

Pre-proposal – Page 1 of 5

Oneida County and Vilas County Wisconsin

BAA number: G14PS00574
Title: U.S. Geological Survey 3DEP
Primary Contact: Michael J Romportl, Oneida County Land Information, PO Box 400,
Rhineland WI 54501
Email: mromportl@co.oneida.wi.us ph 715-369-6179
Proprietary Information: None

Executive Summary

Oneida and Vilas County Wisconsin are located in Northern Wisconsin and are well known for its physical and natural qualities. This area was once part of a vast forest region covering much of the Great Lakes area. Today, the area is a popular vacation and recreational area and has physical resources that are a key factor in the economic structure of the area evidenced by the number of paper and wood industry businesses in the Counties. Oneida and Vilas County are Wisconsin’s richest counties in terms of water resources. Along with excellent watershed characteristics, as a result of a high percentage of land in forest cover, the counties have one of the highest concentrations of natural lakes in the world. The Wisconsin, Tomahawk, Eagle, Wolf, Manitowish, Bear, Turtle & Squaw Rivers are the main rivers in addition to over 1200 miles of streams. These waterways drain eventually to the Mississippi River, Lake Superior, or Lake Michigan.

Oneida and Vilas County covers approximately 2,295 sq miles. The Chequamegon – Nicolet National Forest (100 sq miles), American Legion and Northern Highlands State Forest (412 sq miles), County Forest (190 sq miles) and several scenic water areas are located in these counties. In addition, the Lac du Flambeau Band of Lake Superior Chippewa Indians is located in the western part of Vilas County. The use of quality topographic data is critical to help the public and decision makers to develop plans in protecting the diverse natural resources, implementing best management practices for the forest industry and for development of properties for residential, recreational or wildlife purposes.

Estimate of cost

Oneida and Vilas County would request a ‘grant’ to obtain the data for the public domain in the amount of \$35,000 for each County. That is **less than \$31 per square mile** to acquire quality LiDAR data that would be immediately available for inclusion in the 3DEP program.

Oneida and Vilas County contracted for LiDAR acquisition and processing in 2013. The actual cost that the counties paid for the LiDAR is listed below.

Oneida County LiDAR project cost = \$252,000

Oneida County 3rd party consultant to review data = \$25,000

Vilas County LiDAR project cost = \$208,598

AYRES ASSOCIATES from Madison Wisconsin and AERO-METRIC (NKA Quantum Spatial) from Sheboygan Wisconsin teamed up to provide the services and flew the counties in May of 2013. Both firms have significant experience in providing quality LiDAR datasets meeting or exceeding FEMA and USGS Accuracy Standards. Quantum Spatial (Aero-Metric) has worked with USGS and FEMA in the past for LiDAR projects. Oneida County employed the services of ATKINS to assist with the review of the deliverables. Vilas has already received all of their deliverables and Oneida County expects to have the final deliverables in September 2014. While the costs of these projects have been paid, the Counties feel there is an immediate benefit to the public to partner with USGS and make this data available in the public domain at a very reasonable cost to the agency. These two counties do not have any previous LiDAR data sets available and has never been mapped to a level that would support the 3D Elevation Program (3DEP) prior to this current effort. The counties are located in an area that would fill in the gap between priority areas and given the amount of water bodies in this area would be of great benefit to the 3DEP Program. The ‘grant’ would be applied to perform any further processing needed to submit the data to USGS and partly cover the cost of the already acquired and tested data.

List of Deliverables

All deliverables were produced meeting or exceeding these guidelines or specifications:

1. USGS LiDAR Guidelines and Base Specifications v. 1
2. The Guidelines and Specifications for Flood Hazard Mapping Partners Appendix A: Guidance for Aerial Mapping and Surveying; Federal Emergency Management Agency. April 2003 (including the Procedure Memorandum No. 61-Standards for LiDAR and Other High Quality Digital Topography, September 2010.

In addition, the Contractor flew the entire area at 50% overlap to ensure coverage in the forested areas. Section VI on Page 9 of the BAA lists additional requirements to the USGS Specifications to meet QL2 data. The Oneida County dataset has been tested using the overlap points and would meet this requirement. The overall RMSE on bare earth surfaces is 0.18 feet and represents an extremely accurate data set. Additional datasets are also available: Low Confidence Area Polygons; Digital Surface Models; Intensity Images; and additional classifications for low, medium and high vegetation, buildings, bridges, and dams.

Use Restrictions








All deliverables would be provided to USGS **without** use restrictions.

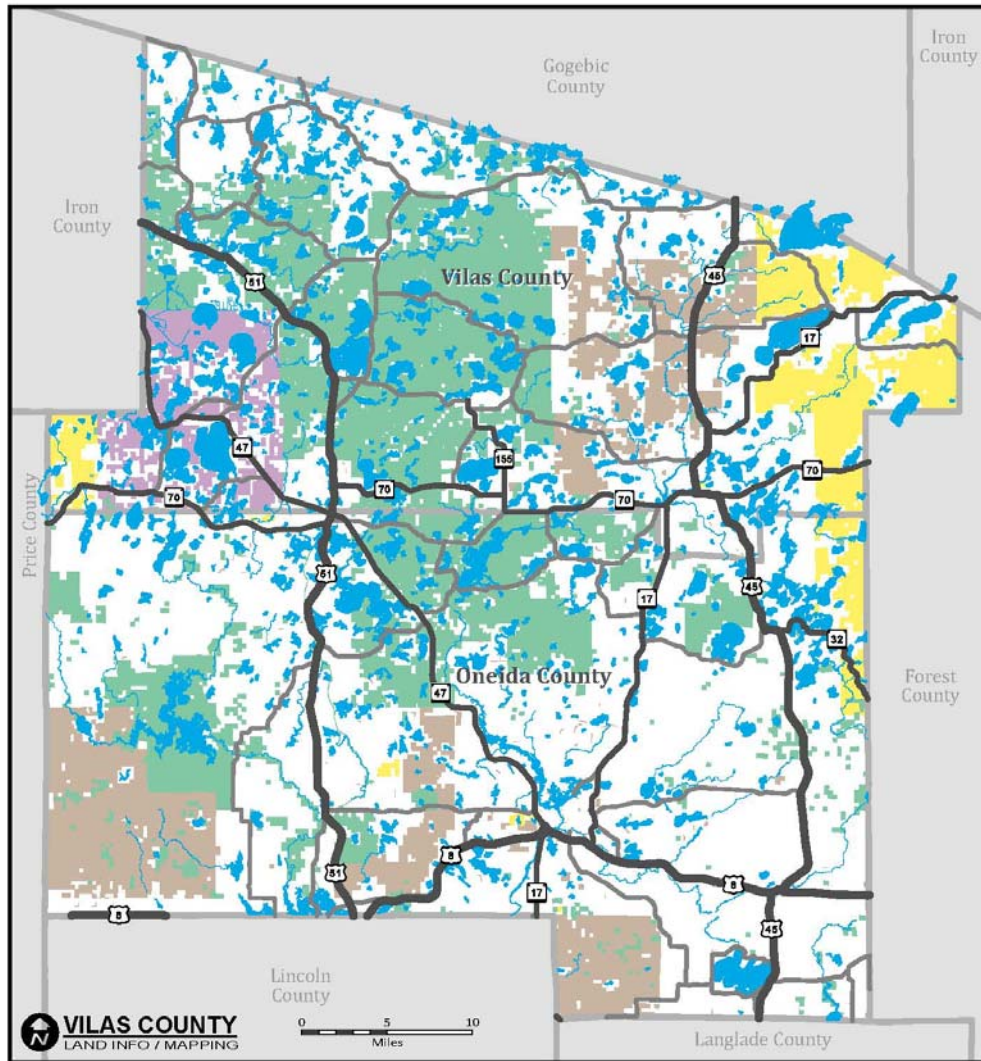
Schedule

LiDAR dataset would be delivered within 90 days of notice of grant award.

2013 LiDAR Project Area

Oneida and Vilas Counties, Wisconsin

- | | |
|---|--|
|  County Lands |  US Highway |
|  State Lands |  State Highway |
|  Federal Lands |  County Highway |
|  Tribal Lands | |



Authorization to Submit Pre-Proposal

At the Oneida County Board of Supervisors Land Records Committee meeting of August 12th, 2014, the Committee unanimously approved a motion authorizing Oneida County Land Information to submit a pre-proposal funding request for the U.S. Geological Survey 3DElevation Program BAA G14PS00574.

Michael J Romportl, Oneida County Land Information Director, August 14th, 2014

At the Vilas County Board of Supervisors Land Records Committee meeting of August 7, 2014, the Committee unanimously approved a motion to forward a resolution to the Vilas County Board authorizing Vilas County Land Information to submit a pre-proposal funding request for the U.S. Geological Survey 3DElevation Program BAA G14PS00574.

Len Fralick, who is a representative of the Lac du Flambeau Band of Lake Superior Chippewa Indians GIS Mapping and Planning Department, contacted Vilas County concerning fees associated with obtaining LiDAR data from the 2013 Oneida-Vilas County project. Due to the tight time frame to submit this pre-proposal, it is was not possible to formalize documents between the counties and the tribe to establish a partnership. However, this partnership would be pursued if this pre-proposal application is selected to compete for the final proposal.

Barbara Gibson, Vilas County GIS Administrator/Land Information Officer, August 14th, 2014

Thank you for consideration of this request.