

NebraskaMAP – A Geospatial Data Sharing and Web Services Network



PROJECT CHARTER

Project Title: NebraskaMAP - A Nebraska Geospatial Data Sharing and Web Services Network

Project Sponsor: Ed Toner, CIO and the NITC GIS Council

Date: Adopted on February 10, 2009 and updated May 2, 2016

Major Participants: NITC GIS Council, Nebr. Office of the CIO, Nebr. Dept. of Roads, Nebr. Game and Parks Commission, Nebr. State Patrol, Legislative Research Office, City/County Governments, US Geological Survey, Nebraska Public Power District

Project Spokespersons: Nathan Watermeier, NITC / NE OCIO

Project Working Group: NE OCIO: Nathan Watermeier and Jeff Timm
NE Dept. of Roads: Claire Inbody, Alicea McCluskey, Michael Munson, Michael Niedermeyer, and Bill Wehling
NE Dept. of Natural Resources: Steve Rathje and Josh Lear
NE Game and Parks Commission: Sudhir Ponnappan
NE State Patrol: Jon Kraai and Andrew Christensen
NE Health and Human Services: Karis Bowen
Legislative Research Office: Casey Dunn
Univ. of Nebraska: Adonna Fleming and Milda Vaitkus
Lincoln/Lancaster County: Jeff McReynolds
Omaha/Douglas County: Mike Schonlau
USGS: Jim Langtry, USGS Geospatial Liaison to Nebraska
Nebraska Public Power District: Tim Cielocha

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

Project Vision: The ability to quickly and reliably access and/or share up-to-date data between public agencies (state, local, regional, and federal) is critical in today's e-gov world. This is particularly true with the wide range of applications using GIS/geospatial technology. So much of the power of GIS lies in its ability to integrate and analyze data from multiple sources, based on location or place.

The Working Group envisions the development of a Nebraska enterprise-level, geospatial data sharing network with related data and mapping services. This data sharing network will enable agencies to access, in an automated on-demand mode, up-to-date data from multiple participating (state, local, regional, and federal) public agencies. Because some of the data of interest will be sensitive, security and permission protocols will be integrated into the overall network design. To encourage maximum participation and utility, this data sharing network will have both an open public access/view and a private-secure access/view component. When fully developed, this data sharing network will support a wide-range of GIS/geospatial applications that require regular, dependable access to up-to-date data from multiple sources. It will additionally provide the technical support to maintain these services and assist public entities to access and build applications based on these enterprise services.

Project Background: This project was initially proposed by the NITC GIS Council. The project has been endorsed by the Nebraska Information Technology Commission as an enterprise "shared services" project. An interagency project exploratory committee recommended that the Office of the CIO become the lead agency to undertake the implementation of this collaborative project and the NITC GIS Council endorsed that recommendation. The OCIO agreed to undertake the implementation lead, provided that there was a clear

PROJECT CHARTER

understanding among the project participants that as an agency primarily funded via revolving cash funds, the OCIO would be coming to project partners to provide funding support to assist with the project's initial implementation and on-going support. Initial startup funding for the project has been secured from a mix of funding sources. The development of proposals for sustainable funding will be an objective as project implementation proceeds.

Project Governance: In partnership with the NITC GIS Council, the Office of the CIO is responsible for providing operational and policy oversight to management of NebraskaMAP data holdings and mapping services. Data submission requests will need to be made to the State GIS Coordinator at the Office of the CIO. All submissions will be reviewed by the NebraskaMAP Data Subcommittee for completeness and final approval prior to release through NebraskaMAP.

Project Overview: This project has been identified as a Nebraska Spatial Data Infrastructure (NESDI) Strategic Initiative. It has been established to develop a geospatial data sharing network will involve a complex matrix of issues. This includes an array of both technical and policy issues.

Technical and Policy Issues

- Networking
- Data exchange standards
- Data transformation
- Data documentation
- Data archiving
- Security
- Data sharing agreements
- Database administration
- Data enterprise administration requirements
- Data operations and maintenance requirements analysis
- Data viewing and query applications
- Online data and mapping services
- Outreach education and technical assistance

To address this complex matrix of issues, the overall project will be divided into a series of project phases. Each phase will be designed to achieve concrete deliverables and will, in and of itself, provide specific advances in interagency data exchange capabilities. For example, sensitive data will not be available through the data exchange network until the later phases of the project, after security and permission protocols have been developed and tested. As part of this learning and building process, it is expected that the design of the project phases will evolve over time. A geospatial data and content management policy will also be developed and implemented to help guide the governance of data handlings through NebraskaMAP.

Integral to the design of this project is the concept that much of the data to be shared will not necessarily be hosted in a central repository. Much of the data will be hosted on servers operated by the original data-producing agency, but will be accessed through a centralized GIS portal. This decentralized approach also applies to accessing online GIS mapping and data services provided by remote site project partners. The project design will, however, also include a central data repository and mapping server that will enable agencies not currently providing online mapping and GIS data services to participate in

PROJECT CHARTER

the project by hosting their data on the project's data repository and servers. For some agencies this data repository may also act as a data security backup.

The project will be designed to be friendly and useful to GIS users with a wide range of GIS experience and sophistication. Early efforts will need to focus on putting in place the basic infrastructure and protocols, and as such, may not be especially user-friendly. However, a design goal of the project is to produce an online GIS interface and tool set that will be easily accessible to unsophisticated GIS users. At the same time, the project will also develop a robust functionality that will serve more sophisticated GIS users. Agencies will be able to develop online applications that can execute and rely on background calls and links to the online GIS mapping and data services provided by the network.

There is a commitment to develop the architecture of the system so that it is open to inputting and exporting geospatial maps and data services in formats compatible with a wide range of GIS and computer-aided design software packages and standards. The establishment of interoperability guidelines will be needed to address workflows between data and GIS applications.

Issues that will impact the project's long-term sustainability and use will be identified as part of the early design and implementation of this project. These issues include training for agency developers and network users; marketing and outreach to increase awareness and use of the network; map and data services needed by the partners, and on-going network maintenance, support and enhancement.

This Working Group will take the lead in identifying the issues, soliciting input, and recommending solutions. As part of this process, the project team 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.

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 Land Records Information and Mapping Project.

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>

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). Each state agency will be responsible for ensuring that geospatial data developed, maintained, or purchased and which is used for policy development, implementation, or compliance review will be documented consistent with this standard. The State of Nebraska, Office of the CIO (OCIO) GIS Shared Services will be responsible for assuring that metadata is completed and the data is registered and available for distribution through NebraskaMAP.

PROJECT CHARTER

State granting or fund disbursement entities or agencies will be responsible for ensuring geospatial metadata documentation requirements are included in requirements and regulations related to fund disbursements. Local government agencies that have the primary responsibility and authority for developing geospatial datasets with state appropriated funds will be responsible for ensuring that those sub-sections defined in the standards will be incorporated in the overall data development efforts and publishing of metadata prior to distribution.

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.