

# **GIT GOVERNANCE**

State Models and Best Practices

## Utah

Prepared for  
Wisconsin Geographic Information Office  
Wisconsin State Cartographer's Office

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The **Wisconsin Geographic Information Office (GIO)** has the responsibility to coordinate Wisconsin's geospatial information activities, to implement standards to facilitate interoperability of information related to homeland security, to make recommendations on awarding grants to fund geospatial data, and to create information sharing agreements with state, local and tribal governments.

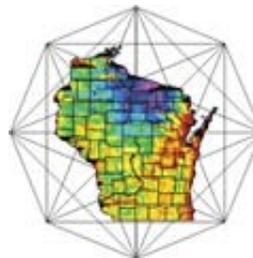
The **Wisconsin State Cartographer's Office (SCO)** is a unit within the Department of Geography at the University of Wisconsin-Madison. With an outreach mission, the SCO gathers, maintains and disseminates information about mapping and geo-spatial data in the state.

The **Land Information & Computer Graphics Facility (LICGF)** of the University of Wisconsin-Madison provides research, training, and outreach in the use of land and geographic information systems while focusing on land records modernization, land and natural resource management applications, and the use of information for land-use decision-making.

The **US Geological Survey (USGS)** has realigned its spatial programs into a National Geospatial Program Office (NGPO), bringing The National Map, Geospatial One-Stop, and the Federal Geographic Data Committee into a single program office. With the creation of the NGPO, the essential components of delivering the National Spatial Data Infrastructure (NSDI) and capitalizing on the power of place will be managed as a unified portfolio that benefits the entire geospatial community.

This state GIT governance profile was compiled as part of *GIT Governance: State Models and Best Practices*, a summary report in support of a proposal for a geographic information council for the State of Wisconsin (April 2007), and was prepared by L. Shanley, Land Information & Computer Graphics Facility, University of Wisconsin-Madison, and National Consortium for Rural Geospatial Innovations (RGIS), with assistance from Dennis Goreham, Manager, Utah Automated Geographic Reference Center, and with additional assistance from D. David Moyer, and Stephen J. Ventura, Director, Land Information & Computer Graphics Facility, University of Wisconsin-Madison. This report was funded by a "50 States Initiative" grant award through the Federal Geographic Data Committee's (FGDC) 2006 National Spatial Data Infrastructure (NSDI) Cooperative Agreement Program (CAP). This CAP grant – Agreement Number 06HQAG0109 – was administered through the Wisconsin Geographic Information Office (GIO), in cooperation with the Wisconsin State Cartographer's Office (SCO).

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# Utah GIT Governance

## GEOSPATIAL COORDINATION STRUCTURES AND PROCEDURES

Utah's statewide GIS coordination and implementation efforts began in the late-1970s. By the early 1980's, the Automated Geographic Reference (AGR) was created within the Department of Natural Resources and a state agency GIS task force was founded. Over the course of the decade, however, AGR moved from department to department, changing its focus with each move and hence limiting its ability to make significant progress.<sup>1</sup> Finally, in 1991, the Utah Legislature passed the "Geographic Information Systems Data Sharing and Conformity" Bill (S.B. 21, U.A.C. 63-1-57-58), officially authorizing the Utah Automated Geographic Reference Center (AGRC) as the primary GIS coordination office and agency responsible for the management of the State Geographic Information Database (SGID).<sup>2</sup>

In 2005, AGRC and SGID were re-authorized under the Utah Technology Governance Act, U. A. C. 63F-1-506 and 63F-1-507 respectively (see Appendix), and moved from the Department of Administrative Services, Division of Information Technology Services, into the Division of Integrated Technology within the newly created Department of Technology Services (DTS) (see Figure 1). Under the direction of the Chief Information Officer, DTS serves as the Executive Branch's lead agency on information technology ("Information Technology Governance Amendments," H.B. 109); it "manages information technology (IT) programs and resources statewide" and "[works] with all other state agencies to ensure efficient and effective investment

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<sup>1</sup> ESRI. Enterprise GIS Case Study – State of Utah, p. 2. ESRI Library, <http://www.esri.com/library/fliers/pdfs/state-of-utah.pdf>

<sup>2</sup> AGRC Website, AGRC History: [http://agrc.utah.gov/agrc\\_aboutagrc/historyagrc/historyintro.html](http://agrc.utah.gov/agrc_aboutagrc/historyagrc/historyintro.html)

in and operation of IT.”<sup>3</sup> AGRC actively coordinates with the CIO to ensure an enterprise approach to GIS implementation and data development. The CIO, in turn, reports to the Governor, and is a member of the Governor's Senior Staff and Cabinet Council.

Originally formed in 1988 as an advisory subcommittee of the Information Technology Planning and Strategy Committee, and as of 2004 officially authorized as a separate council under administrative rule R895-9 (see Appendix),<sup>4</sup> as issued by the Chief Information Officer,<sup>5</sup> the GIS Advisory Council (GISAC) serves as the primary GIS coordinating council for the State of Utah. As depicted in Figure 1, GISAC is organized under the Chief Information Officer within the Department of Technology Services. The Council is large (approximately 70 members) with appointed representatives of local, tribal, state and federal agencies, and non-voting private sector participants.

Highlighting and strengthening the coordination roles of AGRC and GISAC, the State of Utah and local, state, and federal agencies within the state entered into a Memorandum of Understanding (MOU) in May 2004 for the purposes of sharing geospatial data. The 2004 MOU extends a previous MOU signed in 1997 known as the “Utah Digital Spatial Data Sharing and Integration Project,” and “eliminate[s] the necessity of developing multiple agreements between the individual participating agencies.”<sup>6</sup> Under this agreement, participating agencies agree to provide geospatial data and regular updates in a mutually established format so that it may be incorporated into the SGID repository and accessible statewide. Whenever possible, this data is shared without charge.

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<sup>3</sup> 2006-2007 Appropriations Report, Utah Legislature, 2006 General Session Third Special Session (May 2006), p. 56, <http://www.le.state.ut.us/interim/2006/pdf/00001333.pdf>

<sup>4</sup> Administrative Rule R8895-9: <http://www.rules.utah.gov/publicat/code/r895/r895-009.htm>

<sup>5</sup> The Chief Information Officer issued administrative rule R895-9 the under the authority of Section 63F-1-206 of the Technology Governance Act and Section 63-46a-3 of the Utah Rulemaking Act, Utah Code.

<sup>6</sup> 2004 MOU, “Utah Digital Spatial Data Sharing and Integration Project”, AGRC Website: [http://agrc.utah.gov/agrc\\_giscoordination/2004\\_MOU.pdf](http://agrc.utah.gov/agrc_giscoordination/2004_MOU.pdf)

In addition, on June 13, 2006, Utah's Governor Huntsman cosponsored the Western Governors' Association Policy Resolution 06-14 titled "Geospatial Data is Part of the Nation's Critical Infrastructure", which

- "urge[s] the Bureau of Land Management (BLM) to complete, enhance, and maintain the Cadastral National Spatial Data Infrastructure (NSDI) in coordination and partnership with states, tribal and local governments";
- "urge[s] Congress to coordinate appropriations to existing federal imagery acquisition programs to fully fund the coordinated approach described in *Imagery For The Nation* [initiative]";
- "support[s] federal initiatives including the implementation of the Federal Geographic Data Committee's (FGDC) Future Directions initiative and the development of the U. S. Office of Management and Budget's Geospatial Line of Business activity";
- supports "an intergovernmental approach to development and governance of geospatial activities is necessary to optimize investments and results;" and,
- most notably, "support[s] federal, state, tribal and local coordination of GIS activities at the state level through state coordination councils."<sup>7</sup>

The Utah Geographic Information Council (UGIC) is professional association representing a broad range of GIS data users and producers. The UGIC was authorized through a Concurrent Resolution of the Legislature and the Governor in 1991, and is administratively supported by the AGRC (see Figure 1).

### **Manager, Utah Automated Geographic Reference Center**

The *de facto* GIS coordinator for the State of Utah is the Manager of the Utah Automated Geographic Reference Center (AGRC). The AGRC Manager is responsible for: 1) the facilitation of GIS implementation across state agencies, including participation in the GIS Advisory Council; 2) the coordination with federal, local, and tribal organizations on GIS development,

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<sup>7</sup> 2006 Western Governor's Policy Resolution 06-14, AGRC Website:  
<http://www.westgov.org/wga/policy/06/Geospatial.pdf>

maintenance, and distribution; 3) the administration of the State Geographic Information Database (SGID) and the AGRC website; and 4) the provision of training programs and career development opportunities for AGRC staff.

## AGRC Surveyor

The position of AGRC Surveyor is statutorily authorized under U.A.C. 63F-01-506 (see Appendix) and organized under Utah Automated Geographic Reference Center; the duties of the AGRC Surveyor include:

- “provid[ing] technical support to the office of lieutenant governor in evaluating boundary creation or boundary changes prior to certification by the lieutenant governor under Section 67-1a-6.5;
- assist[ing] the State Tax Commission in processing and quality assurance of boundary descriptions or maps into digital format for inclusion in the State Geographic Information Database;
- “coordinat[ing] with county recorders and [county] surveyors to create a statewide parcel layer in the State Geographic Information Database containing parcel boundary, parcel identifier, parcel address, owner type, and county recorder contact information; and
- facilitate[ing] and integrat[ing] the collection efforts of local government and federal agencies for data collection to densify and enhance the statewide Public Land Survey System reference network in the State Geographic Information Database.”

## Utah Automated Geographic Reference Center

The Automated Geographic Reference Center (AGRC), located within the Division of Integrated Technology, is the primary GIS coordination office for the State of Utah. AGRC’s mission is “to encourage and facilitate effective geographic information system implementation in Utah and [to] direct this process in state government.”<sup>8</sup> Under the authority of U.A.C. 63F-01-506 (see

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<sup>8</sup> AGRC website: <http://www.agrc.utah.gov>

Appendix), AGRC provides GIS leadership, coordination and services to local, state, and federal agencies in Utah. It is responsible for facilitating programs and activities to implement GIS technology across the state, and for coordinating GIS policy development. AGRC is further mandated to administer the state's geospatial data clearinghouse, the State Geographic Information Database (SGID), and to establish SGID standards. In addition, AGRC must provide administrative support for the GIS Advisory Committee (GISAC), and the Utah Geographic Information Council (UGIC). AGRC serves as the *de facto* point of contact on behalf of the GIS Advisory Committee for the Federal Geographic Data Committee and other federal agencies. Finally, AGRC provides consulting services, including GIS analysis and application development, GIS training, and Internet Map Service development and hosting. To support these activities, AGRC has thirteen (13) FTE staff members, including the Manager and AGRC Surveyor, and presently eight (8) LTE staff members.

The State Geographic Information Database (SGID), which is managed by AGRC, is statutorily required under U.A.C. 63F-01-507 (see Appendix):

- “[to] serve as the central reference for all information contained in any GIS database by any state agency;
- [to] serve as a clearing house and repository for all data layers required by multiple users;
- [to] serve as a standard format for geographic information acquired, purchased, or produced by any state agency; and
- [to] include an accurate representation of all civil subdivision boundaries of the state.”

In order to support SGID, state agencies that acquire, purchase, or produce digital geographic information data are statutorily required:

- “[to] inform [AGRC] of the existence of the data layers and their geographic extent;
- [to] allow [AGRC] access to all data classified public; and

- [to] comply with any database requirements established by [AGRC].”<sup>9</sup>

Furthermore, annually, the State Tax Commission must “deliver to the [AGRC] information the State Tax Commission receives...relating to the creation or modification of the boundaries of the political subdivisions that are the subject of those sections.”

As of the writing of March 2007, two statutorily created advisory committees serve under AGRC, the Geographic Positioning Network Advisory Committee and the RS2477 Rights-of-Way Grant Program Committee (see Figure 1). The *Geographic Positioning Network Advisory Committee* advises AGRC on implementing and maintaining the Statewide Global Positioning Reference Network, “a system of permanently mounted, fully networked, global positioning system base stations that...provide real time radio navigation and establish a standard statewide coordinate reference system (U.C.A. 63F-1-509; see Appendix).” By statute, this committee is comprised of AGRC’s manager, a representative from the Department of Transportation; a representative from the Division of Integrated Technology designated by the director; the chief information officer or the chief information officer’s designee; and a representative from the Utah Association of County Surveyors.

The *RS2477 Rights-of-Way Grant Program Committee* assists AGRC with the administration of the Rural Government GIS Assistance Program. Originally established in 1999 under U.C.A 63F-1-508 (see Appendix) to award grants to counties for inventory and mapping of R.S. 2477 rights-of-way and associated structures, the RS2477 Rights-of-Way Grant Program Committee now also administers the Utah Cadastral Data Collection Program,<sup>10</sup> a pass-through grants program funded by the State Legislature and Department of Interior to assist Utah’s rural counties with the development of standardized cadastral data. The Committee is comprised of the AGRC Manager, a representative of the Governor’s Office of Planning and Budget, a representative of Utah State University Extension, a representative of the Utah Association of Counties, and three (3) county commissioners. Committee members are selected by the

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<sup>9</sup> The IT Planning and Strategy Committee adopted the FGDC metadata standard as the state standard in 1994. Under state law, state agencies are required to adopt this standard while local governments are recommended to do so.

<sup>10</sup> AGRC Website, Cadastral Data Collection Program:  
[http://agrc.its.state.ut.us/agrc\\_giscoordination/cadastral/cadfund.html](http://agrc.its.state.ut.us/agrc_giscoordination/cadastral/cadfund.html)

organizations they represent; ideally, members should come from rural counties and from different regions of the state. The committee selects a chair from its membership. Neither members of the Geographic Reference Network Advisory Committee nor members of the RS2477 Rights-of Way/Cadastral Grant Program Committee receive compensation for their participation in committee activities. However, AGRC does provide administrative support.

## Utah Geographic Information Systems Advisory Council

Authorized under Utah Administrative Rule R895-9 (see Appendix) and organized under the Chief Information Officer and the Department of Information Technology Services, the Utah Geographic Information Systems Advisory Council (GISAC) is the lead GIS coordination council for the state. GISAC was authorized by administrative rule rather than by executive order or legislation because it had a solid institutional history and because its proponents wanted to focus their energies more on finding sustainable funding, rather than on building the additional political capital required; furthermore, creation and adoption of this administrative rule took less than a year, and unless superseded, provides the same authority as an executive order or statute.

The mission of GISAC is to “recommend GIS policy and standards, encourage GIS use and education, and promote data collection, integration and dissemination among all GIS users. Collectively, these activities promote increased productivity, better decisions, and improved services to customers.”<sup>11</sup> The responsibilities of the Council are to:

- “Serve as a coordinating and collaboration body for the collection, creation, and access of statewide GIS data;
- Recommend to the State CIO any GIS policies or standards it believes should be considered by the CIO for implementation, and such as may need to be reviewed for promulgation as administrative rules; [and]
- Submit a progress report to the CIO by September 30 of each year.”

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<sup>11</sup> Utah I-Team: [http://agrc.its.state.ut.us/i\\_team/iteam\\_final.htm](http://agrc.its.state.ut.us/i_team/iteam_final.htm)

By rule, GISAC is chaired by the Manager of the Automated Geographic Reference Center (AGRC), and is comprised of one (1) GIS representative from each participating state entity, as designated by that agency, as well as invited GIS representatives from local government, colleges/universities, and federal agencies. These are selected by the chair in collaboration with the agency. Of note, Council members do not need to be appointed by the Governor nor approved by the CIO. In an effort to achieve border-to-border representation on the Council, current membership includes representatives from:

- Twelve (12) federal agencies, seventeen (17) state agencies;
- Twenty-nine (29) county government agencies;
- Five (5) universities; and notably,
- Eight (8) Indian nations, which own 4.2 percent of the land area in state.<sup>12</sup>

Many of these members represent agencies that signed the 2004 MOU, as described above. In total, there are seventy-two (72) members on the Council, including the Manager of AGRC. There are no term limits for members.

The private sector and non-profit organizations are invited guests, but are not voting members. Nor are representatives from municipal governments, who can attend GISAC meetings as guests, but cannot vote. As AGRC assigns a staff person to keep in weekly communication with every county in the State, it is assumed that the 29 counties in turn are communicating with the 260 cities and are representing their interests to AGRC and on the Council.

The Council meets at the discretion of the Chair. Typically, the Council meets every two months as needed, but in order to conduct an ongoing statewide imagery and elevation initiative, the Council met every two weeks from February to August in 2006. Council members are not compensated for their time nor reimbursed for travel expenses, but administrative and technical support for the Council is provided by AGRC.

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<sup>12</sup> Conserving Land for People Website, Funding Profile: Utah, State Background Information: [http://www.tpl.org/tier3\\_cdl.cfm?content\\_item\\_id=11470&folder\\_id=706](http://www.tpl.org/tier3_cdl.cfm?content_item_id=11470&folder_id=706)

## Utah Geographic Information Council

Authorized through a Concurrent Resolution of the Legislature and the Governor in 1991, the Utah Geographic Information Council (UGIC)<sup>13</sup> is a professional association comprised of members from federal, state, county and municipal agencies as well as members from public utilities, the private sector, non-profit organizations, and academic institutions. The UGIC follows a set of by-laws and is guided by a Board of Directors.

The purpose of this professional organization is “[t]o act and operate as an information and facilitating organization to promote effective development, access, application, and cooperative use of high quality and meaningful geographic information in the State of Utah among all interested agencies, institutions, companies, and individuals:

- To promote cooperation among all levels of government and the private sector in addressing geographic-data and information needs and services in Utah;
- To promote coordination of programs, policies, technologies, and resources to optimize opportunities and minimize duplication of effort; [and]
- To identify and provide recommendations to federal, state, and local agencies, and the private sector on mapping and geographic-data needs, priorities, and standards.”<sup>14</sup>

To accomplish these objectives, UGIC hosts an annual conference, offers training workshops, and runs an Educator Mentoring program designed to help K-12 educators connect with GIS professionals. UGIC is administratively supported by AGRC.

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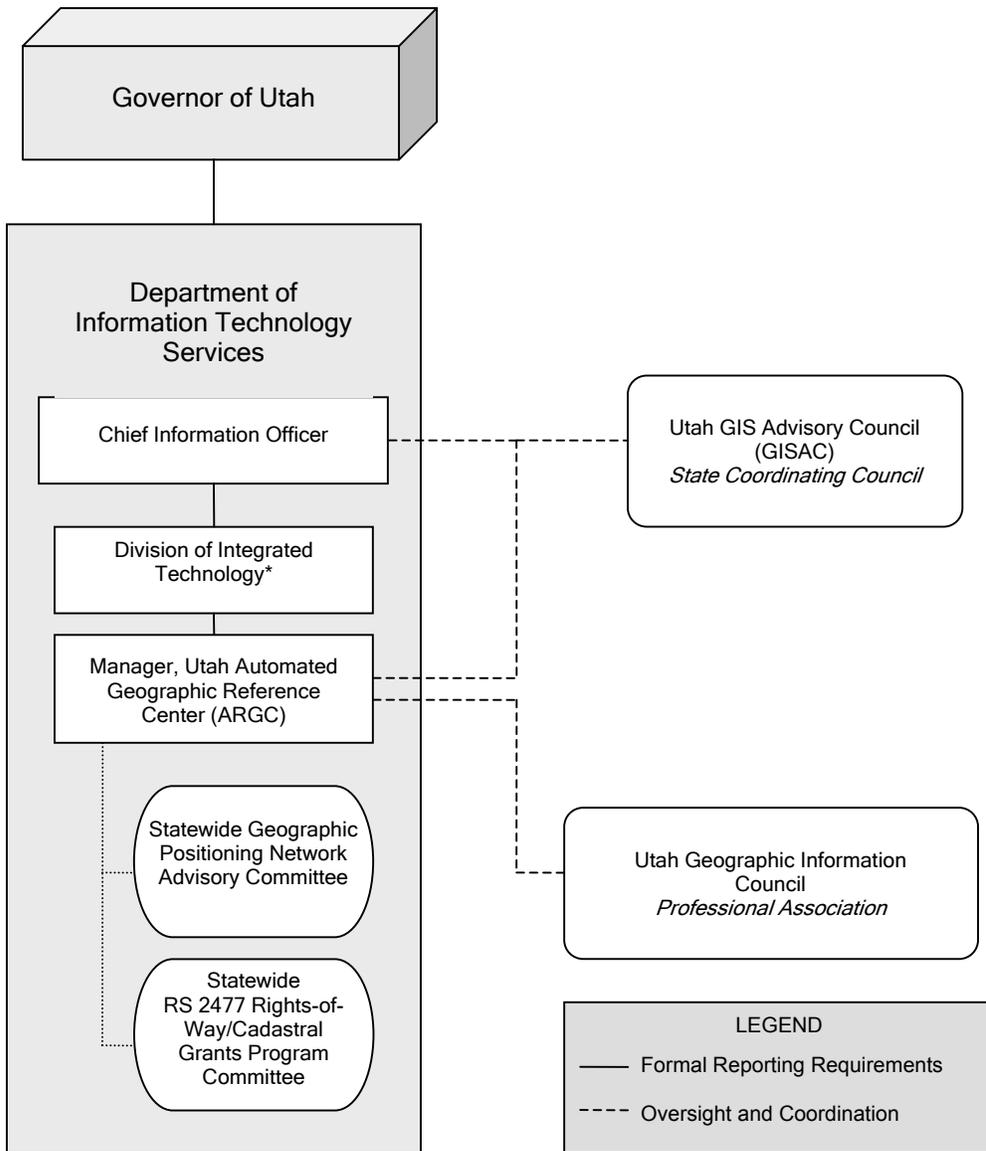
<sup>13</sup> UGIC website: <http://www.ugic.info/>

<sup>14</sup> UGIC website: <http://www.ugic.info/>

## **Regional and Other Coordinating Groups**

Utah has several regional GIS coordinating groups, including: Colorado Plateau Data Committee; Southwest User's Group (SWUG); Technical Interchange Group (TIG); and the Utah Aerial Photography and Orthoimagery Consortium (UAPOC).

**Figure 1. Utah GIS Coordination Organizational Structure, 2006**



\*Operationally, ARGC is the only office within the Division of Integrated Technology.

## FUNDING AND SUPPORT

The Utah Automated Geographic Reference Center (AGRC) is funded in part through legislative appropriation, which covers coordination activities, administrative support for the GIS Advisory Council (GISAC), and maintenance of the State Geographic Information Database (SGID), and in part through an internal service fund. AGRC's total operating budget for the last two years has been \$1.5 million per year. In 2006, however, the total operating budget rose to over \$2 million, including:

- \$808,000 from the General Fund for base funding;
- \$904,000 from the General Fund, one-time, for the Rural Government GIS Assistance Program (\$400,000), and for the acquisition of multi-county digital ortho-imagery (\$500,000); and,
- \$250,000 from the E911 Restricted Fund for mapping activities related to Wireless E911 emergency services.

By February 2007, AGRC's base funding rose to \$881,700 and E911 funding for mapping activities rose from \$250,000 to \$300,000 annually.

AGRC also generates funds by providing geospatial services to other executive branch agencies and by charging a rate to those agencies through the DTS internal service fund; this year AGRC will generate \$500,000 for the internal service fund. Further, AGRC receives grants for cooperative projects with state and local agencies, and pools funds and resources with federal agencies on cooperative projects.

In total since 1999, AGRC has received \$2,120,000 from the State Legislature and \$3,419,000 from the US Congress for the Rural Government GIS Assistance Program, which has focused on road and cadastral mapping. In 2006, AGRC received \$400,000 from the State Legislature (noted above), as well as \$300,000 in county pass-through funds from the Department of the Interior, for the Cadastral Data Collection Program, which focuses on the creation of county digital parcel databases, as well as GPS collection of corner monumentation. In addition, AGRC

received \$400,000 in 2007 and was appropriated \$400,000 in 2008 from the State Legislature for this same effort.

AGRC maintains a staff of twelve (12) full-time employees, including the Manager and State Surveyor, and eight (8) limited term employees. Estimated staffing levels for geospatial coordination activities are provided in Table 1: Utah’s Estimated Staffing for Geospatial Coordination. A little over three and a half (3.65) FTEs are allocated per year to conduct all coordination efforts, including administratively supporting GISAC, coordinating with local, state, and federal agencies in Utah, and communicating with national GIS coordination organizations such as the Federal Geographic Data Committee (FGDC) and National States Geographic Information Council (NSGIC).

GISAC members do not receive compensation for their services nor are reimbursed for travel expenses, but ARGC does provide administrative and technical support, which requires less than 140 hours of staff time per year.

**Table 1.** Utah’s Estimated Staffing for Geospatial Coordination, FY2007

<b>GIS COORDINATION</b>	<b>Actual Staff Hours (7/01/06 to 1/26/07)</b>	<b>Estimated Staff Time (FTE Per Year)</b>
Governance Council	81	0.07
State Agency Coordination	730	0.60
Local Government Coordination	1507	1.24
Federal and National Coordination	2111	1.74
<b>Total Coordination</b>	<b>4429 hours</b>	<b>3.65 FTE</b>

## CHALLENGES AND OPPORTUNITIES

Utah has been a national leader in statewide GIS coordination since the 1970s; however, this coordination takes place within a complex institutional setting. Utah is a “public lands” state;

roughly 75% of the land is owned and administered by the state and federal government and 4.2% is owned and administered Indian nations (see Table 2. Utah Land Ownership).

**Table 2. Utah Land Ownership, January 2007**

SECTOR	LAND AREA	PERCENT OWNERSHIP
Private Parties	16,185	19.07%
State Government	6,392	7.53%
Indian Sovereign Nations	3,815	4.5%
Federal Government	54,043	63.7%
Water	4,432	5.22%
<b>Total Land Area</b>	<b>84,867 sq mi</b>	<b>100%</b>

Thus, AGRC and GISAC must coordinate with a significant number of federal entities, Indian nations, and private land owners. Utah is home to ten Indian nations, including Navajo, Shoshone, Ute, Paiute, and Goshute, which produce and use geospatial data of their territories and resources. Major federal land owners and administrators, and hence custodians for geospatial data in the state, include the Bureau of Land Management (BLM) (44.1%), the US Forest Service (USFS) (15%), the US Department of Defense (4.6%), the National Park Service (3.4%), and the Army Corps of Engineers.<sup>15</sup>

The primary state administrator of land information is the Utah Division of School and Institutional Trust Lands Administration (SITLA), which manages twelve real estate trusts encompassing nearly 3.5 million acres of surface ownership (roughly 7,500 parcels) and an additional 1 million acres of mineral-only lands.<sup>16</sup> Other major state administrators of land information include the Utah Department of Natural Resources, State Parks and Recreation, and the Utah Division of Water Resources.

<sup>15</sup> Conserving Land for People Website, Funding Profile: Utah, State Background Information: [http://www.tpl.org/tier3\\_cdl.cfm?content\\_item\\_id=11470&folder\\_id=706](http://www.tpl.org/tier3_cdl.cfm?content_item_id=11470&folder_id=706), accessed January 31, 2007.

<sup>16</sup> Utah Trust Lands Website: <http://www.utahtrustlands.com/about/>

Because Utah is a “public lands state,” it does not have a substantial tax base from which to support the state’s mapping activities, nor does it have many local governments from which to collect geospatial data. Consequently, Utah does not have the funds, resources, or staff needed to meet the border-to-border mapping needs of the state. To compound matters, federal agencies are woefully under-funded to create geospatial data at a resolution that is of use to state or local governments; the state requires higher accuracies than is typically needed by national programs.

As noted in a 2002 report *Institutional Models: Land Records Modernization State Profiles*,<sup>17</sup> in Utah “funding is limited, and existing funds at times have been diverted locally to meet other immediate needs. Efforts to pass legislation that would institute an additional recordation fee to support land records modernization efforts have been stymied...” On the other hand, efforts to pass legislation that would impose a user fee for wireless service to fund relevant GIS and addressing activities have been successful.

Despite these limitations, Utah has developed a strong statewide GIS coordination program over the last twenty-five years, encompassing a broad range of stakeholders. In fact, the Utah Automated Geographic Reference Center (AGRC) and the GIS Advisory Committee (GISAC) have used their state’s institutional complexity to their advantage by establishing data sharing and cost-sharing partnerships at all levels, facilitating otherwise unaffordable geospatial initiatives. For example, the ground-breaking Memorandums of Understanding for data sharing in 1997 and 2004 were some of the first of their kind in the country. In 2006, AGRC and the GIS Advisory Committee coordinated a statewide data purchase for imagery and elevation worth 2.5 million dollars. This acquisition necessitated over sixty-five agreements with state and federal agencies, 25 of the 29 counties, multiple cities, non-governmental entities, and others. AGRC also has demonstrated its commitment to statewide GIS coordination by developing working relationships with every county and every federal agency in the state, with elected officials and agency management.

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<sup>17</sup> Shanley et al., 2002. *Institutional Models: Land Records Modernization State Profiles: A report prepared by GeoAnalytics, Inc. for the Nebraska GIS Steering Committee for the Nebraska Land Records Modernization Study.* [http://www.calmit.unl.edu/gis/LRM\\_Inst\\_Models.pdf](http://www.calmit.unl.edu/gis/LRM_Inst_Models.pdf)

In addition, Utah's Automated Geographic Reference Center (AGRC) and the GIS Advisory Committee (GISAC) have garnered strong political support for their GIS coordination activities within the Governor's and Lieutenant Governor's offices, with many of the state's legislators, and with locally-elected officials. When the Governor or legislators have requested assistance, AGRC has provided a GIS solution. At the local level, AGRC proactively supports the GIS activities of all twenty-nine (29) counties. It keeps in close communication with both their staff and elected officials, who in turn have proactively supported AGRC initiatives with their legislators.

Because of their efforts and longevity, AGRC and GISAC have become institutions with statewide recognition; and, as a result, they have been referenced in statute many times in relation to other agencies' activities and programs. In the near future, AGRC and GISAC will play a major role in helping the state's CIO develop a strategy for IT consolidation within state government. They also will be developing a State Geospatial Data Policy and National Spatial Data Infrastructure (NSDI) Strategic Plan.

# Appendices

## A. UTAH CODE TITLE 63F CHAPTER 1 DEPARTMENT OF TECHNOLOGY SERVICES, INCLUDING AUTOMATED GEOGRAPHIC INFORMATION CENTER AND STATE GEOGRAPHIC INFORMATION DATABASE

Utah Code -- Title 63F -- Chapter 01 -- Department of Technology Services:

<http://www.le.state.ut.us/~code/TITLE63F/63F01.htm>

### **63F-1-502. Definitions.**

As used in this part:

- (1) "Center" means the Automated Geographic Reference Center created in Section 63F-1-506.
- (2) "Database" means the State Geographic Information Database created in Section 63F-1-507.
- (3) "Director" means the director appointed in accordance with Section 63F-1-503.
- (4) "Division" means the Division of Integrated Technology created in this part.
- (5) "Geographic Information System" or "GIS" means a computer driven data integration and map production system that interrelates disparate layers of data to specific geographic locations.

(6) "State Geographic Information Database" means the database created in Section 63F-1-507.

(7) "Statewide Global Positioning Reference Network" or "network" means the network created in Section 63F-1-509.

**63F-1-504. Duties of the division.**

The division shall:

(1) establish standards for the information technology needs of a collection of executive branch agencies or programs that share common characteristics relative to the types of stakeholders they serve, including:

- (a) project management;
- (b) application development; and
- (c) procurement;

(2) provide oversight of information technology standards that impact multiple executive branch agency information technology services, assets, or functions to:

- (a) control costs;
- (b) ensure business value to a project;
- (c) maximize resources;
- (d) ensure the uniform application of best practices; and
- (e) avoid duplication of resources;

(3) in accordance with Section 63F-1-204, provide the chief information officer a written analysis of any agency information technology plan provided to the division, which shall include:

- (a) a review of whether the agency's technology projects impact multiple agencies and if so, whether the information technology projects are appropriately designed and developed;

(b) an assessment of whether the agency plan complies with the state information architecture; and

(c) an assessment of whether the information technology projects included in the agency plan comply with policies, procedures, and rules adopted by the department to ensure that:

- (i) information technology projects are phased in;
- (ii) funding is released in phases;
- (iii) an agency's authority to proceed to the next phase of an information technology project is contingent upon the successful completion of the prior phase; and
- (iv) one or more specific deliverables is identified for each phase of a technology project;

(4) establish a system of accountability to user agencies through the use of service agreements;

(5) each year, provide the chief information officer and the commission with performance measures used by the division to measure the quality of services delivered by the division and results of those measures; and

(6) establish administrative rules in accordance with Section 63F-1-206 and as required by Section 63F-1-506.

Enacted by Chapter 169, 2005 General Session

**63F-1-506. Automated Geographic Reference Center.**

<http://www.livepublish.le.state.ut.us/lpBin22/lpext.dll?f=templates&fn=main-j.htm&2.0>

(1) There is created the Automated Geographic Reference Center as part of the division.

(2) The center shall:

(a) provide geographic information system services to state agencies under rules adopted in accordance with Section 63F-1-504 and policies established by the division;

(b) provide geographic information system services to federal government, local political subdivisions, and private persons under rules and policies established by the division;

(c) manage the State Geographic Information Database; and

(d) establish standard format, lineage, and other requirements for the database.

(3) There is created a position of surveyor within the center which surveyor shall be licensed as a professional land surveyor under Title 58, Chapter 22, Professional Engineers and Land Surveyors Licensing Act, and shall have the following duties:

(a) provide technical support to the office of lieutenant governor in evaluating boundary creation or boundary changes prior to certification by the lieutenant governor under Section 67-1a-6.5;

(b) assist the State Tax Commission in processing and quality assurance of boundary descriptions or maps into digital format for inclusion in the State Geographic Information Database;

(c) coordinate with county recorders and surveyors to create a statewide parcel layer in the State Geographic Information Database containing parcel boundary, parcel identifier, parcel address, owner type, and county recorder contact information; and

(d) facilitate and integrate the collection efforts of local government and federal agencies for data collection to densify and enhance the statewide Public Land Survey System reference network in the State Geographic Information Database.

(4) The division may:

- (a) make rules and establish policies to govern the center and its operations; and
- (b) set fees for the services provided by the center.

(5) The state may not sell information obtained from counties under Subsection (3)(c).

Amended by Chapter 233, 2005 General Session

Renumbered and Amended by Chapter 169, 2005 General Session

**63F-1-507. State Geographic Information Database.**

(1) There is created a State Geographic Information Database to be managed by the center.

(2) The database shall:

- (a) serve as the central reference for all information contained in any GIS database by any state agency;
- (b) serve as a clearing house and repository for all data layers required by multiple users;
- (c) serve as a standard format for geographic information acquired, purchased, or produced by any state agency; and
- (d) include an accurate representation of all civil subdivision boundaries of the state.

(3) Each state agency that acquires, purchases, or produces digital geographic information data shall:

- (a) inform the center of the existence of the data layers and their geographic extent;
- (b) allow the center access to all data classified public; and

(c) comply with any database requirements established by the center.

(4) At least annually, the State Tax Commission shall deliver to the center information the State Tax Commission receives under Sections 10-1-116, 11-13-204, 11-13-205, 17-2-4, 17-2-9, 17-3-3, 17A-1-102, 17B-2-215, and 17C-1-201 relating to the creation or modification of the boundaries of the political subdivisions that are the subject of those sections.

Amended by Chapter 359, 2006 General Session

**63F-1-508. Committee to award grants to counties for inventory and mapping of R.S. 2477 rights-of-way -- Use of grants -- Request for proposals.**

(1) There is created within the center a committee to award grants to counties to inventory and map R.S. 2477 rights-of-way, associated structures, and other features as provided by Subsection (5).

(2)(a) The committee shall consist of:

- (i) the center manager;
- (ii) a representative of the Governor's Office of Planning and Budget;
- (iii) a representative of Utah State University Extension;
- (iv) a representative of the Utah Association of Counties; and
- (v) three county commissioners.

(b) The committee members specified in Subsections (2)(a)(ii) through (2)(a)(iv) shall be selected by the organizations they represent.

(c) The committee members specified in Subsection (2)(a)(v) shall be:

- (i) selected by the Utah Association of Counties;
- (ii) from rural counties; and
- (iii) from different regions of the state.

(3) (a) The committee shall select a chair from its membership.

(b) The committee shall meet upon the call of the chair or a majority of the committee members.

(c) Four members shall constitute a quorum.

(4) (a) Committee members who are state government employees shall receive no additional compensation for their work on the committee.

(b) Committee members who are not state government employees shall receive no compensation or expenses from the state for their work on the committee.

(5) (a) The committee shall award grants to counties to:

(i) inventory and map R.S. 2477 rights-of-way using Global Positioning System (GPS) technology; and

(ii) photograph:

(A) roads and other evidence of construction of R.S. 2477 rights-of-way;

(B) structures or natural features that may be indicative of the purpose for which an R.S. 2477 right-of-way was created, such as mines, agricultural facilities, recreational facilities, or scenic overlooks; and

(C) evidence of valid and existing rights on federal lands, such as mines and agricultural facilities.

(b) (i) The committee may allow counties, while they are conducting the activities described in Subsection (5)(a), to use grant monies to inventory, map, or photograph other natural or cultural resources.

(ii) Activities funded under Subsection (5)(b)(i) must be integrated with existing programs underway by state agencies, counties, or institutions of higher education.

(c) Maps and other data acquired through the grants shall become a part of the State Geographic Information Database.

(d) Counties shall provide an opportunity to interested parties to submit information relative to the mapping and photographing of R.S. 2477 rights-of-way and other structures as provided in Subsections (5)(a) and (5)(b).

(6) (a) The committee shall develop a request for proposals process and issue a request for proposals.

(b) The request for proposals shall require each grant applicant to submit an implementation plan and identify any monetary or in-kind contributions from the county.

(c) In awarding grants, the committee shall give priority to proposals to inventory, map, and photograph R.S. 2477 rights-of-way and other structures as specified in Subsection (5)(a) which are located on federal lands that:

(i) a federal land management agency proposes for special management, such as lands to be managed as an area of critical environmental concern or primitive area; or

(ii) are proposed to receive a special designation by Congress, such as lands to be designated as wilderness or a national conservation area.

(7) Each county that receives a grant under the provision of this section shall provide a copy of all data regarding inventory and mapping to the AGRC for inclusion in the state database.

Renumbered and Amended by Chapter 169, 2005 General Session

**63F-1-509. Statewide Global Positioning Reference Network created -- Advisory committee.**

(1) (a) There is created the Statewide Global Positioning Reference Network to improve the quality of geographic information system data and the productivity, efficiency, and cost-effectiveness of government services.

(b) The network shall provide a system of permanently mounted, fully networked, global positioning system base stations that will provide real time radio navigation and establish a standard statewide coordinate reference system.

(c) The center shall administer the network.

(2) (a) There is created an advisory committee to advise the center on implementing and maintaining the network.

(b) The committee membership shall consist of:

(i) the center manager or the manager's designee;

(ii) a representative from the Department of Transportation created by Section 72-1-201 designated by the executive director appointed under Section 72-1-202;

(iii) a representative from the division designated by the director;

(iv) the chief information officer or the chief information officer's designee; and

(v) a representative from the Utah Association of County Surveyors.

(c) The representative from the center shall be the chair of the committee.

(d) The committee shall meet upon the call of the chair or a majority of the committee members.

(e) The committee chair shall give reasonable notice to each member prior to any meeting.

(f) Three members shall constitute a quorum for the transaction of business.

(g) The center shall provide staff support to the committee.

(h) Committee members who are state government employees shall receive no additional compensation for their work on the committee.

(i) Committee members who are not state government employees shall receive no compensation or expenses for their work on the committee.

(j) The committee shall recommend rules to the division for adoption under Subsection (3).

(3) (a) In accordance with Title 63, Chapter 46a, Utah Administrative Rulemaking Act, the division shall make, in consultation with the committee, rules providing for operating policies and procedures for the network.

(b) The rules shall consider:

- (i) network development that serves a public purpose;
- (ii) increased productivity and efficiency for state agencies; and
- (iii) costs and longevity of the network.

Enacted by Chapter 76, 2005 General Session

## **B. UTAH ADMINISTRATIVE RULE R895-9 UTAH GEOGRAPHIC INFORMATION SYSTEMS ADVISORY COUNCIL, JULY 1, 2006**

Utah Administrative Rules:

<http://www.rules.utah.gov/publicat/code/r895/r895-009.htm>

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KEY

Date of Enactment or Last Substantive Amendment

Authorizing, Implemented, or Interpreted Law

**R895-9-1. Purpose.**

The purpose of this rule is to establish an advisory council to coordinate statewide GIS data efforts for collection, creation, and access, and to mutual collaboration by state entities.

**R895-9-2. Authority.**

The rule is issued by the Chief Information Officer under the authority of Section 63F-1-206 of the Technology Governance Act and Section 63-46a-3 of the Utah Rulemaking Act, Utah Code.

**R895-9-3. Scope of Application.**

(a) All agencies of the executive branch of state government including its administrative sub-units, except the State Board of Education, the Board of Regents and institutions of higher education, are to be included within the scope of this rule.

(b) This rule also provides for the organizational chairmanship and membership.

**R895-9-4. Definitions.**

(a) GIS data means any electronic data with location attributes that can be used by computer-based geographic information systems.

(b) GISAC means the Utah Geographic Information Systems Advisory Council established by this rule.

**R895-9-5. Advisory Council Responsibilities.**

(a) There is a geographic information system advisory council (GISAC) established and organized under the authority of the Chief Information Officer (CIO). The Council shall be chaired by the Manager of the Automated Geographic Reference Center (AGRC).

(b) The responsibilities of the council include:

- (i) Serve as a coordinating and collaboration body for the collection, creation, and access of statewide GIS data, and;
- (ii) Recommend to the State CIO any GIS policies or standards it believes should be considered by the CIO for implementation, and such as may need to be reviewed for promulgation as administrative rules.
- (iii) Submit a progress report to the CIO by September 30 of each year.

**R895-9-6. Council Membership and Organization.**

(a) The Manager of the AGRC or designee.

(b) The Council shall meet bi-monthly or as determined by the Chair.

(c) The Council shall be composed of one GIS representative from each participating state entity, and such invited GIS representatives from local government, colleges/universities, and federal agencies as are selected by the chair.

**R895-9-7. Rule Compliance Management.**

A state executive branch agency's executive director, or designee, upon becoming aware of a violation, shall institute measures designed to enforce this rule. The CIO may, where

appropriate, monitor compliance and report to an agency's executive director any findings or violations of this rule.

**KEY**

IT standards council, IT bid committee, technology best practices, repository

Date of Enactment or Last Substantive Amendment

March 9, 2005

Authorizing, Implemented, or Interpreted Law

63F-1-206; 63-46a-3