
PROJECT CHARTER

Project Title: Nebraska Statewide Imagery Program
Project Sponsor: Ed Toner, CIO and the NITC GIS Council
Date: Adopted on August 1, 2012 and updated May 2, 2016

Major Participants: NITC GIS Council, Nebr. Office of the CIO, Nebr. Dept. of Roads, Nebr. Dept. of Natural Resources, USDA-FSA, City/County Governments, Nebraska Public Power District

Project Spokespersons: Michael Schonlau, City of Omaha/Douglas County
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Project Working Group: NE OCIO: Nathan Watermeier
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Nebraska Public Power District: Tim Cielocha

** Working group members subject to change on an annual basis*

Project Vision: The overall goal is to develop a Statewide Imagery Program for Nebraska that consists of the following components: digitizing guidelines, acquisition guidelines, acquisition opportunities, data sharing, and statewide coverage.

Statewide imagery is a critical Nebraska Spatial Data Infrastructure (NESDI) framework layer for a wide range of GIS applications in the state. Most GIS applications require or benefit from the availability of current and accurate aerial imagery. Imagery has also been determined by the Federal Geographic Data Committee (FGDC) to be a national framework layer because their use by a wide cross-section of geospatial data users. This working group is established to conduct research and develop recommendations for standards, policies, infrastructure, and funding to support collaborative efforts by state, local and federal agencies to periodically acquire and share updated and accurate imagery for Nebraska.

There is a broad and growing need among public agencies (state, local and federal) for reliable, convenient access to accurate statewide imagery. This need spans a broad cross-section of application types for both public agencies and the private sector, including planning and management in: natural resources, infrastructure, transportation, environment, agriculture, public safety and economic development.

The acquisition of updated, orthorectified (corrected for camera tilt and the slope of the earth's surface) imagery requires a significant public investment, but if done collaboratively, on a regular periodic basis, these costs can be minimized and shared across a broad user community. It is expected that this effort will largely integrated into the NESDI process. Yet while this data is widely needed and significant public funds are being invested in the development of its components, there is currently no single entity, which has the clear responsibility to ensure that this critical data is maintained, collected,

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integrated and reliably provided in a means that is convenient and useful to the wide range of users in Nebraska.

Efforts will be made to learn from, and build on, existing collaborative imagery acquisition efforts such as the Nebraska-Iowa Regional Orthoimagery Consortium (NIROC) and the USDA Farm Services Agency – National Aerial Imagery Program (NAIP). A complete coverage of the state for imagery was collected in 2012 through the USDA-FSA NAIP program. In 2013, the GIS Council also worked with state and local agencies to plan and acquire updated high-resolution imagery (6-inch pixel resolution) for much of the urban area of Nebraska. These areas included Omaha, Bellevue, and Lincoln. This effort was lead and primarily funded by local governments with the GIS Council and some state agencies assisting and contributing.

The project participants envision an enterprise-level program, which upon completion, will enable and support the on-going collection from multiple sources, integration, and distribution of “best available” statewide imagery framework layers and databases. Distribution of this “best available” imagery will include the ability of public agencies to maintain easy online access, without charge, to the most current version of the data.

The NITC GIS Council's strategic database development goal states, "Actively coordinate the development, maintenance, and distribution of priority statewide digital geospatial databases," This involves a project design approach that incorporates the goal of supporting many applications related to infrastructure planning and maintenance.

Project Overview: This project has been identified as a Nebraska Spatial Data Infrastructure (NESDI) Strategic Initiative. It has been established to pursue the objectives outlined in NITC GIS Council, 2012 Strategic Plan, this Working Group is charged with reporting to the NITC GIS Council on the following areas relative to imagery for Nebraska:

- a. Define an imagery program management team and what it is comprised of and where it will be located (administratively and physically). This Working Group is supporting this function at the moment.
- b. Identify pertinent stakeholders and gather core requirements and stakeholder expectations
- c. Identify a set of standards that will meet the majority of these requirements and expectations in the most cost-effective manner
- d. Establish geodetic control considerations
- e. Identify a standard products (Color, Color-IR, B/W, Oblique, High Res (4-8”), Low Res (12”+))
- f. Develop scenarios for completing imagery coverage for the state
- g. Identify, evaluate, data collection providers
- h. Request program cost estimates from solution/data providers (RFI)
- i. Identify data stewards and responsibilities including storage and management strategies
- j. Develop budget and assess fiscal funding cycles among stakeholders to address cash flow requirements
- k. Market the Nebraska Statewide Imagery Program Business Plan
- l. Identify and pursue program funding source(s) and encumber funds.
- m. Implement the acquisition project
- n. Publish and share data through NebraskaMAP
- o. Incorporate aspects of program into overall technical assistance and education outreach plans

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- p. Conduct program evaluation annually and make necessary programmatic adjustments

Any effort to create an enterprise solution to the growing need for a statewide imagery program must address an array of both technical and policy issues. The needs and expectations of the current data producers must be considered, as well as the needs of the broader community of data users.

Technical and Policy Issues

- Data model and standards
- Data distribution mechanisms
- Tools and processes for integrating data from multiple sources
- Tools and processes for notification of update availability
- Data model and standards
- Data sharing agreements, commitments, and restrictions
- Data development and maintenance plans/commitments
- Delineation of agency responsibilities and commitments
- Identification and empowerment of lead agency
- Funding strategies and justifications
- Business case development
- Plans/commitments for undeveloped data elements
- Plans/commitments for undeveloped areas

This Working Group will take the lead in identifying the issues, soliciting input, and recommending solutions. As part of this process, the working group will actively pursue input and feedback on all aspects of the project from agencies not directing participating in the project team's work. The project team, acting on behalf of the participating agencies, will make recommendations to the NITC GIS Council. The Council may accept, modify, or reject those recommendations.

As part of this project, the project Working Group will develop a business case outlining the range of needs for this dataset and the justifications for the commitment of public resources for the on-going costs associated with the development, maintenance, and distribution of this "best available" dataset.

Specific project milestones include the delivery of a comprehensive business plan, implementation and maintenance activities are underway, and that adequate resources are provided for the sustainability of the Nebraska Statewide Imagery Program.

Standards: The working group provides recommendations to the GIS Council for the development and maintenance of standards. The following standards are applicable to this project initiative.

NITC 3-201 Geospatial Metadata Standards. <http://nitc.ne.gov/standards/3-201.html>

NITC 3-204 Imagery Standard <http://nitc.ne.gov/standards/3-204.html>

When recommendations are approved through the GIS Council for standards, the NITC shall be responsible for adopting minimum technical standards, guidelines, and architectures upon recommendation by the technical panel. Neb. Rev. Stat. § 86-516(6). The State of Nebraska, Office of the CIO (OCIO) will be responsible for assuring that

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metadata is completed and the data is registered and available for distribution through NebraskaMAP.

State granting or fund disbursement entities or agencies will be responsible for ensuring that these standards are included in requirements related to fund disbursements as they relate to aerial imagery. Local government agencies that have the primary responsibility and authority for aerial imagery acquisition will be responsible for ensuring that those sub-sections defined in Section 1 will be incorporated in the overall imagery data development efforts and contracts.

Decision-making: It is the intent that this project Working Group will seek consensus on the best solutions and resolutions of the issues and present recommendations forward to the NITC GIS Council. The NITC GIS Council is charged with establishing guidelines and policies for statewide Geographic Information Systems and priority databases, and authorized to establish advisory committees from various levels of government, industry, or the general public pursuant to Sections 85-569 and 85-573, R.R.S. 1943. In cases where a consensus is not possible, the differing viewpoints and their rationale will be forwarded to the NITC GIS Council for further discussion and resolution.

Project Timeline: The timeline for completion of this project is ongoing until otherwise modified or terminated by the direction of the NITC GIS Council. Additional updates and changes to this charter can be made at any time by the NITC GIS Council.