characteristics Inventory (RCI/TCI) data collection, implementation of a data quality assurance/quality control program, database/geodatabase management, data reporting, data mapping, and data analysis as mandated by federal and state regulations and policies. Furthermore, the **CONSULTANT** may also be tasked to collect and analyze customer trip characteristics, travel behavior, demographic characteristics, and operational and performance measures from the public transit systems in the district to support travel demand modeling, long-range and area wide planning, route planning and scheduling, service design, trail, marketing, and customer communications

The primary tasks that will be undertaken in this contract may include, but are not limited to:

- Provide data collection and data entry/conversion support to the Roadway Characteristics Inventory (RCI) and Traffic Characteristics Inventory (TCI) programs at District 5.
- Collect all current and future data elements required by the Transportation Data and Analytics (TDA) Office where the responsible party is The District as specified in the current FDOT RCI Features and Characteristics Handbook or related Handbooks, policies and procedures published by TDA which designate the responsible party for data collection as The District.
- Produce straight line diagrams (SLD) using the latest Straight-line Diagrammer online program. Version 1.4.2.24
- Retrieve data and develop reports via FDOT mainframe, the RCI database and RITA (Roadway Inventory Tracking Application).
- Preparation of LRS/RCI discrepancy submittal packages.

- Develop mapping and graphics applications using ArcGIS, Microstation JV8i, or MS PowerPoint.
- Create and development mapping and graphics applications in a Geographic Information Systems (GIS) environment.
- Perform traffic surveys and miscellaneous tasks to meet project specific traffic data collection requirements.
- Carry out average daily traffic (ADT) and vehicle classification surveys for the District TCI Program.
- Conduct roadway or traffic data analysis and develop reports.
- Traffic monitoring site development and operation, including (but are not limited to) portable traffic monitoring site (PTMS), telemetered traffic monitoring site (TTMS), weigh-in motion (WIM), remote traffic microwave sensor (RTMS) and other non-intrusive devices.
- Assignment and modification of access management classification.

Secondary tasks, as described in this Scope of Services, may also be issued. Further, the **CONSULTANT** may be required to perform other Planning tasks to support Planning and Environmental Management functions.

## **II. SERVICES**

The **CONSULTANT** will be required to provide data collection and analysis services to assist District 5 Transportation Statistics staff in performing the tasks identified in this Scope of Services. The **CONSULTANT** shall complete all work performed under this contract in accordance with applicable **DEPARTMENT** policies, guidelines and procedures. Work is to be performed by the **CONSULTANT** on an as-needed basis throughout the duration of the contract. The **DEPARTMENT** has the final discretion on the choices of **CONSULTANT** staff for each TWO. The following sections describe the tasks for which **CONSULTANT** services may be required.

### **II.1 Primary Tasks**

All work covered under this type will have a unit cost associated with each task to be performed. During contract negotiations, the **CONSULTANT** and **DEPARTMENT** will agree to a unit cost for each of the traffic data collection activities that fall into this category. These unit costs will be used throughout the duration of this Agreement but may be revised according to conditions agreed upon by both parties. The **CONSULTANT** may be required to conduct the following unit-based activities:

#### **A. Roadway Characteristics Inventory of SHS, Off-System and HPMS Samples**

The **CONSULTANT** may be required to collect all Central Office and District 5 required highway data and/or HPMS data using a Distance Measuring Instrument (DMI) with GPS capability, and enter this information into the **DEPARTMENT**'s RCI database. Roadways requiring inventory will include On-system, Off-system and HPMS samples in both Urban and Rural areas. All required roadway data will be collected and input according to the most up-to-

date versions of the FDOT General Interest Roadway Data procedure (currently, Procedure No. 525-020-310-j, 3/23/2016), the FDOT RCI Features and Characteristics Handbook (August 2016 or later), the FDOT RCI Planning Data Handbook (August 2016 or later), and the Federal Highway Administration (FHWA) Highway Performance Monitoring System Field Manual (December 2016 or later). All roadway changes noted in the field must be recorded and entered into the RCI database by the **CONSULTANT**. Furthermore, consistency edits must then be run and resolved using the Department's Data Analysis and Reporting for Transportation Systems (DART) application until they return error free. The **CONSULTANT** should be proactive in running edits and other tracking applications used by the FDOT in its inventory and tracking processes. The **CONSULTANT** should submit completed SLDs at least 10 days before the SLD distribution due date, that being 20 days after RCI input. In the field inventory process, the **CONSULTANT** is responsible to ensure that all personnel and vehicles are equipped with safety measures to meet FDOT standards such as: strobe lights, "SLOW MOVING VEHICLE – MAKES FREQUENT STOPS" identification. Other equipment required are Distance Measuring Instrument (DMI), laptop and inventory software, measuring wheel and measuring tape.

B. RCI/SLD Production Associated with FDOT Construction Completion Notification

The **CONSULTANT** may be requested to conduct a detailed review of roadway construction plans and field verifications. Each set of plans shall be reviewed to determine all changes needed for RCI update. All work shall be completed according to the most current FDOT General Interest Roadway Data procedure (currently, Procedure No. 525-020-310-j, 3/23/2016), the FDOT RCI Features and Characteristics Handbook (August 2016 or later), the FDOT RCI Planning Data Handbook (August 2016 or later), and the Federal Highway Administration (FHWA) Highway Performance Monitoring System Field Manual (December 2016 or later). All changes noted from the review shall be made to the RCI database by the **CONSULTANT**. Edits shall be run until they return error free. Once edits are free from error, the **CONSULTANT** shall, at the direction of the **DEPARTMENT**'s Project Manager, submit a Straight Line Diagram (SLD) for each roadway having had a construction plan review. The **DEPARTMENT**'s Project Manager shall approve all SLDs before final submittal.

C. State Highway System (SHS), Strategic Intermodal System (SIS), National Highway System (NHS) and MAP-21 Roads

The **CONSULTANT** may may be responsible for conducting data inventory, analysis, SLD and Key Sheet regeneration, mapping, and other various tasks related to updates, modifications to, or investigation into the SHS, SIS, NHS and MAP-21 roadways.

D. Quality Control and Monitoring

The **CONSULTANT** may be requested to develop and support a District plan for a comprehensive, well defined, written set of procedures and activities designed to produce services and products at an established quality level consistent with the measures of the current, annual Quality Assurance Monitoring Plan established by the Transportation Data and Analytics Office. The **CONSULTANT** may also be requested to support the District in data quality

evaluations including District Quality Evaluations (DQE) and Quality Assurance Reviews (QAR) with FHWA and Central Office staff. The **CONSULTANT** should be proactive in running of DART edits and other tracking applications used by the FDOT in its inventory and tracking processes and endeavor to achieve the highest standards for data quality in these evaluations.

E. FDOT Planning Office GIS Linear Reference System (LRS) and RCI Basemap Correction/Update Analysis

The **CONSULTANT** may be requested to conduct a detailed review of the FDOT Planning Office GIS LRS and Basemap including, but not limited to, roadway section alignments, lengths, curve data, overall descriptions, classifications, etc. Updates are to be reviewed for inconsistencies between the Basemap and RCI database, using ESRI ArcGIS, digital ortho quarter quad maps, aerials, Videolog and the RCI database. The **CONSULTANT** will prepare draft RCI/LRS Correction submittal packages for review by the FDOT Project Manager or designee prior to transmittal to FDOT Central Office. Unless requested by the FDOT project manager, the **CONSULTANT** will not request adjustment to section lengths if the measured DMI length in the field is within tolerance of the Basemap length.

F. Geographic Information System (GIS) Support

The **CONSULTANT** may be requested to apply Geographical Information System (GIS) software to support Department Planning and Environment Management functions. For example, the **CONSULTANT** may be requested to perform various RCI data extraction reports and/or mapping and graphic application tasks using ArcGIS, Microstation CADD, and/or MS Excel, MS Access, or MS PowerPoint software. Other work may include but are not limited to:

- GIS data development, cleaning, update and conflation
- Develop scripts to perform data integration, manipulation, and analysis in ArcGIS environment.
- On-Site Support

G. Bold and Innovative Solutions and Services

The **CONSULTANT** may be required to assist the FDOT staff in developing bold, innovative and visionary solutions and services that would improve the overall efficiency, productivity and cost saving of various data collection and analysis tasks.

H. Integrated Roadway Asset Identification System (IRAIS) Project - RCI-Rewrite

The **CONSULTANT** may be required to assist the PLEMO staff in performing activities relevant to the **DEPARTMENT**'s IRAIS initiatives on modernizing the data contents and usage as well as reengineering the relevant processes that surround TCI/RCI. The **CONSULTANT** may be tasked accordingly to properly assess, develop and/or carry out follow-up actions.

I. ROADS (Reliable Organized and Accurate Data Sharing) Project

The **CONSULTANT** may be required to participate, support and perform relevant tasks throughout the development of the **DEPARTMENT**'s ROADS project. The purpose of the project is to allow accurate and reliable data to be collected and used in making informed transportation decisions. The **CONSULTANT** may be responsible to respond to research and information requests, implement data transformations, resolve data issues and collaborate on system changes as per the direction of the **DEPARTMENT**.

J. Off-system Construction Complete Notification Program

The **CONSULTANT** may be requested to coordinate with county and municipal entities to conduct RCI inventory on off-system roads with newly completed improvement projects. If needed, plans shall be reviewed to determine all changes that have impacted RCI, followed by a field inventory. All applicable work shall be completed according to the most up-to-date FDOT General Interest Roadway Data procedure (currently, Topic No. 525-020-310-i, 2013), the FDOT RCI Features and Characteristics Handbook and the RCI Planning Data Handbook (2013 or later). All changes noted from the review shall be made to the RCI database by the **CONSULTANT**. Edits shall be run until they return error free. The **DEPARTMENT**'s Project Manager shall approve all final submittal.

K. Public Involvement

The **CONSULTANT** may be required to perform public involvement duties as needed to support other tasks specified in this scope of services. For example, the **CONSULTANT** would be required to develop and conduct public involvement program for a travel survey. The **CONSULTANT** may also be required to conduct public workshop and to present the products of other tasks. The **CONSULTANT** would be responsible for advertising public involvement events and documenting public inputs.

L. Remote Sensing Services

The **CONSULTANT** may be required to use Remote Sensing Systems for inventory and data collection for roadways on and off the State Highway System and other mapping applications.

M. GPS Services

The **CONSULTANT** is required to use Global Positioning Systems (GPS) to collect latitude and longitude coordinates in decimal degrees when a Position Dilution of Precision (PDOP) reading value calculated from a minimum of 4 satellites is less than or equal to 4. The **CONSULTANT** should have GPS capabilities and the necessary equipment to perform the above tasks and any other related tasks, upon request.

N. In-House Support

Upon request, **CONSULTANT** staff will be required to work at the **DEPARTMENT**'s offices as scheduled by the **DEPARTMENT** to perform any task that is outlined in this scope. This arrangement allows for direct interactions between **CONSULTANT** and **DEPARTMENT** staff and the **CONSULTANT** direct access to the **DEPARTMENT**'s archives to conduct work in a timely manner, thus expediting the completion of work assignments. The details of **CONSULTANT** staff work schedule will be defined in Task Work Orders.

O. FDOT Roadway Jurisdiction Transfer

The **CONSULTANT** may be asked to assist in researching, verifying and documenting proposed, pending or completed jurisdictional roadway transfers between governmental agencies. Responsibilities may include, but are not limited to, data analysis, development of graphics, GIS applications support, stakeholder coordination and meeting participation.

P. Interim Functional Classification Designation and Development – Primary

The **CONSULTANT** may be asked to assist in the designation and development of federal functional classification based on the parameters, such as trip lengths and purposes, travel speeds, traffic volumes, etc., and procedures that the FHWA regulates and enforces.

## II.2 Secondary Tasks

The secondary tasks may include but are not limited to the following work:

A. Average Daily Traffic (ADT) Counts

- Twenty-four (24) Hour
- Forty-eight (48) Hour
- Seventy-two (72) Hour
- Seven (7) Day
- Fourteen (14) Day

B. Vehicle Classification Surveys

Unless otherwise specified, all vehicle classification surveys must be conducted using the 15 class Scheme F.

- Twenty-four (24) Hour
- Forty-eight (48) Hour
- Seventy-two (72) Hour
- Seven (7) Day
- Fourteen (14) Day

C. Bridge Closing/Boat Volume Surveys

The **CONSULTANT** may be required to conduct a 14-day volume count of the traffic crossing over or under a specified bridge. Volume data will be collected in 15-minute intervals and summarized according to U.S. Coast Guard procedures.

D. Speed/Travel Time Surveys

Spot speed and/or travel time studies, as set forth in the Manual on Uniform Traffic Studies (MUTS), may be required. Speed surveys may be carried out at the existing **DEPARTMENT** owned PTMSs or at any designated location determined as appropriate and feasible. The **CONSULTANT** may be tasked to perform spot speed analyses to quantify free-flowing and/or other traffic speed characteristics at a specified location under the traffic and environmental conditions prevailing at the time of the analysis.

E. Intersection Turning Movement Counts (TMC) and Pedestrian/Bicycle Counts

The **CONSULTANT** will be required to conduct TMCs which may include pedestrian and/or bicycle Counts. TMC's will include a 24-hour or 72-hour ADT bi-directional count for each leg of the intersection, as set forth in the Manual on Uniform Traffic Studies (MUTS). Turning movement, pedestrian and/or bicycle counts will be recorded and summarized in 15-minute intervals with hourly and grand totals for each location. Compatible **DEPARTMENT** software must be used. The **CONSULTANT** will provide a condition diagram including an intersection schematic showing the counts on a basic geometric layout. The condition diagram will include the location of all counting personnel and equipment. The format will be specified in the task work order. The **CONSULTANT** will provide a SPS.INV file of the corridor as well as other electronic files and documentation.

F. Access Management

The **CONSULTANT** may be required to participate in the assignment or re-assessment of access management classifications of State Highway System (SHS) roadway segments, in accordance with the guidelines and regulations set forth in Rule Chapter 14-97, F.A.C. and any other supporting documentation. The **CONSULTANT** may be required to perform public involvement duties, as needed, to support this task. In addition, the **CONSULTANT** may be required to conduct field inventories of the State Highway System, to confirm access management classification.

G. Traffic Count Support

The **CONSULTANT** may be required to recommend permanent/portable count site locations for the installation of inductive loop detectors, piezoelectric sensors and TMS traffic control cabinets. This task may require statistical analysis of existing count locations to determine count

site needs by facility type, area type, number of lanes, etc., as well as field review and right-of-way research to identify suitable count site locations.

#### H. Freight Data Collection and Analysis

At the discretion and direction of the **DEPARTMENT**, the **CONSULTANT** may be requested to assist the development, implementation and refinement of classification traffic data collection plan and coverage. In addition, the **CONSULTANT** may be requested to perform necessary data collection and any relevant analysis to assess freight level of service through quantifiable performance measures. The **CONSULTANT** may be required to perform the following subtasks:

- Identify quantitative freight data sources
- Collect stakeholder input
- Identify hot spots and key issues
- Compile freight profile in terms of volume, commodity type, economic impact, etc.
- Develop freight plan recommendations and strategic framework

The relevant freight data, that the **CONSULTANT** may be tasked to collect, include but are not limited to the following items:

- Volume and direction
- Terminal gate queue length and processing time at sea ports
- Commodity value
- Gross vehicle weight (GVWR) or gross vehicle mass (GVM)
- Time of the day and day of the week variations
- Truck type and body style
- Trip O/D and route used

#### I. Traffic Data Conversion, Manipulation, Integration and Analysis

The **CONSULTANT** may be tasked to perform necessary conversion, manipulation, integration, “mining”, and analysis of traffic data that are received from various sources, e.g., Intelligent Transportation Systems (ITS), and with different formats and data representations to assist Transportation Data and Analytics in performing its functionalities in a cost-effective manner.

#### J. Portable Traffic Monitoring Site (PTMS) Inspections

The **CONSULTANT** may be required to provide a qualified technician to inspect PTMS and provide a hard and/or electronic inspection report to the **DEPARTMENT** (see the Traffic Monitoring Handbook for procedure and equipment details). Upon acceptance of inspections, the **CONSULTANT** is responsible for labeling each PTMS cabinet. The **CONSULTANT** shall incur all costs for labeling and numbering of PTMS cabinets (the **DEPARTMENT** has detail of the label and numbers). The **DEPARTMENT** may request a 48-hour count following a repair or installation, as part of the inspection requirements.



K. Project Traffic Development

The **CONSULTANT** may be required to develop future traffic estimates (including turning movements); develop K, D and T design factors, collect necessary of project specific traffic data; and prepare pavement loading reports (18-Kip ESAL) using the above information.

L. Maintenance RCI

The **CONSULTANT** may be requested to collect Maintenance RCI data and input this data in the RCI database in accordance with the FDOT General Interest Roadway Data procedure (currently, Procedure No. 525-020-310-j, 3/23/2016) and the FDOT RCI Features and Characteristics Handbook (August 2016 or later). Furthermore, the **CONSULTANT** may be tasked with developing an approach, process analysis, and methodology testing to Maintenance RCI data collection both independently of and in conjunction with the some or all of the other services described in this contract.

M. SunTrail and Trail

The **CONSULTANT** may be requested to collect RCI SunTrail and Trail data and input this data in the RCI database in accordance with the FDOT General Interest Roadway Data procedure (currently, Procedure No. 525-020-310-j, 3/23/2016) and the FDOT RCI Features and Characteristics Handbook (August 2016 or later). Furthermore, the **CONSULTANT** may be tasked with developing an approach, process analysis, and methodology testing to SunTrail and Trail RCI data collection both independently of and in conjunction with the some or all of the other services described in this contract.

N. Model Inventory of Roadway Elements (MIRE)

The **CONSULTANT** may be requested to collect MIRE data elements and, where applicable, input this data in the RCI database in accordance with the FDOT General Interest Roadway Data procedure (currently, Procedure No. 525-020-310-j, 3/23/2016), the FDOT RCI Features and Characteristics Handbook (August 2016 or later), and Federal Regulation 23 CFR 924.17. Furthermore, the **CONSULTANT** may be tasked with developing an approach, process analysis, and methodology testing to MIRE data collection both independently of and in conjunction with the some or all of the other services described in this contract.

### III. SCHEDULE

The **CONSULTANT** agrees to begin work after issuance of a notice to proceed by the **DEPARTMENT** and upon receipt of Task Work Orders.

### IV. METHOD OF COMPENSATION

Payments for each Task Work Order will be specified on the corresponding Letter of Authorization.

## **V. KEY PERSONNEL**

The **CONSULTANT**'s work will be performed and directed by key personnel identified in the executed contract. The **CONSULTANT** shall provide sufficient staff, either the requested staff person or acceptable staff, at defined levels of expertise as agreed to by the **DEPARTMENT**. Prior to any changes in the indicated personnel, a request must be submitted to the **DEPARTMENT** for review and approval. The **CONSULTANT** may be required to assign a Task Manager to coordinate activities associated with assigned tasks. Equivalent Single Axle Load (ESAL) Reports shall be prepared by a certified individual and/or signed and sealed by a Professional Engineer.

## **VI. MEETINGS**

During the contract period, meetings may be necessary between **CONSULTANT** and **DEPARTMENT** personnel. Meetings may be scheduled at the request of either party, as needed. These meetings may include, but are not limited to, the following purposes:

- To provide documentation
- Review of proposed task work orders, scheduling needs, and personnel resources
- Review of the financial and legal administration of the contract
- Address any questions the **CONSULTANT** or **DEPARTMENT** may have
- Resolve unforeseen problems

## **VII. SUBCONTRACTING SERVICES**

Additional Sub- **CONSULTANT**s with specialized areas of expertise may be required by the **DEPARTMENT** or requested by the **CONSULTANT** to complete specific task work orders. All sub-consultants must be pre-qualified by the **DEPARTMENT** to perform all work assigned to them. A formal contract amendment is required to use a Sub- **CONSULTANT** who is not specifically listed in the contract.

## **VIII. MATERIALS AND EQUIPMENT**

The **CONSULTANT** will provide all equipment and materials required to complete each task work order, including counters, cable assemblies, sensors, and accessories. The **CONSULTANT** will submit an annual certification of all counters prior to beginning the Routine Annual Count Program each year, and prior to putting a new or repaired counter into service. Calibration methodology and documentation must have **DEPARTMENT** approval or will be provided by the **DEPARTMENT**.

See the Traffic Monitoring Handbook for additional information. Traffic counters placed in the field will be clearly marked with the name and telephone number of the **CONSULTANT**. At

PTMS containing J1 cables, the **CONSULTANT**'s equipment must have the corresponding P1 cable. The **CONSULTANT** shall not disconnect the J1 cable and connect their counter directly to the back panel.

The **DEPARTMENT** reserves the right to specify the type of sensors used to collect traffic data at a portable traffic monitoring site (PTMS). Where the **DEPARTMENT** has installed permanent sensors, the **CONSULTANT** is required to use them unless otherwise directed by the **DEPARTMENT**. The **CONSULTANT** will notify the **DEPARTMENT** of any problems concerning a PTMS. A task work order may be issued to perform a PTMS inspection at a site where the **CONSULTANT** has determined that the sensors are not operating properly. The site inspection report will be submitted within a week of its completion, so that the **DEPARTMENT** can schedule it for repair. When repairs can be made in a timely fashion, the **CONSULTANT** may be required to return and obtain a traffic survey at this PTMS.

## **IX. RESPONSIBILITIES OF THE DEPARTMENT**

The **DEPARTMENT** will provide a Project Manager, who will be responsible for the day-to-day management of this contract, including coordination with the **CONSULTANT** pertaining to the development and execution of task work orders. The **DEPARTMENT** will direct the **CONSULTANT**'s work through task work orders that describe the project requirements for which **CONSULTANT** services are required. The **CONSULTANT** may assist in preparing a given TWO. After negotiations, the **DEPARTMENT** will issue the Letter of Authorization for each TWO, which will include a copy of scope of services with descriptions on expected work tasks, schedules, staffing requirements, documentation requirements, and the total allowable cost. The required task work order form will be prepared and signed by both the **CONSULTANT** Project Manager and the **DEPARTMENT** Project Manager prior to the initiation of any work. The **DEPARTMENT** will designate a Professional Services Contract Manager who shall represent the **DEPARTMENT** in all matters pertaining to contract administration. The **DEPARTMENT** shall furnish, without charge, the following services and data to the **CONSULTANT** for the performance of the requested services:

- All criteria and full information as to the **DEPARTMENT**'s requirements for the **CONSULTANT**'s services including objectives, constraints, budgetary limitations, and time restraints.
- All **DEPARTMENT** Policies, Procedures, Standards, and other information applicable to the services.
- All specifications, schedules, reports, and other information prepared by 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.
- Available traffic and planning data necessary for the **CONSULTANT** to perform each Task.
- Limited training of the **CONSULTANT**, if required, on applicable software and **DEPARTMENT** standards and procedures.

## **X. COMPUTER SERVICES**

The **DEPARTMENT** will furnish the **CONSULTANT** the following computer applications and tools:

- Survey Processing Software (SPS)
- Traffic Monitoring Handbook CD/DVD
- Florida Traffic Information DVD
- Count Check Software

The **CONSULTANT** must coordinate with the **DEPARTMENT** project manager to ensure that the latest version of SPS is used to process ADT and Vehicle Classification counts obtained for the Routine Annual Traffic Count Program. Counting devices must be setup and configured in accordance with the guidelines set forth in the SPS User Manual.

The **DEPARTMENT** will not be responsible for providing proprietary software packages to the **CONSULTANT**. Computations based on computer programs other than the **DEPARTMENT**'s must conform to all **DEPARTMENT** format requirements. All contractually required documentation will be prepared using software compatible with the **DEPARTMENT**.

## **XI. RESPONSIBILITIES OF THE CONSULTANT**

The **CONSULTANT** shall perform the required services and complete each task work order within the specified time limits, while maintaining the required degree of accuracy. The **CONSULTANT** shall provide all equipment, materials, accessories, transportation and incidentals that are required to perform the services. The **CONSULTANT** shall be responsible for assuring that an adequate number of skilled personnel are available for the duration of this contract. The **CONSULTANT** shall provide and maintain a list of staff of the following categories for this contract:

- Project Manager
- Senior Engineer
- Engineer
- Engineer Intern
- Senior Engineering Technician
- Engineering Technician
- Senior GIS Specialist
- GIS Specialist
- Senior RCI Specialist
- RCI Specialist
- PTMS Specialist
- Senior Planner
- Planner
- CADD/Computer Technician

For all categories, salary rates will be negotiated prior to beginning the contract. Any category not listed above but later determined to be required must be amended to the Contract prior to the issuance of the Task Work Orders that apply the new category. The **CONSULTANT** shall perform all analyses, develop recommendations, and document all by specific time as defined in each of the Task Work Orders. All the documents created for this project shall be ready for internet posting.

The **CONSULTANT** shall complete all work performed under this contract in accordance with current **DEPARTMENT** Policies, Procedures, Guidelines, Standards, and other information applicable to the services. The **CONSULTANT** shall perform all tasks in accordance with specified District Court of Appeals Rules, applicable Florida Statutes, and other State laws and policies, including applicable Homeland Security guidelines. The **CONSULTANT** shall correct or revise, without additional compensation, any work product that is found to be in error or deficient.

## **XII. PROJECT MANAGEMENT**

The **CONSULTANT** shall provide a Project Manager who will be the primary point of contact on issues related to the scope, scheduling, man-power coordination, negotiation of task work staff hours, and completion of task work orders. Progress reports and transmittal lists are vital to effective management of the project and shall be provided as requested by the **DEPARTMENT**. Should the **DEPARTMENT** determine that the materials, equipment, expertise or number of staff assigned for a specific task are inadequate, the **DEPARTMENT** may coordinate with the **CONSULTANT** to remedy the situation so as to ensure the timely completion of the work with the required degree of accuracy. The **CONSULTANT** is responsible for assuring that all personnel adhere to the safety procedures as described in the Traffic Monitoring Handbook.

## **XIII. WORK FLOW**

Work will not commence until a task work order is issued. The **CONSULTANT** shall perform all required duties and document all work within time deadlines specified in the task work order. Scheduling of traffic counts may be included in the task work order, which is subject to negotiation, as the overall count program progresses. Services may be performed in conjunction with the Central Office Transportation Statistics staff and/or District personnel or performed independently by the **CONSULTANT** and submitted to the **DEPARTMENT**.

## **XIV. SPECIFICATIONS FOR WORK PRODUCTS**

The **CONSULTANT** shall ensure that all products of Task Work Orders be prepared on PCs using **DEPARTMENT** approved software, stored on DVDs/CDs/external HDs, and provided to the **DEPARTMENT**. All documentations shall be in Microsoft Word and Adobe Portable Document Format (PDF). Any programming source codes, form designs, raw source database and other ancillary files shall be transferred to the **DEPARTMENT** in addition to the executable applications at the closure of each work order or any moment specified by the **DEPARTMENT**

project manager. All deliverables, including ADT, classification and speed survey data, must be submitted as required by the task work order and in a format that can be processed by the most current version of SPS.

## **XV. QUALITY ASSURANCE**

ADT and vehicle classification counts will be conducted according to guidelines published by the **DEPARTMENT** in the Traffic Monitoring Handbook. The **CONSULTANT** shall avoid collecting data one day prior to, during, or one day after holidays or special events, or as specified in the task work order. The **CONSULTANT** will assure that routine sites (counted by portable sensors) will be counted in the same location each year by using GPS, or an alternate method as approved by the **DEPARTMENT**. The **CONSULTANT** will record the GPS latitude and longitude coordinates of the counter for a new location.

Random inspections by the **DEPARTMENT** personnel may be conducted to verify the **CONSULTANT**'s data collection efforts. The **CONSULTANT** will monitor the traffic data instruments for accurate operation before leaving the site. If a valid survey cannot be obtained as specified during the deployment of survey devices for whatever reason, the relevant equipment will not be installed until the **CONSULTANT** has obtained instructions from the **DEPARTMENT**. The **DEPARTMENT** reserves the right to reject traffic count surveys that appear to be incorrect.

In addition, the **DEPARTMENT** reserves the right to reject traffic counts collected by portable sensors where PTMS permanent sensors are available unless justification has been provided to the **DEPARTMENT**'s project manager. At the **DEPARTMENT**'s discretion, if a recount confirms the first survey, the **CONSULTANT** may be compensated for both surveys.