REQUEST FOR INFORMATION (RFI) Florida Department of Transportation

The Florida Department of Transportation (Department, FDOT), Office of Transportation Data and Analytics, is requesting information from remote sensing data collection vendors in order to support Department transportation asset inventory and data collection programs and consider establishing one or more statewide procurement contracts for the following services: mobile LiDAR data collection, Video data collection services, Integrated LiDAR and Video data collection services, data processing services, feature data extraction services, automated feature extraction capabilities, and data delivery.

Description of commodities/contractual services:

Background:

FDOT is responsible for the collection, management, archiving, and distribution of state transportation and asset data for routine core business functions. The management of this data and information support the Department's business of planning, designing, programming, funding, developing, monitoring, and maintaining a safe and efficient state transportation network. FDOT emphasizes the importance of reliable, organized, accurate, and timely data and requires statewide FDOT personnel to perform data collection methods primarily in the field to maintain high confidence of quality data. The primary method of collecting transportation data is through vehicular mile-point field data collection from GPS enabled Distance Measurement Instruments (DMI). Transportation data is collected in the field through tape measurement and visual counting. FDOT District staff and consultants are trained to perform these data collection methods and enter data into the enterprise Roadway Characteristics Inventory system to allow the Department to meet critical State and Federal annual reporting requirements.

The RCI application is currently used to store transportation mile-point data on multimodal travel ways and their associated attributes so other Department functions can meet State and Federal annual reporting requirements. The application allows users to enter standardized transportation data into RCI from various functional offices across the Department through their respective programs. The functional offices required to train and hire data collectors to obtain the field data through three and five-year inventory cycles as well as new roadway construction or improvements. Per the General Interest Roadway Data procedure, Districts have 120 days to collect all the roadway data required and to load them into RCI and create a straight-line diagram depiction of the roadway. District and Turnpike offices perform most of the field data collection and post-processing through full-time staff or consultant contracts. The Central Office provides functional application coordination duties, procedure development, requirements coordination, and statewide training duties between the following Central owning offices:

- Transportation Data and Analytics (TDA) Office
- Office of Maintenance
- Traffic Engineering and Operations (TEO) Office

Specific Information Requested:

- 1. Describe your data collection technology and how it meets explicitly Department of Transportation asset inventory business functions.
- 2. Please provide information that enables your company to work with the State of Florida.
- 3. With which transportation agencies, commissions, cabinets, entities, companies or authorities has your company have contracts with or currently have contracts? Please provide information on how long the service contract was for and provide contact references.
- 4. What type of sensor equipment does your company utilize for remote sensing data collection? What types of LiDAR or Video sensors do you mobilize? What is your installation and maintenance plan for your equipment? Is a third party utilized to maintain equipment?
- 5. Please explain the technical specifications of your video log capture extent? Can your equipment collect 360 degrees of imagery or less?
- 6. What type of capture extent methods does your company recommend for LiDAR? Please provide if there are time of day parameters or recommended number of passes.
- 7. What is the level of accuracy your sensors may be able to collect in terms of inches or feet?
- 8. Describe your data management plan for data collected by your sensors?
- 9. Does your company subcontract with other companies to perform data collection, processing, storage or management services?
- 10. Does your company provide value-added services including crowdsourced or other publicly available data?
- 11. Provide examples of data collection projects and empirical data, where available, that present time, cost, and accuracy of data collection specifications and requirements determined by the project client.
- 12. Please provide details on your company's data post-processing solutions or capabilities? Please provide information on innovative methods for automated or manual data extraction. Provide performance capabilities on automated extraction methods.
- 13. Please provide the software titles utilized to process and deliver data to clients. How does your company maintain software licensing? Does your company develop any remote sensing or GIS integration tools to support data loading? Provide any process diagrams or visuals on your company's architecture and process.
- 14. Provide your project management approach to coordinate client requirements.

- 15. Please explain your data delivery methods. Does your company provide APIs for data deliverables? Can FDOT specify the data deliverable and formats of the datasets?
- 16. Please provide your quality assurance and quality control plan for data collection and delivery services to clients. Provide any standards your company utilizes.
- 17. How has your company responded to clients that require recollects or rework for unsatisfactory deliverables?
- 18. What is the required start-up time to begin mobile data collection services?
- 19. How does your company handle staff operator turnover for continuous operations?
- 20. FDOT maintains an estimated 12,103 centerline miles and inventories data for over 20,000 centerline miles of roadways that includes Off-System roadways. What is your proposed approach to an annual statewide collection for Florida's roadways that are maintained by FDOT as well as roadways that are of interest to the Department.
- 21. Has your company collected data for a state's All Roads Network of Linear Referenced Data (ARNOLD) required by FWHA? If so, please explain your approach and data collection cycle.
- 22. What differentiates your approach from your other competitor's solutions?
- 23. For vendors that collect proprietary data, please provide a copy of your standard agreement license that would be provided to public agencies.
- 24. Please outline how your company would handle data collection or data extraction rework costs for work that is considered unsatisfactory by the client.
- 25. Is there data you may require of the FDOT to support your data collection efforts?

FDOT would like any interested potential vendors to submit technical design documents that discuss their products, and their ability to meet FDOT's data collection needs.

Contact for Questions or clarification:

Please contact Joel Worrell, Transportation Data Inventory Manager, at <u>joel.worrell@dot.state.fl.us</u> with any questions.

The requested information must be received by 5:00 pm (EST) on Friday, August 23, 2019.

Send to: Florida Department of Transportation Transportation Data and Analytics Office 605 Suwannee Street, MS-27

Tallahassee, FL 32399-0450

OR E-mail to: joel.worrell@dot.state.fl.us

NOTE:

- Responses to this Request for Information (RFI) will be reviewed by the agency for informational purposes, and will not be considered as offers to be accepted by the agency to form a binding contract.
- Information obtained in response to this RFI is subject to public record as defined by F.S. Ch. 119.
- In accordance with F.S. 287.057, information obtained in response to this RFI may be used to develop scope and solicitation documents for future procurements at the discretion of the Department.
- Respondents to this RFI will remain eligible for any subsequent contract with the Department.
- Advertisement of any subsequent competitive solicitation that may result from this RFI will be posted on the Florida Vendor Bid System.