

**State of Nebraska (State Purchasing Bureau)
REQUEST FOR INFORMATION**

RETURN TO:
State Purchasing Bureau
301 Centennial Mall South, 1st Fl
Lincoln, Nebraska 68508
OR
P.O. Box 94847
Lincoln, Nebraska 68509-4847
Phone: 402-471-2401
Fax: 402-471-2089

SOLICITATION NUMBER	RELEASE DATE
RFI OCIO LiDAR	April 11, 2013
OPENING DATE AND TIME	PROCUREMENT CONTACT
May 2, 2013 2:00 p.m. Central Time	Julie Hopp/Ruth Gray

This form is part of the specification package and must be signed and returned, along with information documents, by the opening date and time specified.

PLEASE READ CAREFULLY!

SCOPE OF SERVICE

The State of Nebraska, Administrative Services, Materiel Division, State Purchasing Bureau, is issuing this Request for Information RFI OCIO LiDAR for the purpose of gathering information to purpose of gathering information to support business plan development for elevation data acquisition through Light Detection and Ranging (LiDAR) technology.

Written questions are due no later than April 18, 2013, and should be submitted via e-mail to matpurch.dasmat@nebraska.gov. Written questions may also be sent by facsimile to (402) 471-2089.

Bidder should submit one (1) original and two (2) copies of the entire RFI response. RFI responses must be submitted by the RFI due date and time.

RFI RESPONSE MUST MEET THE FOLLOWING REQUIREMENTS TO BE CONSIDERED VALID. RFI RESPONSE WILL BE REJECTED IF NOT IN COMPLIANCE WITH THESE REQUIREMENTS.

1. Sealed RFI responses must be received in State Purchasing by the date and time of RFI opening indicated above. No late information will be accepted. No electronic, e-mail, fax, voice, or telephone information will be accepted.
2. RFI response must meet all specifications of the RFI.
3. This form "REQUEST FOR INFORMATION" MUST be manually signed, in ink, and returned by the information opening date and time along with bidder's response and any other requirements as specified in the RFI.
4. It is understood by the parties that in the State of Nebraska's opinion, any limitation on the contractor's liability is unconstitutional under the Nebraska State Constitution, Article XIII, Section 3, and that any limitation of liability shall not be binding on the State of Nebraska despite inclusion of such language in documents supplied with the contractor's bid or in the final contract.

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request For Information form, the bidder guarantees compliance with the provisions stated in this Request for Information.

FIRM: _____

COMPLETE ADDRESS: _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

SIGNATURE: _____ DATE: _____

TYPED NAME & TITLE OF SIGNER: _____

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I. SCOPE OF THE REQUEST FOR INFORMATION

The State of Nebraska, Administrative Services (AS), Materiel Division, Purchasing Bureau (hereafter known as State Purchasing Bureau), is issuing this Request for Information, RFI OCIO LiDAR for the purpose of gathering information to support business plan development for elevation data acquisition through LiDAR technology. This involves: a) developing alternative approaches to acquiring elevation data and b) identifying organizations capable of providing LiDAR acquisition services to support this effort.

This request is coordinated through the Nebraska Geography Information System (GIS) Council, which is an advisory committee to the Nebraska Information Technology Commission (NITC). The NITC was established to coordinate the implementation of GIS technology by state and local government in Nebraska. Nothing in this RFI should be construed as an offer by the Nebraska GIS Council or its member agencies to pay for or reimburse RFI response cost or to imply that an award will be made by the Council.

ALL INFORMATION PERTINENT TO THIS REQUEST FOR INFORMATION CAN BE FOUND ON THE INTERNET AT: <http://www.das.state.ne.us/materiel/purchasing/rfp.htm>

A. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

	ACTIVITY	DATE/TIME
1	Release Request for Information	April 11, 2013
2	Last day to submit written questions	April 18, 2013
3	State responds to written questions through Request for Information "Addendum" and/or "Amendment" to be posted to the internet at: http://www.das.state.ne.us/materiel/purchasing/rfp.htm	April 23, 2013
4	RFI opening Location: Nebraska State Office Building State Purchasing Bureau 301 Centennial Mall South, Mall Level Lincoln, NE 68508	May 2, 2013 2:00 PM Central Time

II. RFI RESPONSE PROCEDURES

A. OFFICE AND CONTACT PERSON

Responsibilities related to this Request for Information reside with the State Purchasing Bureau. The point of contact for the procurement is as follows:

Name: Julie Hopp/Ruth Gray
Agency: State Purchasing Bureau
Address: 301 Centennial Mall South, Mall Level
Lincoln, NE 68508

OR

Address: P.O. Box 94847
Lincoln, NE 68509
Telephone: 402-471-2401
Facsimile: 402-471-2089
E-Mail: matpurch.dasmat@nebraska.gov

B. GENERAL INFORMATION

A subsequent Request for Proposal (RFP) may not be issued as a result of this RFI. There will not be a contract as a result of this RFI and the State is not liable for any cost incurred by vendors in replying to this RFI. If an RFP is issued, the information provided will assist the State of Nebraska in developing the Request for Proposal. This RFI does not obligate the State to reply to the RFI responses, to issue an RFP, or to include any RFI provisions or responses provided by vendors in any RFP.

C. COMMUNICATION WITH STATE STAFF

From the date the Request for Information is issued and until RFI opening (as shown in the Schedule of Events), contact regarding this RFI between potential vendors and individuals employed by the State is restricted to written communication with the staff designated above as the point of contact for this Request for Information.

The following exceptions to these restrictions are permitted:

1. written communication with the person(s) designated as the point(s) of contact for this Request for Information;
2. contacts made pursuant to any pre-existing contracts or obligations; and
3. state-requested presentations, key personnel interviews, clarification sessions or discussions.

Violations of these conditions may be considered sufficient cause to reject a vendor's response to the RFI. No individual member of the State, employee of the State, or member of the Interview Committee is empowered to make binding statements regarding this RFI. The State of Nebraska will issue any clarifications or opinions regarding this RFI in writing.

D. WRITTEN QUESTIONS AND ANSWERS

Any explanation desired by a bidder regarding the meaning or interpretation of any Request for Information provision must be submitted in writing to the State Purchasing Bureau and clearly marked "RFI Number OCIO LiDAR; NITC GIS Council Elevation Questions". It is preferred that questions be sent via e-mail to matpurch.dasmat@nebraska.gov. Questions may also be sent by facsimile to 402-471-2089, but must include a cover sheet clearly

indicating that the transmission is to the attention of Julie Hopp/Ruth Gray, showing the total number of pages transmitted, and clearly marked "RFI Number OCIO LiDAR; NITC GIS Council Elevation Questions".

Written answers will be provided through an addendum to be posted on the Internet at <http://www.das.state.ne.us/materiel/purchasing/rfp.htm> on or before the date shown in the Schedule of Events.

E. ORAL INTERVIEWS/PRESENTATIONS AND/OR DEMONSTRATIONS

The Review Committee(s) has indicated that oral interviews/presentations and/or demonstrations are not being requested at this time. All vendors need to complete the request for information and questions posed in section III of this RFI. The State reserves the right to conduct oral interviews/presentations and/or demonstrations if required at the sole invitation of the State.

F. SUBMISSION OF RESPONSE

The following describes the requirements related to the RFI submission, handling and review by the State.

To facilitate the response review process, one (1) original, clearly identified as such, and two (2) copies of the entire RFI response should be submitted. The copy marked "original" shall take precedence over any other copies, should there be a discrepancy. RFI responses must be submitted by the RFI due date and time.

A separate sheet must be provided that clearly states which sections have been submitted as proprietary or have copyrighted materials. RFI responses must reference the request for information number and be sent to the specified address. Container(s) utilized for original documents should be clearly marked "ORIGINAL DOCUMENTS". Please note that the address label should appear as specified on the face of each container. Rejected late responses will be returned to the bidder unopened, if requested, at bidder's expense. If a recipient phone number is required for delivery purposes, 402-471-2401 should be used. The request for information number must be included in all correspondence.

G. PROPRIETARY INFORMATION

Data contained in the response and all documentation provided therein, become the property of the State of Nebraska and the data become public information upon opening the response. If the vendor wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska's public record statutes. All proprietary information the vendor wishes the state to withhold must be submitted in a sealed package, which is separate from the remainder of the response. The separate package must be clearly marked PROPRIETARY on the outside of the package. Vendor may not mark their entire Request for Information as proprietary. Failure of the vendor to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other vendors and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, vendors submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State's definition of proprietary information, the State is under no obligation to maintain the

confidentiality of proprietary information and accepts no liability for the release of such information.

H. REQUEST FOR INFORMATION OPENING

The sealed responses will be publicly opened and the responding entities announced on the date, time and location shown in the Schedule of Events. Responses will be available for viewing by those present after the opening.

I. LATE REQUEST FOR INFORMATION RESPONSES

RFI responses received after the time and date of the RFI opening will be considered late responses. Rejected late responses will be returned to the bidder unopened, if requested, at bidder's expense. The State is not responsible for responses that are late or lost due to mail service inadequacies, traffic or any other reason(s).

III. PROJECT DESCRIPTION AND SCOPE OF WORK

Responses should be concise and at a minimum include the following requested information to support the needs of the project description and scope of work.

A. PURPOSE AND BACKGROUND

Federal, State, and local agencies and private groups in Nebraska have demonstrated a need for accurate and precise elevation data to meet their varied business requirements for planning and management in: natural resources, infrastructure, transportation, environment, agriculture, and economic development.

The Nebraska Information Technology Commission (NITC) GIS Council is preparing a business plan for the acquisition, maintenance, and distribution of a current, high-quality, statewide elevation dataset for the State of Nebraska. We are requesting specific information that reflects current elevation acquisition technology and services currently being offered in industry. This includes information about equipment capabilities, data collection procedures and methodologies, data quality and controls, derivative products, and overall costs.

The geographic context of Nebraska occupies an area of approximately 77,000 square miles. National Enhanced Elevation Assessment Quality Level 3 data has been collected between 2004 to present for approximately 40,000 square miles of the state. Information provided by respondents will be used to develop alternative LiDAR acquisition scenarios that would result in a uniform dataset either by collecting LiDAR for the areas that currently have no modern elevation data or by collecting a higher quality elevation dataset for the entire state. Figure 1 provides information in respect to previously collected LiDAR projects. The overlay grid represents the USGS 1-Degree blocks as point of reference. This figure also represents a potential scenario to consider in defining project areas for data acquisition.

All future LiDAR data collected needs to meet the US Geological Survey (USGS) LiDAR Base Specification Version 1.0 standards. We are interested in several scenarios in acquiring different levels of LiDAR. These scenarios include acquiring QL 3 LiDAR for the remainder of the state, acquiring LiDAR at QL 2.5 for the entire state, or acquiring LiDAR at QL 2 for the entire state. Acquisition timelines may vary from as little as one year for the first scenario to eleven years for the second and third scenarios for acquisition of data. Figure 2 provides an example LiDAR data collection scenario by year and geographic area. This is just an example. There can be many different approaches and variations to where and when future LiDAR data can be collected. Some of the questions in the request for information is to seek input on criteria necessary for determination of these scenarios for collection of data.

B. INFORMATION REQUEST CRITERIA

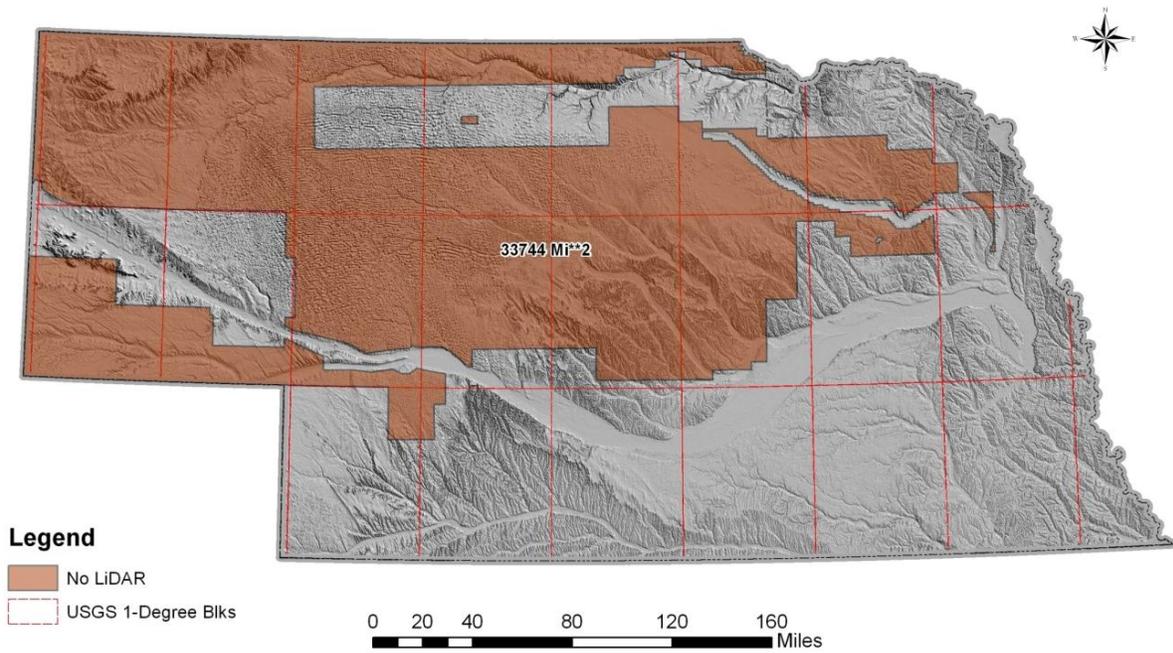
Provide sufficient information for the following requests for information and questions.

1. Provide the following information about your organization.
 - a. Vendor name
 - b. Contact person
 - c. Contact information (address, email, phone, fax, web site)
 - d. Size of business (e.g. number of employees, breadth of product and services in relation to annual sales volume)
 - e. Location of main business and satellite offices

2. Provide a description about the following equipment and other capabilities that you use to acquire elevation data.
 - a. Aircraft
 - b. Sensors with calibration details
 - c. GPS and ground control capabilities
3. Describe your overall data collection and post-processing procedures.
4. Provide us information on past experiences in providing airborne LiDAR acquisition services. Have you acquired new sensor platform technology for data acquisition? If so, how extensive have you tested the platform and it's derived product data?
5. Provide an example of metadata that is filed along with the completion and delivery of a product dataset.
6. What factors do you consider that determine overall acquisition costs?
7. What is the optimal project size in square miles for data acquisition?
8. What is the optimal project data acquisition shape to provide the most efficient and accurate data product? This involves implementing quality ground control while ensuring level of detail needed for hydrologic modeling and consistency of data collected across multiple collection boundaries from previously collected data and newly acquired data.
9. Describe the approach and level of detail that you use in meeting the following point classification schema.
 - a. 1 Processed, but unclassified
 - 2 Bare-earth ground
 - b. 7 Noise (low or high; manually identified; if needed)
 - c. 9 Water
 - d. 10 Ignored Ground (Breakline proximity)
 - e. 11 Withheld
 - f. 12 Overlap (Note: if you do not use this classification how do you deal with overlapped data?)
10. What are the approximate acquisition costs per square mile, given the optimal project size and shape, for:
 - a. QL3, 1.4 M NPS, 18.5 cm RMSE
 - b. QL2.5, 1.0 M NPS, 12.5 cm RMSE
 - c. QL 2, 0.7 M NPS, 9.25 cm RMSE
11. What are the approximate processing costs for each of the data quality levels indicated in question 10 for the following criteria? (as per LiDAR Base Specification version 1.0)
 - a. Classification of point clouds
 - b. Development of hydro break lines
 - c. Bare-earth DEM (1 meter for QL 2 and 2.5, 2 meters for QL 3)
 - d. Contours (1 ft. for QL 2 and 2.5, and 2ft. for QL 3)
12. What are the approximate costs for conducting QA/QC for each of the items outlined in question 11 above?

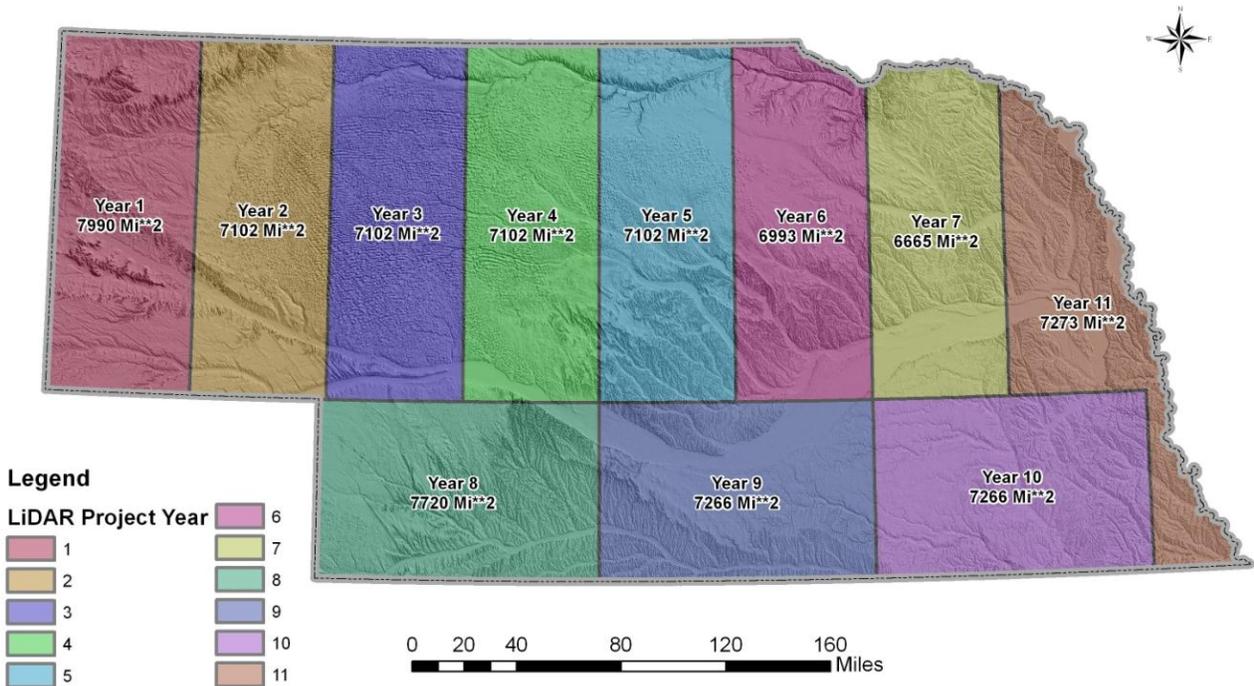
- 13.** Indicate your limits on your ability to acquire LiDAR in a given season for each of the Quality Levels listed above.
- 14.** How would you match or adjust to existing LiDAR data sets for a given data collection area?
- 15.** Please provide any additional comments and recommendations.

Figure 1. Example coverage area scenario for LiDAR acquisition in Nebraska. Areas in gray are from previously collected LiDAR projects. The overlay grid represents the USGS 1-Degree blocks as point of reference.



*This map shows the approximate area of Nebraska for which there is no current LiDAR coverage (as of 2/25/2013).

Figure 2. Example LiDAR data collection scenario by year and geographic area.



*Project phases were constructed by merging USGS 1-degree blocks or portions thereof.

Form A

Vendor Contact Sheet

Request for Information Number OCIO LiDAR

Form A should be completed and submitted with each response to this solicitation document. This is intended to provide the State with information on the vendor's name and address, and the specific persons who are responsible for preparation of the vendor's response.

Preparation of Response Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Each vendor shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the vendor's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	