



Strategic Plan

for the Iowa Geographic Information Council

Approved

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Executive Summary

DRAFT

1.0 Summary of Intent and Scope

1.1 Intent of Document

It is the intent of this plan to outline the strategic direction of the Iowa Geographic Information Council for the period of July 1, 2006 through June 30, 2008.. In doing so, IGIC will evaluate the current geospatial condition in Iowa and then determine and fix a plan of action for IGIC that will chart its course over the next two years.

This document replaces an earlier Strategic Plan Draft, (July 1, 2000).

As is the case with any strategic planning document, approaches and projects are ever changing, thus the strategic priorities and objectives will change and be updated over the next several years.

1.2 Scope and Objectives

1.2.1 Scope

IGIC is a shared mechanism for the diverse community to identify, explore, and solve problems with geospatial information. Members of IGIC work to bring the geographic community together to discuss, learn about, and promote the use, development, sharing, and management of geographic data in a manner that communicates the value of geographic information to citizens and decision-makers.

Today, the GIS and Remote Sensing industries are multibillion-dollar industries employing hundreds of thousands of people worldwide. Professionals in every field are increasingly aware of the advantages of thinking and working geographically.

State, regional, and local governmental entities in Iowa utilize Remote Sensing and Geographic Information Systems (GIS) for a wide range of activities, including economic development, natural and physical resource monitoring, tax parcel mapping, infrastructure planning, emergency/disaster preparedness and recovery, and regulatory issues. In the private sector, utilities, real estate companies, telecommunications firms, retailers, and the agriculture industry all use GIS to make their products and delivery systems more efficient and cost effective. Utilization of this technology can save money, time, and personnel hours, allowing people to make better, faster, and cheaper decisions.

To properly realize the potential benefits from Remote Sensing and GIS, the State of Iowa must obtain more up-to-date and accurate data than it currently has.

Largely due to a lack of policy coordination among public sector users and purchasers of Remote Sensing and GIS data, the responsibilities of Iowa's various public sector entities for providing geospatial data have not been well-defined.

Significant costs can be avoided through coordination across multiple jurisdictions. In addition, geographic data serves as an important source for private-sector initiatives and its availability is, as a result, an

important differentiator in competition for industry and creating new jobs.

1.2.2 Objectives

IGIC will take positive steps over the next two years, by accomplishing the goals and objectives in this strategic plan, to provide improved capabilities and services to its members, the geospatial community of Iowa and the citizens of the State of Iowa.

Two years from now, the following statements will describe IGIC:

- Through the building of strong relationships, our organization's ability to accomplish our mission, attain our objectives, and reach our vision has been successful.
- The members of IGIC are viewed within Iowa as strong leaders for promoting adherence to standards, and for being advocates for the geospatial information community in Iowa.
- IGIC is the definitive source of timely information on geospatial technology trends, policies, and data exchange in the state of Iowa.
- The organization is efficient in its operations and responsive to its constituency.

The Iowa Geographic Information Council (IGIC) is an organization which looks to foster cooperation and coordination of both public and private entities in a means to create efficient and effective decision-making through the prudent adoption of geospatial information technologies. A rich and diverse group, IGIC membership includes state, nationally, and internationally recognized experts in geospatial information technologies, data creation and management as well as information technology policy.

IGIC looks to provide a unified voice on geographic information and technology issues that affect the State of Iowa and looks to, when appropriate, make recommendations to appropriate decision-makers in Iowa.

The Iowa Geographic Information Council supports the National Spatial Data Infrastructure (NSDI) as the technology, policies, criteria, standards and people necessary to promote geospatial data sharing throughout all levels of government, the private and non-profit sectors, and academia.

In Iowa, geospatial technology has an effect on areas as diverse as:

- Homeland security
- Emergency management and emergency response
- Economic development
- Health and human services

1.3 Introduction

- Environmental protection and management
- Facilities management
- Parcel appraisal and assessment
- Education
- Transportation planning
- Natural resource management

The future activities of the Iowa Geographic Information Council are tied to the goals and objectives outlined and discussed in this document

1.4 Methodology and Deliverables

The following activities were followed in preparing this strategic plan:

- The IGIC mission statement proposed in the July 1, 2000 Strategic Plan Draft was evaluated to ensure relevancy and appropriateness. The IGIC Board modified the 2000 Mission Statement slightly and adopted the modified version that is used in this document (see January 19, 2005 quarterly meeting minutes).
- Successful implementation of a strategic plan depends upon an accurate accounting of available resources. A review of IGIC resources and general GIS and communication-related resources available to the IGIC community for implementing

the IGIC Strategic Plan was conducted in January and February 2005. These resources can be found in Chapter 4.0

- The goals (referred to as objectives in 2000 draft) that were proposed in the July 1, 2000 Strategic Plan Draft were evaluated to evaluate relevancy and appropriateness. Redefined goals were drafted and reviewed by the IGIC Board in January – March, 2005). The IGIC Board adopted the goals (see April 13, 2005 quarterly meeting minutes), which are included in this plan.
- Specific objectives to achieve the goals were developed based on input and assistance from IGIC Board members, committees, and other interested parties.
- The objectives and action items were reviewed, modified as needed, and accepted for implementation by the IGIC Board (approval date).
- It is the responsibility of each successive Board, under the direction of the Bylaws and Strategic Planning Committee to review action items, solicit input from Iowa's geospatial community and, in conjunction with the Board of Directors, create an annual work plan for implementation.
- The approved Strategic Plan will be posted to the IGIC website, with notice of posting sent to the IGIC membership.

2.0 Strategic Vision, Mission, Goals and Objectives

2.1 Strategic Vision

IGIC's vision is that all levels of government become highly effective and efficient through coordinated development and use of geospatial data and technologies and the State of Iowa's interest are served, and the core missions of all levels of government and partners are met, through the effective and efficient development, provision, and interoperability of geospatial data and services.

2.2 Mission Statement

The mission of IGIC is to foster an efficient GIS environment through cooperation and coordination with public and private entities that access, collect, provide and share data, metadata, applications and educational opportunities. (Adopted by IGIC Board of Directors at January 19, 2005 quarterly meeting.)

2.3 Goals and Strategic Objectives

The following outlines the adopted goals of IGIC. The goals support the IGIC mission. A set of defined objectives for attaining these goals more specifically address how the goals will be accomplished.

An annual work plan will be developed that contains a series of action items that work towards obtaining the objectives for each goal. The work plan will also spell out a series of tasks for each action item that are both attainable and a measurable outcome to discern performance towards each goal. The listing of implementation items is found in Appendix A.

- IGIC's Goals:

- Promote the use of geographic information technology among public and private organizations and individuals for planning, decision-making and problem-solving processes.
- Promote education and training in GIS and related technologies within all levels of education.
- Adopt, communicate and promote standards for use by the GIS community to facilitate data collection and promote data sharing.
- Promote partnerships for the purpose of data development and data sharing.
- Provide a mechanism through which the interests and concerns of Iowa's GIS community can be directed to appropriate policy makers.
- Provide operating policies and procedures for management of the Council.

2.3.1 GOAL

Promote the use of geographic information technology among public and private organizations and individuals for planning, decision-making and problem-solving processes.

Current Status and Issues

Many agencies and organizations in Iowa are already utilizing geospatial technologies in their business operations. Some of these entities utilize geospatial technologies as a tool for strategic and targeting decisions, but many do not. Many others across the state are just now beginning to recognize the usefulness of utilizing location as a framework for their activities.

There is currently no one source of neutral information on the benefits, capabilities, and uses of geospatial activities in Iowa. While volunteer networks have developed over time, the lack of a funded and dedicated entity is holding back geospatial development in Iowa.

Desired Outcome

As large of an audience as possible needs to understand how geospatial data, information, applications, and technologies can be meaningfully used to enhance their business operations.

Objectives

2.3.1.1 Developing and maintaining mechanisms to exchange information on GIS activities.

- *Assignment: Conference, Website and Outreach Committees*
- *Target Completion Date: June 30, 2007*
- *Strategy*

Maintain, update, and utilize the Iowa Geographic Information Council's website; <http://www.iowagic.org>. Ensure that the site is informative and useful for conducting IGIC business as well as providing a location where Iowa examples of successful GIS uses can be posted as well as maintaining a clearinghouse of funding sources that can be utilized by local governments to assist in GIS implementation activities.

Also, continue to capitalize on the success of the biennial IGIC Conference as a mechanism to educate and communicate to Iowa's GIS community. The Conference has thus far been a successful mechanism for IGIC to educate and communicate with Iowa's GIS population. Every effort must be made to continue with this success as well as striving to reach out and communicate with new audiences who may not be aware of the conference.

2.3.1.2 Implement a full-time statewide GIS Coordinator position for Iowa.

- *Assignment: IGIC membership*
- *Target Completion Date: 6/30/2008*
- *Strategy*

Many GIS activities require statewide coordination to be effective and efficient: geospatial data infrastructure, geospatial data standards, federal GIS initiatives, federal grants, homeland security, applications development, partnerships among state and local agencies and data delivery to the public. A single statewide coordination entity can work towards managing and implementing the above activities plus many more.

Iowa has been without a statewide GIS coordinator since June 2005 and has relied upon the efforts of an entirely volunteer group to attend to the needs mentioned above. Iowa's GIS community must present a solid justification as to what future benefit to Iowa a statewide GIS Coordinator can bring and then work towards implementing that position in a manner that meets the widest range of needs possible.

2.3.1.3 Building and strengthening relationships.

- *Assignment: IGIC Outreach Committee*
- *Target Completion Date: December 31, 2007*
- *Strategy*

Develop and maintain relationships with partner organizations so as to utilize their resources as a means of strengthening IGIC.

IGIC needs to explore mechanisms to reach out to entities that are not currently involved with the discussion of statewide geospatial coordination issues. Efforts must be made to identify and target groups who engage in geospatial activities but may not be aware of the existence of IGIC and what the furtherance of IGIC's mission may be able to do for their business processes.

Many entities that are involved with geospatial activities and are not currently involved with IGIC bring the potential for bringing to the table a wide array of assets that could greatly benefit the organization.

The current IGIC membership roster illustrates a wide and varied background of members. Efforts must be made to ensure that the needs and interests of current members are heard as well as assets utilized.

2.3.2 GOAL

Promote education and training in GIS and related technologies within all levels of education.

Current Status and Issues

GIS was first used in Iowa's academic institutions in the mid-1970s. Adoption and integration of geospatial technologies in Iowa's academic institutions has continued to evolve since that time.

In 2003?, Iowa's institutions of higher education signed a master purchase agreement for ESRI software that has seen xxx number of institutions sign.

Getting students in all levels of education to think spatially is becoming increasingly crucial in today's society. GIS is a tool that assists students in visualizing spatial relationships and provides a learning tool like no other in the classroom.

Need to insert something about the Department of Labor study on High Growth Jobs and GIS and the demand for future labor.

Desired Outcome

IGIC is an entity that provides leadership and service to schools and communities throughout Iowa in order to enhance GIS/GPS education in a manner consistent with the development of a skilled geospatial labor force in Iowa.

Objectives

2.3.2.1 Develop relationships and mechanisms to serve Iowa's K-12 sector.

- *Assignment: Education Committee*
- *Target Completion Date: 12/31/07*
- *Strategy*

The Education Committee of IGIC must first work towards evaluating the sufficiency of GIS education throughout the State and then propose any additional efforts at secondary, post-secondary, and professional levels of GIS education.

Fulfilling the needs of providing speakers, resources and classroom assistance in the employment of GIS in the classroom, IGIC must work towards becoming a central K-12 resource for educators in Iowa. The organization can do this by having a presence with educators at local education conferences, identifying existing GIS education opportunities and making those widely available and identifying opportunities and learning situations for students.

2.3.2.2 Increase participation in the IGIC Resource Guide.

- *Assignment: Outreach Committee*
- *Target Completion Date: 3/31/07*
- Strategy

The IGIC Resource Guide has the potential of being a non-commercial public service that brings a non-biased listing of resources and contacts for geospatial information in Iowa. The framework currently exists on the IGIC website but participation and submission by Iowa's geospatial community has lagged.

In order to fully realize the potential of the IGIC Resource Guide, IGIC must identify GIS and IT expertise among IGIC members who are willing to act as resource guide facilitators. Encouraging identified resource experts to participate in the IGIC Resource Guide or other mechanism for transferring expertise can go a long ways in attributing value with the Resource Guide.

2.3.3 GOAL

Adopt, communicate and promote standards for use by the GIS community to facilitate data collection and promote data sharing.

Current Status and Issues

The 1998 Executive Order that established IGIC spoke prominently on this topic and the "need to recommend policies, guidelines, and standards to the Office of Information Technology Services and other units of government for developing and sharing geographic information." The final bullet in the Executive Order states that "policies, guidelines, standards, and conventions developed by the IGIC shall be widely distributed throughout Iowa for discussion and shall be recommended for implementation through the Office of Information Technology Services and other organizations as appropriate."

One of the primary issues affecting IGIC over the past several years has been the lack of a relationship between the organization and the State's Department of Administrative Services. Until a relationship is re-established, IGIC has very little in terms of capabilities for dealing with standards.

Desired Outcome

Interoperable solutions empower technology developers to make complex spatial information and services accessible and useful with all kinds of applications and spatially enable the internet, wireless and location-based services, and mainstream IT activities. By improving data integration through standards, the geospatial business needs of a wider audience in Iowa will be more fully realized.

Objectives

2.3.6.1 Support GIS software standards which will stipulate compliance with Open GIS Consortium (OGC) guidelines for data sharing and interoperability across GIS vendor platforms.

- *Assignment: Clearinghouse Committee*
- *Target Completion Date:*
- *Strategy*

The OGC is an organization of over 250 companies, agencies and universities working toward a world in which everyone benefits from geographic information and services made available across any network, application, or platform.

Working towards implementing OGC guidelines in Iowa will enable users to maximize the value of past and future investments in geoprocessing systems and data.

This will be done by addressing the need to share and reuse data in order to reduce costs, get more or better information, and to increase the total value of data holdings. Also, by choosing the best tool for the job, there is a reduction in technology and procurement risk. Finally, there is a need for more people with less training to benefit from using geospatial data in more applications.

2.3.6.2 Increase the participation in the state geospatial data clearinghouse.

- *Assignment: Clearinghouse Committee*
- *Target Completion Date: July 1, 2007*
- *Strategy*

The Iowa Geospatial Data Clearinghouse (IGDC) will look to promote the documentation of geospatial data. The IGDC will provide a mechanism to facilitate data sharing and documentation amongst entities in Iowa in support of the National Spatial Data Infrastructure and local spatial data infrastructures.

Beyond developing and maintaining the current geospatial data clearinghouse, work must be done to secure funding for the continued maintenance and expansion of clearinghouse activities as well as increasing partnerships in the IGDC.

Mechanisms should be put into place that encourage data sharing and collaborative data acquisition activities as well as continuing education to data providers/producers about the documentation of geospatial data through metadata standards.

2.3.4 GOAL

Promote partnerships for the purpose of data development and data sharing.

Current Status and Issues

Data development and sharing partnerships do occur in Iowa but not on a widespread or in a publicized manner. Recent national events have highlighted the importance and relevance to all citizens of the United States of how important partnerships are with regards to developing data resources with limited resources.

Partnerships require resources to both cultivate and implement. IGIC works to promote the alignment of resources for these purposes, but it lacks the resources to either fund or implement partnerships for data development or sharing without outside assistance.

Desired Outcome

Being an organization which encompasses federal agencies, state agencies, local government, academia, private and not-for-profit sector participants, IGIC is well-positioned to take the lead in developing partnerships in Iowa.

Development of a framework data approach that utilizes collaborative efforts, in a manner that provides the best available data for an area, certified, standardized, and described according to a common standard would provide a foundation on which organizations statewide can utilize. This approach will only be successful if work is completed that defines needs, inventories data development, standards, identification of custodians, and funding requirements.

Objectives

2.3.6.1 Development of common memorandums of understanding

- *Assignment: Government agency partners at all levels (local, state, and federal)*
- *Target Completion Date: June 30, 2007*
- *Strategy*

Limitations on the ability to access, integrate, and analyze geographic information quickly and accurately place Iowa at a disadvantage in responding to public and private development initiatives and opportunities as well as natural and human induced disasters and catastrophes.

Common memorandums of understanding will provide a vehicle for the development and distribution of digital data, decreasing the redundant collection of the same digital data, increasing multi-agency and/or organization data sharing efforts, and providing a cost savings to taxpayers.

Geospatial preparedness is a key component of public safety. Foresight and action prior to events is a case of government best practices and a driving mechanism behind good governance. Having a common geospatial memorandum of understanding between government entities operating in Iowa is the first step in geospatial preparedness.

2.3.6.2 Encourage the coordination of spatial data collection to reduce duplication and increase the usefulness of this resource.

- *Assignment: Clearinghouse Committee*
- *Target Completion Date: September 30, 2007*
- *Strategy*

Iowa needs to have a complete picture of its spatial data assets before any type of future development can occur in an efficient manner. Identifying and prioritizing assets and needs that cross-cuts sectors and agencies is a path towards a successful implementation

An enhanced clearinghouse in Iowa will allow discovery and access to multiple data resources that are currently maintained by many entities as standalone resources. By reducing the cost of data through eliminating the need to maintain redundant and inconsistent data resources, access to resources is improved and existing data and infrastructure investments can be more fully utilized.

2.3.6.3 Continue existing partnerships and pursue new opportunities with the federal government for development of the National Spatial Data Infrastructure (NSDI).

- *Assignment: IGIC Board of Directors*
- *Target Completion Date: January 1, 2008*
- *Strategy*

Iowa's continuing partnerships with the federal government, which has in the past included, but has not been limited to: The National Map, the National Spatial Data Infrastructure, the Federal Geographic Data Committee, and the Geospatial One-Stop have provided IGIC with valuable insight and direction for Council activities. Over the years, these partnerships have provided much needed funding for several initiatives undertaken by the Council and the potential remains to tap these federal resources to assist IGIC while at the same time working towards building the NSDI.

IGIC needs to look towards resources available from the federal government as well as national resources that are focused upon developing spatial data infrastructures.

2.3.5 GOAL:

Provide a mechanism through which the interests and concerns of Iowa's GIS community can be directed to appropriate policy makers.

Current Status and Issues

The current challenges in communicating IGIC's interests and concerns are the lack of relationships and effective strategies for maximizing those relationships.

In the early formative years of IGIC's existence, the organization was able to establish contact with several legislative officials but little has been done recently to cultivate new relationships with elected legislators across Iowa.

Being an entirely volunteer organization, the accomplishments of IGIC are realized either through the generosity and time of the individual or the organization that associates with IGIC. That being said, the organization has done little over the years beside publish an occasional annual report that solidly demonstrates what it is the organization does. To remedy that situation, time must be set aside to work through the formulation of annual work plans and annual budgets as well as identifying partners with which IGIC can work to attain its organizational mission.

Desired Outcome

A collaborative environment that works to solve problems, develop new understandings and design solutions that address the issues affecting Iowa's GIS community specifically and the people of Iowa in general.

Objectives

2.3.6.1 Establish a formal relationship between IGIC and the State CIO.

- *Assignment: IGIC Board*
- *Target Completion Date: July 1, 2007*
- *Strategy*

In 2003, NSGIC identified nine criteria needed for an effective statewide coordination program. The third criterion listed was the need for a formal relationship with the state's Chief Information Officer (or similar office). Following directly on the heels of that criterion was one that listed the need for a champion (politician or executive decision-maker) who is aware and involved in the process of coordination. Many states have found the Chief Information Officer to be a vocal and active proponent of geospatial coordination issues. IGIC has not had that relationship with the CIO's office and the organization needs to work towards an ongoing and sustainable relationship with the State of Iowa's Information Technology Enterprise inside the Department of Administrative Services with emphasis placed on forging a more formal relationship with the state's Chief Information Officer (CIO).

2.3.6.2 Complete an Annual Work Plan

- *Assignment: Executive Committee & Committee Chairs*
- *Target Completion Date: December 15, 2006 – initial; June 15th, annually - thereafter*
- *Strategy*

An all volunteer organization with members spread across the state of Iowa requires a clear focus and mechanism for establishing and addressing priorities.

An annual work plan will be established annually by the Board to identify, prioritize, and address short-term priorities.

Individual committees shall also create annual work plans to outline their annual objectives and initiatives. Since the bulk of IGIC's activity occurs within committees, these committee work plans are necessary input in formulating the IGIC annual work plan and budget.

This work plan should also include input from individual committee work plans to ensure that input is as broad-based and inclusive as possible.

2.3.6.3 Formalize and improve the outreach capabilities of IGIC.

- *Assignment: Outreach Committee*
- *Target Completion Date: March 30, 2007*
- *Strategy*

Effective public relations materials should be developed that are targeted appropriately to various audiences to explain and demonstrate the value of statewide coordination activities and the role of stakeholder organizations.

Liaison relationships should provide formal representation to outside organizations and enhance bidirectional communications between the leadership of both organizations. Efforts to establish liaison relationships should be intended to further the goals of IGIC.

2.3.6 GOAL:

Provide operating policies and procedures for management of the Council.

Current Status and Issues

IGIC was formally established via Executive Order in 1998. Before that the organization operated without formal designation. Since the initial Executive Order, IGIC has operated both within and outside the formal operations of state government.

While the Executive Order signed by then Governor Branstad is still in effect, no known effort has been made by the organization to have the Executive Order re-authorized or re-authorized to reflect the current situation.

The organization has had the opportunity to have two different statewide GIS Coordinators assist the organization but Iowa has not had a formal statewide coordinator since June 2005.

The organization is purely voluntary and its major source of income to offset operational costs comes from the biennial conference. No other fees are charged to be involved with IGIC.

Desired Outcome

An organization that meets all of the criteria and characteristics of effective statewide coordination councils as detailed in the Fifty States Initiative Action Plan. (Appendix C).

Objectives

2.3.6.1 Develop committee charters

- *Assignment: Executive Committee and Committee Chairs*
- *Target Completion Date: November 1, 2006*
- *Strategy*

Each IGIC Committee shall draft a committee charter for submission to the IGIC Board that outlines the structure of the committee and identifies and clarifies activities to be undertaken.

Committees, just like the larger organization are defined by their mission and objectives. They have a broad focus with several objectives and milestones, and their duration should be one year or longer. Work groups or sub-committees have a more narrow focus. They have clear objectives and a shorter timeframe for accomplishing their objectives. The duration for a work group or sub-committee is typically less than one year and these groups have clearly defined deliverables and outcomes.

2.3.6.2 Consistent branding of the organization

- *Assignment: Outreach Committee*
- *Target Completion Date:*
- *Strategy*

IGIC shall work to develop a consistent identity and logo which will become synonymous with the organizational brand.

Such branding will lead to increased name recognition as well as a better understanding for both those within and those outside the organization to further realize, what it is that IGIC is, what it does and what it stands for.

2.3.6.3 Budgeting

- *Assignment: Finance and Executive Committees*
- *Target Completion Date: Initial – November 1, 2006; thereafter – July 1, annually*
- *Strategy*

IGIC needs to be able to develop adequate revenue sources to achieve its mission. Without a complete accounting of the current situation in conjunction with future projections, it is extremely difficult to plan for future development and need.

The adoption of an annual budget for the organization will enable IGIC to meet projected financial needs by utilizing sponsorships, membership and registration fees, grants, endowments, and other sources of income.

3.0 Existing Capabilities and Gaps in IGIC Resources

3.1 Introduction

A partial list of available resources available to IGIC and the Iowa GIS community to help accomplish IGIC goals and objectives was developed during the strategic planning process. The resources have been defined into two categories: tangible and intangible.

3.2 Intangible Resources

Intangible	
IGIC Resources	Iowa GIS Community Resources
Proven track record of successes	knowledge and time
Ideas and experience contributed by well-established core of IGIC participants	Dedication to GIS/GPS technologies
Ideas and experience contributed relatively new IGIC members	
Prior experience with statewide GIS Coordinator	
Elections and politics	

3.3 Tangible Resources

Tangible	
IGIC Resources	Iowa GIS Community Resources
IGIC Board	GIS Programs at Iowa's Educational Institutions (CC, University, Small Colleges, K-12 schools)
IGIC Members	Specially focused user groups (ICIT, IDDEA, others)
IA GIS Clearinghouse	Local user groups, local meetings and conferences
IGIC List Serve	IA GIS Clearinghouse
Participation in NSGIC	NSGIC
Participation in MAGIC	MAGIC
IGIC Quarterly meetings	Issue focused forums
Iowa GIS Conference	ESRI User Conferences
Funds generated from past Conferences	Standards
Grant funding (FGDC)	ICN
	Internet

3.4 Gaps

During the most recent survey conducted by NSGIC on the implementation of coordination criteria for statewide councils (Appendix B), IGIC responded in the affirmative to four of the nine criteria.

The criteria that IGIC was able to answer in the affirmative included: clearly defined authority exists for statewide coordination of geospatial information technologies and data production; responsibilities for developing the National Spatial Data Infrastructure and a State Clearinghouse are assigned; the ability to work and coordinate with local governments, academia, and the private sector; and the federal government works through the statewide coordinating authority. Several of the affirmative responses should be regarded as partial as or less than definitive.

Many of the criteria that IGIC is not able to answer in the affirmative relate to the organizations past inability to define clearly stated objectives and become involved with political issues.

If the organization wishes to move towards becoming an effective statewide coordinator of geospatial information technologies, IGIC must first start with defining who and what IGIC is. Having a clearly stated vision, such that is stated earlier in this document, helps to coalesce IGIC's diverse and dispersed community around a common thread.

Movement towards the successful implementation of the remaining 5 coordination criteria needs to start with communicating the message of IGIC and GIS to decision-makers

IGIC needs to be able to clearly espouse the benefits of geospatial technologies and data as they relate to saving money and time; increasing efficiency, accuracy, productivity, communication, and collaboration; generating revenue; supporting decision-making; aiding in budgetary development; building information bases; and managing resources for Iowa. When these messages have been clearly communicated to politicians and executive-level decision-makers; credibility can be established and work can begin on tackling the remaining coordination criteria.

Appendix A

Actions Table

The following table lists a series of action items that have been brought forward during the strategic planning process. This implementation table will be updated as needed to reflect the changing landscape confronted by IGIC.

An annual work plan shall be adopted by the IGIC Board that addresses the current priorities of IGIC. That annual work plan will utilize the listing of actionable items seen here. The annual work plan will specifically address the necessary steps towards implementation as well as the required resources for implementation.

	Action Item	Goal Alignment	Lead	Collaborating Parties	Deadline	Status
1	Actively seek out entries for the IGIC website related to events and news related to geospatial activities with relevance to Iowa.	1	Website	Conference Outreach	6/30/07	
2	Explore technologies / mechanisms to "syndicate" information on the IGIC website to a broader audience.	1, 3, 4, 5	Outreach	Website	12/31/06	
3	Host the biennial IGIC conference in odd-numbered years for the exchange of information and for the exhibit of products and services.	1, 2, 5	Conference		4/30/07	
4	Develop a business plan that outlines the business case of having a statewide GIS Coordinator for Iowa that draws upon the experiences of other states.	1, 5	Board	Membership	6/30/08	
5	Develop a GIS Coordinator job description	1, 5	Board	Membership	12/31/06	

6	Identify partner organizations and relevant contacts.	1, 3, 4	Outreach		12/31/07	
7	Hold a series of monthly listening post type seminars held around the state that address timely topics of interest to Iowa's geospatial community. (These topics may specifically address items that are being addressed by current IGIC committees or they may be other topics.)	1, 2, 3, 4, 5	Outreach	All other Committees	12/31/06	
8	Offer free classes / volunteers to work at local school districts and GIS presentations to schools at all levels. Develop a core group of people who are both willing and able to do presentations of geospatial topics for K-12 meetings and assist educators in area schools as schools begin using GIS/GPS technologies.	2	Education		6/30/07	
9	Build relationships with Area Education Agencies (AEA's) and help them become a conduit for GIS possibilities.	2	Education		6/30/07	
10	Identify resources currently hosted on the Resource Guide site, their relevancy, and how the items are organized.	1, 2	Website		3/31/07	
11	Identify resources in Iowa's GIS Community and how they could be involved with the Resource Guide.	1, 2	Website		3/31/07	
12	Identify the constituency of the Clearinghouse and identify how the Clearinghouse has improved the operation of state government.	1, 3, 4, 5	Clearinghouse		9/30/07	

13 Define a statement of the opportunity afforded by Clearinghouse services and how those relate to a broader interest of public decision-making. Describe key areas of impact that the Clearinghouse can implement with continued development. 1, 3, 4, 5 Clearinghouse 9/30/07

14	Encourage IGIC partners to complete metadata for primary (NSDI framework) datasets. Metadata will be constructed using current geospatial metadata standards. Metadata expertise within IGIC members can be used to assist members in without current standards compliant metadata and publishing. A special emphasis should be placed on documenting public agency data holdings via the metadata clearinghouse.	1, 3	Clearinghouse		12/31/07	
15	Post sample data agreements that Iowa counties, cities, and state agencies are using on the IGIC website.	1, 3, 4	Clearinghouse		6/30/07	
16	Conduct an inventory of the geospatial data holdings that exist within state agencies and public stakeholder organizations. Utilize the inventory to understand what geospatial data is created and maintained by agencies, what agency data is used by other agencies and to determine what federal, commercial and other enterprise datasets are being used or are needed.	1, 4	Clearinghouse	Partner agencies	9/30/07	
17	Develop a plan for an Iowa GIS data framework	3, 4			12/31/07	

18 Engage the municipal government sector in Iowa to become involved in the coordination of spatial data. This may be accomplished by the creation of a public database of municipalities in Iowa that could include information pertaining to where municipalities are in their pursuit of GIS, contact information, and any data that they create and are will to share if applicable.

1, 5 Municipal reps on IGIC Board 3/31/07

19	Explore the potential in Iowa for creating a "geospatial blueprint" for state government in Iowa that would potentially address leveraging geospatial investments within Iowa State government. The blueprint document would enable the State of Iowa to move from an environment where geospatial tools are considered ancillary to addressing business activities to one where they are viewed as essential to programmatic operations.	1, 3, 4	State reps on Board		9/30/07	
20	Support collaborative activities to develop the implementation of the National Spatial Data Infrastructure (NSDI) by signing the NSDI Partnership Agreement.	1, 3, 4, 5	Board		12/31/06	
21	Participate in the 2007 NSDI Cooperative Agreements Program (CAP) of the FGDC. It is anticipated that participation will be minimally in the Category 3: Fifty States Initiative and potentially others.	1, 2, 3, 4	CAP grant workgroup		12/31/06	
22	Develop a strategic plan to implement a statewide spatial data infrastructure consistent with appropriate national standards. This activity will also entail	4	Framework data		6/30/08	

	the development of individual business plans that articulate the necessary implementation details.		workgroup			
23	Determine an effective public relations tool that can be developed that can target appropriate audiences to explain and demonstrate the uses of GIS and the role of involved parties in coordination activities.	1, 5	Outreach		3/31/07	
24	Establish a committee specifically focused on public relations, outreach, and communications.	1, 2, 5, 6	Board	Outreach Website	12/31/06	
25	Provide mailed information (brochure, postcard, letter, whatever) to legislators highlighting cases of GIS success.	1, 5	Outreach		12/31/06	
26	Identify papers throughout the state and submit regular press releases to them about geospatial activities in Iowa. Specifically target local papers where particularly interesting activities have occurred.	1, 5	Outreach	Membership	12/31/06	
27	Identify and establish liaison activities with outside organizations.	5, 6	Outreach	membership	12/31/07	
28	Organize a GIS awareness event at the Iowa Statehouse for elected officials and administrative staff.	1, 4, 5	Outreach		3/31/07	
29	Committee charter documents will be developed and distributed to each committee chair for completion within each committee and then submitted to Board for approval. The charter shall	6	Bylaws & Strategic Planning	Committees	12/31/06	

	include (but not limited to) a purpose statement and proposed goals.					
30	An annual work plan will be developed for each committee that outlines the objectives and action items to be undertaken by that committee as well as suggested meeting schedules and reporting requirements.	6	Committee Chairs	membership	6/30/07	
31	Assess the current IGIC logo and determine need for further refinements or need for an entirely new professionally designed logo.	6	Outreach		12/31/06	
32	Work towards replacement of old logo and promotion of agreed upon logo.	6	Outreach		3/31/07	
33	Prepare a fiscal year-end report.	6	Finance		6/30/07	
34	Prepare an annual budget for the organization as well as a 2 year projected budget for the Board by the fourth quarterly meeting of the year.	6	Finance		6/30/07	
35	Determine process and procedure for an organizational audit.	6	Finance		12/31/06	
36	Work towards implementing a statewide orthoimagery program that meets the needs of as many partner agencies as possible.	4	Remote Sensing	Framework data workgroup	3/31/07	
37	Develop mechanisms to support the collection and dissemination of statewide LIDAR datasets	3, 4	Remote Sensing	Natural Resources	12/31/07	

38	Identify partner agency remotely sensed data needs and work towards meeting those needs.	1, 3, 4, 5	Remote Sensing		6/30/07	
39	Support the statewide historic aerial photography project	4	Remote Sensing		12/31/07	
40	Identify a lead agency for geodetic control in Iowa who will be responsible for coordination, management and dissemination of geodetic control for Iowa.	1, 3, 4	Geodetic	Clearinghouse Framework data workgroup	3/31/07	
41	Assist the State of Iowa in the development of a Request for Proposals for GIS software	1, 4, 5	Board	membership	12/31/06	

Appendix B

National States Geographic Information Council (NSGIC) Coordination Criteria for Effective Statewide Coordination of Geospatial Information Technologies (May 22, 2004)

- **A full-time, paid coordinator position is designated and has the authority to implement the state's business and strategic plans.**
 - Explanation: Many states have created one or more full time positions to oversee coordination of geospatial technologies. These individuals are responsible for implementing the state's business plan and are typically assigned to the Governor's Office, Chief Information Officer, Budget Department, or the Technology Office. In some states, these duties fall on a volunteer and in others, no one is willing to assume this role. Having a full-time paid individual is advantageous and a significant portion of their energy is channeled into on-going statewide coordination council activities.
 - **A clearly defined authority exists for statewide coordination of geospatial information technologies and data production.**
 - Explanation: A responsible individual or group has been designated in many states through executive orders, budget authorizations, or legislation. These individuals, or groups, are usually better able to deal with difficult coordination issues since they are empowered to perform this function. In some cases,
- "all volunteer" efforts are very effective at coordinating statewide activities through consensus building. These groups are often recognized as a "clearly defined authority" although they have no specific powers.
- **The statewide coordination office has a formal relationship with the state's Chief Information Officer (or similar office).**
 - Explanation: Geospatial technologies are clearly a component of any state's information technology architecture, but they are not always viewed as such by "old school" IT leaders. A close relationship with the state CIO is essential to move major geospatial technology initiatives forward.
 - **A champion (politician or executive decision maker) is aware and involved in the process of coordination.**
 - Explanation: A visionary political champion who understands geospatial technologies is a valuable ally that can help obtain recognition and funding to support new initiatives. Without a strong political champion, new initiatives often fail.
 - **Responsibilities for developing the National Spatial Data Infrastructure and a State Clearinghouse are assigned.**
 - Explanation: The responsibility for the component pieces of the NSDI should be assigned to appropriate staff and agencies to ensure that stewards are identified, and to prevent duplication of effort. Assignment of responsibilities should happen in advance of actual need, to ensure that the appropriate activities are

planned for and incorporated into the state's business plan.

end-of-year funds when contracting mechanisms are already in place.

- **The ability exists to work and coordinate with local governments, academia, and the private sector.**

- Explanation: Each state must have the capability to routinely meet and coordinate with all other sectors. Safeguards should be developed to ensure that the needs of other sectors can be incorporated through consensus building activities.

- **Sustainable funding sources exist to meet projected needs.**

- Explanation: Sustainable funding is the foundation of effective partnerships. Data production tends to be the highest component cost for implementation of geospatial technologies and most users have requirements for continuous updating of data layers that need reliable fund sources. Effective consortia can only be established when each of the players brings something to the partnership. Non-lapsing funds also help to stabilize partnerships.

- **Coordinators have the authority to enter into contracts and become capable of receiving and expending funds.**

- Explanation: To be effective, individual state GIS coordinators or the agencies identified as the stewards for the component pieces of the NSDI must be able to readily contract for software, systems integration, training, and data production costs. Often partnerships can be "brokered" to capture

- **The Federal government works through the statewide coordinating authority.**

- Explanation: It is essential that Federal agencies use statewide GIS Coordination offices and councils as a type of "clearinghouse" to make sure that grant opportunities are being used wisely to implement the business plans of the states. Going through the coordination offices and councils will also help to minimize duplications of effort.

Appendix C

Characteristics of Effective Statewide Coordination Councils

In addition to identifying the NSGIC Coordination Criteria, the Fifty States Initiative Action Plan requires that a more consistent system of statewide councils (or "authorities") be established that incorporate the following characteristics:

- Provide a mechanism for broad representation and inclusion in decision-making of user communities, including Federal, state, county, municipal and tribal governments; private sector GIS users and vendors; academic sector; non-profit organizations; utilities; and the general public.
- A Strategic Plan that incorporates a vision statement, with appropriate goals and objectives related to implementing the NSDI.
- A Business and Marketing Plan that details the development of a geospatial technology infrastructure (including data) to mirror the definition of the NSDI
- Formal authorization establishing the council along with appropriate bylaws.
- A relationship and linkage with the nine coordination criteria to feed consensus based decision making to official statewide initiatives.
- Funding and support to enable the operation.
- A commitment to implementing appropriate OGC, FGDC, ANSI and ISO standards.

Appendix D

Measuring Successful Implementation of the NSDI By Statewide Coordination Councils / Authorities

- Local, state, tribal and federal agencies have data sharing agreements in place unless they routinely provide data in the public domain.
- A published list of local, state, tribal and federal data stewards and integrators for each of the framework layers is available.
- Local, state and tribal framework data are being posted to the statewide clearinghouse or otherwise being made available through OGC interfaces.
- Local, state and tribal data producers create metadata for data holdings and post it to the Geospatial OneStop (GOS) Portal.
- A functioning clearinghouse or appropriate inventory tool is available to all interested sectors in a state.
- Local, state and tribal agencies participate in The National Map.
- Local, state and tribal agencies adopt and incorporate OGC, FGDC, ANSI and ISO standards as appropriate.