

2007 CAP – Category 3: Final Report State of Utah Geospatial Strategic and Business Plan

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Project Title: State of Utah Geospatial Strategic and Business Plan

Final Report – 12/31/08

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Collaborating Organizations:

- Utah Automated Geographic Reference Center
- State of Utah, Chief Information Officer
- Utah Association of Counties
- Utah League of Cities and Towns
- USGS Western Region NSDI Partnership Office, Geospatial Liaison for Utah

Executive Summary

Coordination activities have been an indispensable part of Utah's geospatial strategy since our first innovative partnership with the USGS to digitize a 1:500,000 scale base map for the State in 1986. In the twenty years since then, the State has partnered with virtually every federal agency, every county, and many cities and tribal organizations within Utah. Through regular interaction and practical implementation of geospatial technologies, tremendous benefits to the citizens of the State have been garnered.

We developed a participatory approach to a visioning and implementation strategy. This project engaged the community to contribute to the creation of the Strategic Plan that explains our vision for the future for geospatial information and technologies. We also developed a Business Plan for Preservation of Geospatial Resources as the first of many initiatives coming out of the process. Both the Strategic and Business Plans incorporate a technology plan that will determine the optimum solution and what technology needs to be in place for achieving the goals and objectives. Combined, these plans strengthen our council, improve coordination, define the business needs of the stakeholders, and establish priorities for the State.

Project Narrative

GISAC, along with partners, and much of the geospatial community of Utah, developed a strategic plan through a visioning process, and business plan and technical approach for implementation.

This project will strengthen our efforts for an effective, all-inclusive statewide coordinating council and related activities necessary for participation in, and enhanced development of the NSDI through the Utah Geospatial Infrastructure. We expect that this process will enable the various organizations involved with geospatial data and activities in Utah to improve coordination efforts resulting in better decisions, products, and services for the citizens of the state. This long term project will overcome existing issues of inequities in representative governance, redundancy and will increase the efficiency and effectiveness of organizations. Through a visioning process and tied to activities outlined below, we will establish priorities designed to improve statewide coordination mechanisms and geospatial information initiatives. From a practical

perspective, this will result in an assessment of the business needs of all stakeholder communities, an identification of partnership opportunities, a plan for implementation of enterprise architecture and standards, and improvement of statewide coordination and support for the community.

Our purpose was to develop a strategy and implementation plan to support the needs of the geospatial community in Utah. This will facilitate the coordination of programs, policies, technologies, and resources, which enable coordination, collection, documentation, discovery, distribution, exchange, and maintenance of geospatial data. The formation of the strategic plan was to be driven by needs identified government agencies, elected officials, and practitioners throughout the state's GIS community:

- Legislated requirements (e.g., Utah HB113 – cadastral data)
- Partner needs (e.g., Governor's Data Sharing Agreement)
- GIS Advisory Council input
- UGIC and other affiliate organization's input
- National Initiatives (e.g. Imagery for the Nation)
- Governor's priorities and initiatives
- Technology
- Standards

These drivers were defined through a series of input opportunities including GISAC facilitated meetings, UGIC Annual Conference sessions, regional geospatial user group meetings, surveys, and focus groups. This project was conducted primarily by GISAC members, AGRC staff, and Applied Geographics. CAP grant funds were used to hire Applied Geographics for facilitation and support.

The planned primary components of this project included:

- Development of a Strategic Plan. The strategic plan explains our vision for the future for Utah Geospatial Infrastructure (UGI).
- Development of a Business Plan for a component of the Strategic Plan. The business plan defines how objectives will be achieved along with justification for doing them. Developing the Business Plan will identify partnership opportunities. The Strategic Plan defines the UGI as the infrastructure "necessary to acquire, process, distribute, use, maintain, and preserve spatial data and services for long term benefit of all citizens of Utah." We focused on the preservation of geospatial resources as the first Business Plan developed.

What was done?

Over the past year, Utah conducted a geospatial strategic planning process that aimed to identify both opportunities and priorities for improving the geospatial assets of the state. To make progress, the plan identified a series of both short-term and long-term programmatic goals that should be pursued over the next 3-5 years. This project was funded by the Federal Geographic Data Committee (FGDC) and was informed through an inclusive and transparent planning process that obtained direct input from a broad array of geospatial stakeholders including federal, state, county and local governments, as well as the private and academic sectors. Over 200 practitioners of geospatial technology took part in an on-line survey, information gathering workshops or individual interviews and through this outreach a broad consensus on the recommendations was achieved.

The core recommendation is that all geospatial stakeholders in Utah work together to establish the Utah Geospatial Infrastructure (UGI). As the vision statement affirms: the UGI will “deliver robust map-based information and services to citizens, businesses, and government to enhance the safety, economy, environment, and quality of life in Utah, through the collaborative efforts of the Utah geospatial community.”

What was found?

The following abstracts major observations uncovered by Applied Geographics during the information gathering process:

- Utah has made significant geospatial progress over the last two decades and possesses extensive **geospatial strengths** which include:
 - The **Automated Geographic Reference Center (AGRC) provides effective leadership in coordinating** state GIS activities and serving as reliable resource for data and technical support
 - The Utah **geospatial community is vibrant, inclusive and growing**
 - The **State Legislature recognizes and understands** the state’s geospatial assets and programs and has supported investments in this technology
 - **County and local governments have been successful** in initiating GIS technology programs throughout the state
 - Utah **geospatial educational programs have the capacity to produce** the professional workforce necessary to support GIS activities
- There are opportunities to address several **geospatial weaknesses**, including:
 - **Data standards are inadequate** and are in need of modernization
 - **Parcel data accuracy and maintenance practices are uneven**
 - City and county governments have a **wide variety of data sharing and pricing policies** and this results in geographic information not being consistently accessible
 - There is **no regularly recurring, statewide aerial imagery program**
 - Professional **GIS labor resources are not always accessible** especially in rural areas of the state
 - Budget and political **support from local and county elected officials is often inadequate** to sustain or expand GIS activities

What is recommended?

In order to leverage the state’s geospatial strengths and to address its weaknesses, the strategic plan identified four overarching **strategic goals**. The following outlines these strategic goals while enumerating several of the **programmatic goals** and activities that were identified as being necessary to achieve the strategic goals.

1. **Collaboratively maintain statewide data resources.** Data are recognized as the most important and expensive elements of geographic information systems and there is broad interest in ensuring that Utah’s data remain high quality and current. Programmatic elements of improving geospatial data include:
 - Identify and prioritize key data sets

- Develop, publish, and implement improved standards
 - Identify data stewards and/or custodians
 - Create and maintain an online inventory of the state's data resources
 - Make the business case for data sharing
- 2. Geospatial web services are effective, accessible and reliable.** Increasingly, states are improving access to geospatial data by leveraging technologies such as web services. Improved access leads to greater uses of geospatial assets and a higher return on investment.
- Create a common infrastructure for delivering geospatial services
 - Develop data integration services
 - Adopt management and control processes for UGI geospatial services
- 3. Achieve organization and communication efficiencies.** Geographic information systems rely on human infrastructure as well as technology. The people and organizations engaged in geospatial activities require effective organization and coordination.
- Optimize the organization of the Utah geospatial community including re-examination of the missions and focus of existing geospatial organizations
 - Involve all stakeholders in the construction, maintenance, and use of the UGI
- 4. Promote the understanding, value, and benefits of the Utah Geospatial Infrastructure to decision makers at all levels.** The UGI represents a common vision that will need funding and institutional support to come into being and mature.
- Present the UGI to decision makers as a high value project and asset
 - Develop a series of key projects to illustrate the benefits of supporting the UGI
 - Develop a support network to of local practitioners and build advocacy

Next Steps

- Initial focus on governance and coordination
- Begin process to inventory existing geospatial resources in state and local agencies
- Begin process to preserve geospatial resources in state and local agencies
- Enhance process to coordinate development and sharing of geospatial resources and services
- Enhance communication among geospatial professionals and decision makers at all levels of government

Attachments

- The Utah Geospatial Infrastructure Strategic Plan
- Business Plan For Archival Preservation of Geospatial Data Resources
- Business Plan For Statewide Online Inventory of Geospatial Data Resources