

Nebraska Spatial Data Strategic Planning — Laying the Foundation for Communication and Collaboration

PROJECT SUMMARY

- (a) **Applicant's Organization:** Nebraska Department of Administrative Services - Office of the CIO
- (b) **Collaborating organizations:**
- Nebraska GIS Steering Committee is the statutory-based, intergovernmental GIS coordinating council for Nebraska.
 - Several state agencies and universities represented on the Nebraska GIS Steering Committee.
 - The Nebraska County Officials Association is the statewide organization that represents county government officials.
 - The League of Nebraska Municipalities is the statewide organization that represents municipal governments.
 - The Nebraska Association of Natural Resources Districts is the statewide organization that represents regional natural resources districts.
 - The Metropolitan Area Planning Agency is the area planning agency for the most densely populated area of Nebraska
 - The Nebraska GIS/LIS Association is a statewide membership organization of GIS professionals.
- (c) **Organization's Internet Address:** Office of the CIO - http://its.ne.gov/plan_proj_mgt/, Nebraska GIS Steering Committee Strategic Plan - http://www.calmit.unl.edu/gis/Annl_Rpt&Strategic_Plan_06.pdf
- (d) **Relevant National Digital Geospatial Clearinghouse node address:** <http://dnrmap2.dnr.state.ne.us/metadataexplorer/explorer.jsp>
- (e) **Principal Investigator:** Larry K. Zink, GIS Coordinator, 402-471-3206, Larry.Zink@nebraska.gov
- (f) **Other key contact personnel:** James Langtry, USGS Geospatial Liaison for Nebraska, (402) 328-4128, jlangtry@usgs.gov
- (g) **Geographic scope:** Geographic area included within the boundaries of the State of Nebraska
- (h) **Previous CAP cooperative agreement participation:**
2002 USGS-FGDC CAP grant to assist with Nebraska I-Team Formation - Strategic Plan and a Land Records Modernization Study;
2006 –07 USGS CAP grant to assist in providing start-up funding for a technical lead to develop an enterprise Nebraska geospatial data sharing and web services network.
- (i) **Project Description:**
Nebraska Spatial Data Strategic Planning — Laying the Foundation for Communication and Collaboration. A planning proposal to develop an enterprise-level strategic plan to guide the development of the spatial data infrastructure for the geographic area of Nebraska. The planning process will involve a broad cross-section of the state, local, federal public and private user community to aggregate their needs and plans into a statewide Strategic Plan. Business cases will also be developed for two existing priority enterprise-level initiatives: a statewide street centerline/address database, and an enterprise geospatial data sharing network. Integrated into the planning processes are efforts to develop and strengthen coordination infrastructure for the future, including: a). regional interest groups; b). an urban areas interest group; c). the development of an enterprise-level, web-based data sharing network; and d). a Ramona-powered Nebraska Data Inventory system

PROJECT SCOPE

This proposal is being submitted by the Nebraska Office of the CIO on behalf of the Nebraska GIS Steering Committee. The GIS Steering Committee is an intergovernmental, statutory-based, state GIS coordinating council for Nebraska.

There are three primary interrelated thrusts or goals to this proposal:

Develop a Nebraska Geospatial Strategic Plan reflecting the needs of the broader GIS user community in Nebraska.

Develop Business Cases for Two Priority Initiatives: a) a statewide street centerline-address database; and b) development of an enterprise-level geospatial data sharing and web services network

Strengthen Coordination Infrastructure by developing and/or strengthen multiple channels for future communication and collaboration.

For the last five (5) years, the efforts of the GIS Steering Committee have been guided by a Strategic Plan that was originally developed back in 2002. In the intervening years, this Plan has undergone an annual reporting and update process, but has not undergone a comprehensive review since 2002. The most recent version of this Plan is available at:

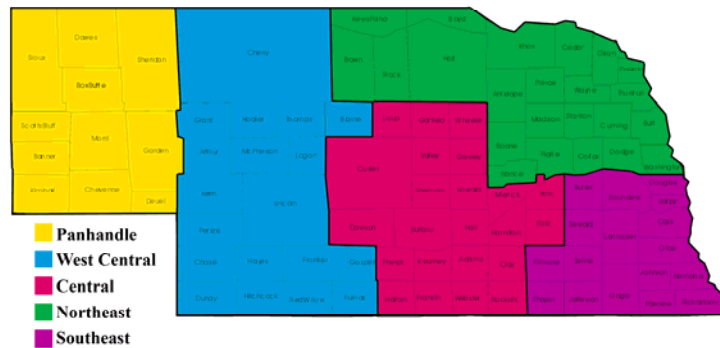
http://www.calmit.unl.edu/gis/Annl_Rpt&Strategic_Plan_06.pdf

Since its original development in 2002, major changes and evolution of GIS technology and national, state and local level use of geospatial technology argue for the timeliness of a major rewrite of Nebraska's Strategic Plan.

Strategic Planning Objectives

- Facilitate Individual Public Agency Geospatial Planning. Encourage and facilitate geospatial strategic planning within individual public agencies at the state, federal, regional and local level.
- Develop Tools to Collect and Aggregate Needs and Plans. Develop, distribute, and encourage the use of a common survey instrument to stimulate strategic thinking and to enable the collection and aggregation of individual agency needs and plans at a statewide and sub areas of interest. Common survey instrument to be primarily based on Ramona online Data Inventory questionnaire tool.
- Facilitate Strategic Planning Among Areas of Shared Interest. In addition to the collection and aggregation of individual agency needs and plan, efforts will be made to convene *areas of shared interest* working groups (e.g. environment and natural resources) to explore common needs, potentials for partnerships, and on-going mechanism for coordination and collaboration.
- Stimulate Collaboration Within Common Geographic Regions. Shared geography is definitely an area of shared interest. To facilitate geospatial networking and planning, regional meetings will be convened in geographic areas roughly defined by the five regions on the map below. County and municipal officials, representatives of the Nebraska Natural Resources Districts, regional health districts, tribes and other public/private entities with potential interest in geospatial data and services for that geographic area will be invited to participate.

Rough Outline of Proposed Regions



- **Urban Areas Planning.** In addition to exploring the shared interests that are likely to be identified within the five geographic regions, an Urban Areas working group will be convened to explore common issues and the potentials for future collaboration and/or partnerships (e.g. Omaha, Lincoln, etc.).
- **Federal Agency Planning.** Federal agencies will be asked to complete the standardized survey instrument and if there is sufficient interest a federal agencies meeting convened.
- **Tribal Outreach and Planning.** In addition to tribal representatives being invited to participate in the geographic regional gatherings, efforts will be made to meet specifically with representatives of the tribes based in Nebraska to encourage their participation in geospatial strategic planning and projects.
- **Develop an Updated Strategic Plan.** Based on the input and review from a wide cross-section of the user community, the GIS Steering Committee will develop an updated Spatial Data Strategic Plan for Nebraska.

Business Plan Development Objectives

- **Statewide Street Centerline/Address Database.** The key Nebraska agencies currently involved in street centerline/address database development and/or use will develop an enterprise-level business plan for the collaborative development and maintenance of this data. This process will propose standards, assess resource needs, develop proposals for assignment of responsibilities, and develop the business case justifications for allocating the needed resources.
- **Nebraska Geospatial Data Sharing and Web Services Network.** Currently Nebraska GIS users operate in a decentralized GIS environment. There is very little available in the way of statewide, enterprise-level operational services, upon which web-based data sharing and web-based services can be built. Initial startup funding has been secured to contract for a technical lead to put into place the hardware, software and technical protocols necessary to establish the foundation for this data sharing network. As part of this strategic planning proposal, a business case will be developed to support the longer-term development and maintenance of this data sharing network.

Development of Coordination Infrastructure Objectives

- Regional Communication, Coordination Networks. To establish regional geospatial coordination networks, efforts will be made to host two meetings in each of five (5) roughly defined geographic regions. An initial meeting will provide an overview of GIS and what is happening in the state and that specific region. Following that initial meeting, the needs and plans of individual agencies will be solicited and that info aggregated by geographic regions. A second meeting will focus on presenting the aggregated findings and exploring the potential for future collaboration will be arranged.
- Urban Areas Planning. While the majority of Nebraska is rural, there are significant urban areas, for which the utilization of GIS/geospatial technology is rapidly growing. These urban areas share many concerns and needs as they relate to GIS and geospatial technology and this strategic planning process will help identify common needs and facilitate further collaboration.
- Update Nebraska GIS Steering Committee Structure. Based on the input for the Nebraska GIS user community, proposals will be developed for the restructuring of the GIS Steering Committee to better serve the evolving Nebraska GIS/geospatial user community. The NSGIC nine model criteria for effective state coordination and the model characteristics for state coordination councils, as outlined in the FGDC's Fifty State Action Plan, will be used as planning and assessment guides.
- Development of an Online Nebraska Data Inventory as a Communication Tool. While the potential for the online Nebraska Data Inventory (Ramona-powered) is clear, it has been difficult to engage the community in populating and utilizing this tool. As part of this strategic planning process, individuals and agencies will be encouraged to register with the Nebraska Data Inventory and complete an online strategic planning questionnaire. If successful, this will establish a solid foundation for using this tool to address general GIS user community information and communication needs and for future efforts to update strategic plans.
- Lay Foundation for a Nebraska Geospatial Data Sharing and Web Services Network. The development of an enterprise-level, web-based GIS data sharing and data and mapping services would be a significant enhancement of Nebraska's spatial data infrastructure. As part of the strategic planning process, agencies will be queried relative to data they might provide, and data and web services that they would want available through such a data sharing network.

SKILLS AND CAPABILITIES

The Principal Investigator for this project will be Larry Zink, GIS Coordinator for Nebraska. Mr. Zink has a Masters in Community and Regional Planning and has served as the Coordinator for the GIS Steering Committee since 1993. Mr. Zink was the major organizer and author of the 2002 GIS Strategic Plan and the annual updates that have been done since (http://www.calmit.unl.edu/gis/Annl_Rpt&Strategic_Plan_06.pdf). The 2002 Strategic Plan was developed as a part of a FGDC CAP grant for I-Team strategic planning and a land record modernization study. As part of that process, Mr. Zink developed an RFP, hired and oversaw the work of a project consultant for a land record modernization study. As a testimony to the quality of that earlier work, Mr. Ronald T. Matzer, FGDC/OMB I-Team Coordinator, sent the following 2-3-03 email.

“Congratulations Larry. The Nebraska I-Plan may be the most thorough and complete plan yet submitted. Knowing what I do about the extent of your resources, it is a remarkable achievement. Tom Bryer of the Council for Excellence in Government read the entire plan last week in order to extract from it information we want to present to OMB. He told me and others at the Council that the Nebraska I-Plan is the best he has read.”

Mr. Zink is also the Principal Investigator for another USGS CAP program that is currently active, entitled the Nebraska Geospatial Data Sharing Web Services Network. As part of this CAP program, the USGS is contributing to a larger pool of startup funding to contract for a technical lead to help initial development of an enterprise-level web-based data sharing and geospatial web services network for Nebraska. This is a collaborative project involving several state and local government agencies.

Mr. Zink is very familiar with the goals and objectives of the FGDC Fifty States Cooperative Agreement Program. As an active member of NSGIC, Mr. Zink served on the advisory committee that helped to draft the Fifty States Action Plan adopted by the FGDC.

COMMITMENT TO EFFORT

The GIS Steering Committee and its member agencies have a long history of collaboration with the USGS on the implementation of the NSDI in Nebraska, including numerous data development projects. In 2005, the GIS Steering Committee formally entered into a NSDI Partnership Agreement with the USGS National Geospatial Programs Office (NGPO). This Agreement was designed to “facilitate the implementation of collaborative activities in areas of mutual interest that support the development of the NSDI, . . . including support for the recommendations in the NSDI Future Directions Fifty States Initiative Action Plan, and promote USGS assistance to states in implementing strategic and business plans that support the development of the NSDI.”

The GIS Steering Committee and its member agencies have cooperated with the USGS in the development of multiple versions of statewide DOQs, DEMs, NHD, and currently serve spatial data to *The National Map*.

This strategic planning proposal includes the participation and support of several key statewide organizations. All of these organizations have offered to encourage their members to participate in this planning effort.

Because of the GIS Steering Committee’s long-term commitment to the NSDI, it has made extra efforts to integrate into this strategic planning process initiatives designed to develop and/or strengthen coordination infrastructure for the future, such as: a). regional interest groups; b). an urban areas interest group; c). the development of an enterprise-level web-base data sharing network; and d). a Ramona-powered Nebraska Data Inventory system.

ORGANIZATIONAL AND MANAGERIAL CAPACITY

This strategic planning process will be managed out of the Nebraska Office of the CIO (OCIO) on behalf of the Nebraska GIS Steering Committee. The OCIO has responsibility for overseeing and implementing the major state-level IT projects in Nebraska and has approximately 230 FTE employees (plus numerous IT contract employees) with a wide range of technical skills and project management experience in the IT area and oversees a budget of over \$100,000,000.

Larry Zink is the designed Principal Investigator for this project and is administratively based within the OCIO.

Most of the major stakeholder/partners in this strategic planning endeavor are represented on the GIS Steering Committee and have endorsed this planning process (*see letters of support*). Consistent with the recommendations of the FGDC's Strategic Planning Template, the GIS Steering Committee has created a Strategic Planning Advisory Committee which is charged with leading the Steering Committee and broader user community through this planning process (*see page 1 of attached background info*).

An existing Advisory Committee on Geospatial Data Sharing and Web Services Network will guide the development of a Business Case for that initiative. The Advisory Committee has already secured separate startup funding for a project technical lead and is in the process of advertising and interviewing to fill that position (*see page 3 of background info*).

An Advisory Committee on Street Centerline-Address Databases has been authorized by the GIS Steering Committee and will be convened in January 2008. This committee will guide the development of the Business Case in this area.

Integral to this project proposal is the contracting with a consulting firm with experience in assisting organizations in geospatial strategic planning. It is envisioned that this firm will work closely with the State GIS Coordinator and the various Advisory Committees to refine the planning process and the planning instruments, organize and facilitate meetings, provide follow-up friendly nagging to encourage completion of the survey instrument, compile survey responses, and help develop draft strategic plans and business cases.

Project Timeline (*milestones in bold*)

- Jan 08..... Convene Street Centerline/Address Advisory Committee
- Mar 08 Mid-Year NSGIC - training for 50 States Planning grants
- Apr 08..... RFP released for consultant
- Apr 08..... Initial draft of planning survey instrument
- May 08 Formal CAP start date and selection of planning consultant**
- May-Jun 08 .. Refine and finalize planning survey instrument**
- Jun-Aug 08 Solicit state, local, federal agency planning survey input via online NE Data Inventory (Ramona)
- Aug 08..... Cut off period for initial agency input into planning survey instrument and compilation of shared interest areas**
- Jun-Oct 08 Regional mtgs., Urban areas mtgs., other areas of interest mtgs.
- Jun 08-Feb 09 Business Case Development (Centerline/address, Data Sharing Network)
- Nov 08 Interim Project Report due
- Nov 08 Draft Strategic Plan available for comment**
- Jan 09..... Finalize Strategic Plan
- Mar 09 Draft Business Cases (2)**
- May 09..... Final adoption of two Business Cases
- Jul 09 Final Project Report due

This strategic planning proposal has an ambitious timeline and set of objectives/tasks. Undoubtedly, not all of the outreach and input-related tasks will be met to perfection. However, we are reasonably well positioned to solicit and synthesize a lot of information from a wide cross-

section of stakeholders. We will help to develop and strengthen networks of shared interest, which will provide a basis for future and on-going coordination and collaboration.

If we are reasonably successful in this planning process, the interim steps (internal agency planning, regional planning, network building, etc.) should provide their own logic to ensure the relevance and utility of the final Strategic Plan and business cases.

BUDGET BREAKDOWN

Federal CAP Funding Expenditures

\$10,000* Other Direct Cost Items – Regional Meeting Expenses: Regional and urban area meetings (facilities rental, facilitator, meals and breaks for participants, trainer, travel for presenters)
Two meetings each for five (5) regional and one (1) urban area mtgs. x 40 people/mtg. for each mtg.= 480 participants & meals/breaks
480 participants x \$15/meals & breaks & room = \$7,200
printing, materials, facilitator = \$2,800
* A primary challenge to the success of the proposed regional meetings is getting a wide range of key stakeholders to attend and participate. In many rural areas, these folks will need to travel significant distances and devote two full days of their time. The experience in KS and MO in organizing such regional meetings found that providing meals and breaks and some associated training were key incentives to encouraging participation (*see page 7 of attached background info*). Providing meals as part of these planning meeting's agenda will also allow for those meals to be tightly integrated into the agenda and therefore the overall meeting time compressed.

\$40,000 Other Direct Cost Items – Contract Services: Planning consultant fees to help refine the planning process and the planning instruments, organize and facilitate meetings, provide follow-up friendly nagging to encourage completion of the survey instrument, compilation of survey responses, and help develop draft strategic plans and business cases.

\$50,000 Total Federal CAP Funding

In-Kind Matching Funds

\$15,000 OCIO – GIS Coordinator's time and expenses (500 hrs x \$30/hr, ¼ FTE)

7,500 Other state agencies (250 hrs x \$30/hr, 5 agencies x 50 hrs/agency)

22,500 Local government agencies (conservatively est. five (5) regional mtgs. held twice with 15 (up to 40) folks for 5 hrs at \$30/hr, 5 x 2 x 15 x 5 x \$30/hr = \$22,500)

\$45,000 Total In-Kind Match

Total Project Funding

\$50,000 Federal CAP Funding

\$45,000 In-Kind Match Funding

\$95,000 Total Project Funding