

Delaware Geospatial Data
Aerial Imagery
LiDAR
Land Use Land Cover
Request for Information RFI
2013

Issue date: February 20,2013

Response due: March 22, 2013

Table of Contents

| | |
|---|----------|
| 1. Introduction..... | 3 |
| 1.1. Background..... | 3 |
| 1.2. Objective | 3 |
| 1.3. Purpose of Request for Information..... | 3 |
| 1.4. Intent of Request for Information (RFI)..... | 3 |
| 2. Data Specifications..... | 5 |
| 2.1. Minimum Technical Specifications | 5 |
| 3. Request for Information..... | 7 |
| 3.1. Respondent’s Organization and Primary Contact..... | 7 |
| 3.2. Request for Proposals | 7 |
| 4. Vendor Logistics..... | 7 |
| 4.1. Timeline for Response Submissions | 7 |
| 4.2. Questions and Response Delivery | 8 |
| 4.3. Vendor Presentations | 8 |
| 4.4. Proprietary Material | 8 |

1. Introduction

1.1. Background

Many State of Delaware Agencies use the Aerial Imagery, LiDAR and Land Use Land Cover (LULC) data on a regular basis. Currently there is no plan that allows for this data to be collected on a regular basis. The current method of grass roots fundraising between agencies to find enough money to acquire these data has been determined to not meet the needs of the user community.

1.2. Objective

State agencies have agreed upon a potential 7-year contract with Aerial Ortho-photography being collected 4 times, LiDAR data being collected and processed 1 time, and LULC data (including an Impervious Surface raster) being processed 1 time. The Committee's preference is for Aerials to be collected on years 1, 3, 5, and 7 (2-year cycle), LiDAR to be collected on year 3, and LULC to be processed on year 5. More details can be found in the Minimum Technical Specifications section later in this document.



1.3. Purpose of Request for Information

This Request for Information (RFI) is being released to determine the best method to collect this data and to determine the amount of funding that would need to be budgeted.

1.4. Intent of Request for Information (RFI)

The intent of this RFI is to elicit the advice and best analysis of knowledgeable persons in the vendor community, not to select a proposed solution or a vendor. Subsequently, and incorporating knowledge gained from the response to this RFI, the State may issue a Request for Proposal (RFP). The collective information provided by vendors will be used to develop alternatives for consideration and to estimate

costs related to acquisition of a proposed solution.

It must be clearly understood that this RFI is being used as a vehicle to obtain information from experts about possible implementation methods and potential suppliers of implementation services. This RFI should not be interpreted as a contract (implicit, explicit, or implied), nor does it imply any form of an agreement to candidate vendors. This RFI does not create vested contract rights. It is merely solicited for informational purposes. In addition, no inference should be made that the State will adopt or implement in the future any recommendations proposed by the vendors responding to this RFI. The State may, however, use responses to this RFI to build one or more RFPs.

While vendor qualification information may be provided in response to this RFI, only vendor information submitted in response to any eventual RFP will be used to make the vendor selection.

No cost associated with responding to this RFI may be charged to the State of Delaware for any reason.

2. Data Specifications

2.1 Minimum Technical Specifications

| Aerial Orthophotography | | |
|------------------------------------|----------------------------------|---|
| Criteria | Minimum Specifications | Upcharge |
| Coordinate System | DE State Plane (meters) | |
| Datums | NAD83, NAVD88 | |
| Resolution | 1/4 Meter | higher resolutions |
| Bands | 4 Band | |
| Vegetation Conditions | leaf off | |
| Water Conditions | normal water (no flooding) | tide coordinated |
| Cloud Cover, Smoke, Haze, Snow | 0 | |
| Sun Angle | greater than 30 degrees | |
| Ortho Tile Grid | 1700m x 1700m | |
| Ortho Tile Submission | provide an Esri file geodatabase | |
| Metadata | project level | feature level (tile level) |
| Deliverable Media | external hard drive | |
| Deliverable Image Format(s) | geotiff and MrSID | jpeg2000, mosaics |
| Flight Line Overlap (Edge Overlap) | | increased overlap in urban areas, to reduce building lean |
| Requirements | Minimum Specifications | Upcharge |
| QA/QC | independent 3rd party | |
| Collection Frequency | 2 years | |

| Land Use / Land Cover (LULC) | | |
|--|---|---------------------------------|
| Criteria | Minimum Specifications | Upcharge |
| Geometry | polygon based | |
| Deliverable Data Format | Esri geodatabase | |
| Classification Scheme | *modified Anderson et. al. (to be provided) | |
| Minimum Mapping Unit | 1/4 acre wetlands, 2 acre upland | |
| Coordinate System | DE State Plane (meters) | |
| Datums | NAD83, NAVD88 | |
| Metadata | project level | feature level |
| Impervious Surface | raster deliverable | finer resolution in urban areas |
| Requirements | Minimum Specifications | Upcharge |
| Base Aerial Imagery | most recent collected orthoimagery | |
| Base LULC | update of most recent LULC deliverable | |
| Collection Frequency | 4 years | |
| QA/QC | | |
| *Delaware Land Use Land Cover (LULC) will include enhanced forest and wetland classifications as previously completed in the 2007 project. Anderson et. al. is dated 1976. | | |

| Light Detection and Ranging Data (LiDAR) | | |
|---|---|--|
| Criteria | Minimum Specifications | Upcharge |
| Nominal Point Spacing | *1.4 meters | 1 meter (urban areas) |
| Vegetation Conditions | leaf off | |
| Water Conditions | normal water (no flooding) | tide coordinated (+/- 2 hours predicted low mean tide) |
| Cloud Cover, Smoke, Haze, Snow | 0 | |
| Vertical Accuracy | 18 centimeters | 9 centimeters (needed for 1 foot contours) |
| Point Cloud (returns) | full point cloud (all returns) | |
| Intensity Values | intensities included for each return | |
| ASPRS Classifications | 1, 2, 7, 9, 10 (based on USGS minimum v.13) | full LAS classification |
| Coordinate System | DE State Plane (meters) | |
| Datums | NAD83, NAVD88 | |
| Vertical Units | meters (2 decimal places) | |
| Horizontal Units | meters (2 decimal places) | |
| Mass Points Format | LAS 1.3 (or most recent) | |
| Mass Points Tile Size | 1700m x 1700m | |
| Mass Points Tile Grid Source | Delaware Ortho Grid (file geodatabase provided) | |
| Metadata | project level | tile level |
| Deliverable Media | external hard drive | |
| Bathymetry | none | yes |
| | | |
| Requirements | Minimum Specifications | Upcharge |
| Collection Frequency | 6 years | |
| QA/QC | independent 3rd party | |
| | | |
| Post-Processing Options | | |
| Digital Elevation Model (DEM) | 2 meter resolution | finer resolutions |
| Contours | 2 foot | |
| Breaklines | | |
| <p>*An NPS of 1.4 is based on Delaware's 2007 LiDAR collection. This NPS was said to be a requirement for a 2' contour deliverable. This NPS is flexible, but must be between 1-2. The USGS minimum standard is 1-2 (version 13).</p> | | |

3. Request for Information

The Request for Information outlines the information that respondents are requested to submit in their response to this RFI. Please use this format. Additional instructions for submission follow in section 4. Vendor Logistics.

3.1. Respondent's Organization and Primary Contact

Please complete the following information regarding your organization's corporate headquarters, local office, and primary contact for any questions pertaining to your organization's response to this RFI.

ORGANIZATION HEADQUARTERS INFORMATION:

Company Name: Address:

City, State & Zip:

Company Size: (Total Number of Employees)

REGIONAL OR LOCAL OFFICE INFORMATION:

Address:

City, State & Zip: Primary Contact:

Phone: Fax:

E-mail:

PRIMARY CONTACT INFORMATION RFI:

Name: Title: Address:

City, State & Zip: Phone: Fax:

E-mail:

3.2. Request for Proposals

Based on the results of this RFI the State will determine whether to issue an RFP for some, all or none of these data.

4. Vendor Logistics

4.1. Timeline for Response Submissions

Please submit an electronic copy of your response by **March 22, 2013**. The electronic version of your response should be emailed to Matthew Laick; Matthew.laick@state.de.us. The State of Delaware limits the file size we can receive, so if your file exceeds **5 MB**, then we would prefer a paper copy. If sending hard copy, then direct it to Matthew Laick at the following address. Include the reference "**2013 – RFI – Geospatial Data**" on the mailing.

The hard copy response should be sent to:

Matthew Laick
Delaware Department of Safety & Homeland Security

303 Transportation Circle, Suite
Dover, Delaware 19901

4.2. Questions and Response Delivery

Please submit any questions or requests for clarification of this RFI electronically by emailing Matthew Laick at matthew.laick@state.de.us. Responses to questions will be answered as soon as possible. No questions will be answered after Friday **March 15, 2013**.

4.3. Vendor Presentations

The State may elect to schedule meetings with vendors responding to this RFI to receive demonstrations of referenced systems, as well as to solicit additional information and clarification of the information presented. The decision to schedule meetings will be made following review of all RFI responses.

4.5. Proprietary Material

Any information contained in any response to this RFI that the vendor believes is proprietary must be clearly designated as such. Responses declaring the entire RFI response or an entire section proprietary will be neither accepted nor honored and will be rejected. If, after opening all bids in response to a possible subsequent RFP, a request is made to view any response to this RFI, the State of Delaware will comply with that request pursuant to the Freedom of Information Act (FOIA). To the extent any information contained in a response to this RFI is marked as proprietary, such information will not be made available to the requestor until the affected vendor has been given an opportunity to provide an appropriate response, however, the State reserves the right under FOIA to disclose any information submitted.

The vendor should clearly identify any materials, which constitute valuable formulae, designs, drawings, or research data or any materials otherwise claimed to be to be confidential trade secrets, along with a citation to the applicable statutory provisions supporting such a claim for confidentiality. Failure to so label materials as such, or failure to respond within ten days of notice of a request for access to materials submitted pursuant to this RFI, may be deemed a waiver by the vendor of any claim that such materials are, in fact, confidential. The State's sole responsibility shall be limited to maintaining the above data in a secure area and to notify any vendor of any request(s) for disclosure as soon as practicable from date of receipt of any such request.