**Project description**

**dEVELOPMENT OF LIDAR ELEVATION Data for lAKE AND lAPORTE COUNTIES INDIANA**

**BY the**

**indiana office of technology/geographic iNFORMATION office**

**FEBRUARY 22, 2013**

### 

**Purpose:**

This is a cooperative agreement with the Indiana Office of Technology, Indiana Geographic Office (IOT/GIO) in support of their statewide program to develop LiDAR elevation data and derivative elevation products for Lake and LaPorte counties Indiana.

**Project Description**

The State of Indiana’s Office of Technology, Geographic Information Office has implemented a statewide program to develop LiDAR elevation data and derivative elevation products for all 92 counties. This new LiDAR data for Indiana will provide a much greater understanding of Indiana’s topography and provide an increase in applications that can be accomplished with this high resolution elevation data.

In 2011, Indiana’s IOT began their multi-year contract to produce LiDAR elevation and orthoimagery statewide and now is in its third and final year. Although this agreement specifically supports IOT’s acquisition of elevation products in Lake and LaPorte counties, Indiana will provide the entire western north-south tier to the USGS for inclusion into The National Map.

**Schedule**

Period of Performance is: date of award to March 31, 2014

**Funding**

The USGS is awarding the Indiana Office of Technology, Indiana Geographic Office $10,000 in support of their development of LiDAR elevation and derivative elevation products (including Digital Elevation Models (DEM)) for Lake and LaPorte counties Indiana.

**Statement of Work:**

The Indiana Office of Technology/Geographic Information Office will:

* Monitor, administer and provide oversight of their contract with Woolpert to produce LiDAR data and derivative elevation products (including DEMs)
* Partner with Indiana’s Geographic Information Council Elevation Workgroup and Indiana Department of Natural Resources to perform review and QA/QC of LiDAR elevation data.
* Make arrangements to deliver LiDAR and derivative elevation products to the USGS

USGS will:

* Provide funds as stated below
* Provide technical and programmatic guidance
* Review, QC and Load LiDAR and DEM data into appropriate USGS national databases.
* Make the data viewable and downloadable through USGS *The National Map*

**Deliverables:**

All deliverables are based on *U.S. Geological Survey National Geospatial Program Base Lidar Specification Version 12.*

* 1m NPS Lidar
* 1m post-spacing hydro-flattened DEM
* LAS v1.2 file format, Classified Point-Cloud bare-earth, first, last return (01, 02, 07, 09, 10, 13)
* Filtered raw (swath files) LiDAR point-clouds (LAS format)
* IMG Raster file format
* Hydro Breaklines used to produce the DEM
* Metadata that conforms to FGDC requirements (FGDC-STD-001-1998)
* Projection: Indiana State Plane West zone, NAD83/HARN, US Survey Feet (ESPG Codes 2968 [west])
* Project Reports listed in USGS-NGP Lidar Guidelines and Base Specifications v12/v13 (Collection, Survey, Processing, QA/QC)
* Control and Calibration points (Shapefile format)
* Data in 5,000ft x 5,000ft tile size

**Technical Contacts:**

|  |  |  |
| --- | --- | --- |
| **USGS POC:** |  | **Indiana Office of Technology, Geographic Information Office POC:** |
| David Nail | Name | Jim Sparks |
| US Geological Survey  Indiana Geospatial Liaison |  | Geographic Information Officer |
| 5957 Lakeside Blvd | Address | 100 North Senate Ave |
| Indianapolis, IN 46167 |  | Indianapolis, IN  46204 |
| 317-290-3333 | Telephone | 317-234-5889 |
| dnail@usgs.gov | E-Mail | gio@iot.in.gov |

**Financial Arrangements:**

A Cooperative Agreement for $10,000 is being prepared in coordination with the USGS Office of Acquisition and Grants. The total approximate cost for this project is $1.5million dollars for the collection of both orthoimagery and LiDAR data for the western north-south tier of Indiana, which includes Lake and LaPorte counties.

This Project Description does not constitute a financial commitment on the part of the USGS. Financial commitments will be covered in separate documents subject to budgetary and administrative procedures.

All financial inquiries will be made to:

Lindsay C. Murphy  
U.S. Geological Survey  
12201 Sunrise Valley Drive, MS 810  
Reston, VA 20192  
Phone: (703) 648-4159  
Fax: (703) 648-4160  
Email: [lcmurphy@usgs.gov](mailto:lcmurphy@usgs.gov)