

FGDC CAP GRANT 2006
FINAL REPORT

**Wisconsin Geographic Information
Coordination Council:**
Process and Prospects

Prepared for
Wisconsin Department of Administration
Wisconsin State Cartographer's Office

Prepared by
WIGICC Working Group

With assistance from L. Shanley
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DECEMBER 2007

Agreement Number: 06HQAG0109

Report Date: December 2007

Lead project organization: Wisconsin Department of Administration,
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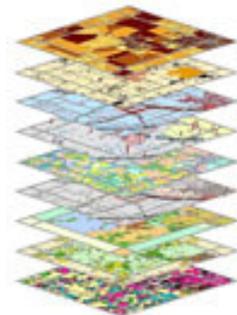
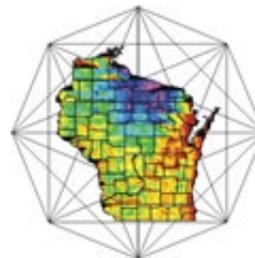
Website: http://www.doa.state.wi.us/section_detail.asp?linkcatid=568

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This FGDC CAP Grant final report was prepared by L. Shanley, Land Information & Computer Graphics Facility, University of Wisconsin-Madison, and National Consortium for Rural Geospatial Innovations (RGIS). 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 Officer (GIO), Department of Administration, in cooperation with the Wisconsin State Cartographer’s Office (SCO).



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Wisconsin Geographic Information Coordination Council: Process and Prospect

INTRODUCTION

Geographic information is a strategic asset. Yet, no systematic statewide approach exists for creating, maintaining, and accessing Wisconsin's geographic information. Consequently, creation and maintenance efforts are typically independent, often redundant, and geographic information used in public decision-making can be out-of-date, incomplete, and incompatible with other systems. In some areas, adequate capabilities or resources do not exist to effectively use this information. Conversely, accessible and usable geographic information would facilitate effective service delivery, improve operational efficiencies, and expand agencies' capacity to address priorities such as emergency management and public health.

The statewide strategic plan *Wisconsin Location Matters* (January 2007), prepared under the guidance of the Wisconsin Land Information Association (WLIA), underscores the need for statewide collaboration and cooperation, and identifies a Wisconsin Geographic Information Coordination Council (WIGICC) as a top priority. As noted by the National States Geographic Information Council (NSGIC), a majority of states have formally established geographic information technology (GIT) governance councils. WIGICC offers a new opportunity for GIT governance in Wisconsin and for cooperative data sharing and exchange. Importantly, WIGICC also provides a vehicle for the State Geographic Information Officer (GIO) to engage the geographic information community throughout Wisconsin.

SUMMARY OF PROJECT ACTIVITIES

The goal of this project is to create and formally establish a Wisconsin Geographic Information Coordination Council (WIGICC). This project was funded through a 2006 CAP Grant Award under the U.S. Geological Survey (USGS) Federal Geographic Data Committee (FGDC) Fifty States Initiative. This Grant Award resided within the Wisconsin Department of Administration (WI DOA), under David Mockert, the former Wisconsin Geographic Information Officer (GIO). However, in August 2007, the State GIO stepped down from his position, and Erik Mickelson (WI DOA) and Ted Koch, the Wisconsin State Cartographer (SCO), assumed responsibility for coordinating project activities. Support for this initiative also came from the National States Geographic Information Council (NSGIC), of which Wisconsin is a member.

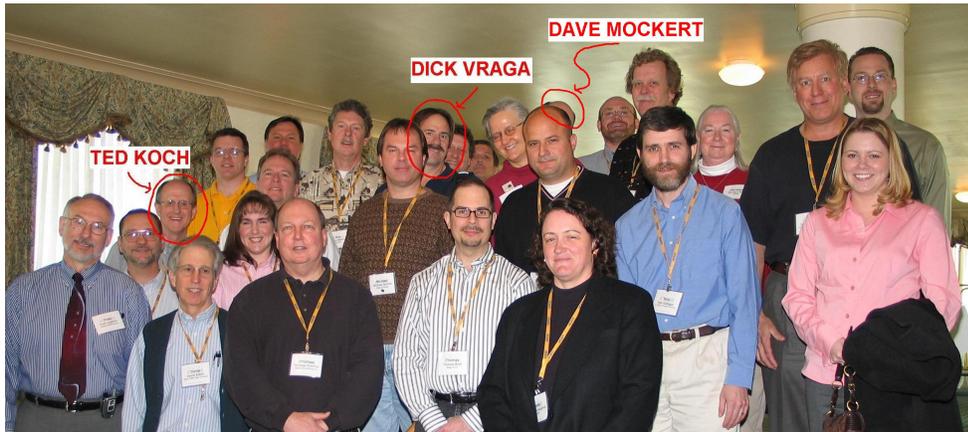


Photo: 2006 CAP Grant Award Recipients, including Ted Koch (WI State Cartographer), Dick Vraga (USGS NSDI Partnership Liaison), and Dave Mockert (former WI GIO)

The Wisconsin DOA used the Grant Award to retain the services of staff at the Land Information & Computer Graphics Facility (LICGF) to conduct research and report on eight states' geographic information coordination councils, and to provide additional administrative and technical support for project activities. In addition, the Wisconsin DOA used this Grant Award to retain the services of a consulting firm, Collaborative Initiative, which assisted with pre-planning and facilitation of most of the "Listening Sessions" and the "Governance Summit" for the project, in cooperation and coordination with the ad hoc WIGICC Working Group. The Wisconsin State Cartographer's Office provided in-kind staff support for the project website development and maintenance.

Because of the departure of our State GIO in August 2007, as noted above, the WI DOA terminated the Grant Award with less than half the grant amount expended. The combination of these two events resulted in a 2-3 month setback and reevaluation of our progress and priorities. Importantly, because of the premature Grant termination, we were unable to achieve as much as we had intended within the given timeframe. Nonetheless, we did make significant headway. Project activities and accomplishments include the following:

Key Accomplishments

- ✓ Researched and reported on eight states' coordination councils
- ✓ Researched and developed set of governance model evaluation criteria
- ✓ Developed and maintained project website
- ✓ Solicited input from stakeholders through five listening sessions, follow-up email and online surveys, focused stakeholder meetings, and Governance Summit
- ✓ Defined scope, function, composition and structure of Council
- ✓ Presented project research and progress at National States Geographic Information Council (NSGIC) and Urban and Regional Information Association (URSIA) annual conferences
- ✓ Encouraged and supported the hiring of a new State GIO

Wisconsin received two prior CAP grants. The first grant (2004), administered through the Wisconsin Department of Administration, focused on coordination efforts and resulted in a workshop that served to educate and network the GIS community, to identify goals, and to obtain volunteers to work on next steps. The second grant (2005), administered through the Wisconsin Land Information Association (WLIA), resulted in a statewide GIS strategic plan *Wisconsin Location Matters*, published January of 2007.

PROJECT NARRATIVE

In early 2007, Wisconsin's Geographic Information Officer, in cooperation with the Wisconsin State Cartographer's Office (SCO), assembled a Working Group to facilitate the creation of a WIGICC. Selection of the Working Group was based on involvement in the initial grant research activities, knowledge and experience with previous GIS governance efforts in the state, and expressed interest to the GIO regarding coordination of council development. Over time, the

Working Group expanded to thirteen members, including representatives from state, county, regional, federal, university, and private sectors. Diversity of expertise and experience, of geographical region including urban and rural, and of age and gender also were considered in the selection of Working Group members.

Governance Research

As a first step, the Working Group reviewed the literature on governance from several different domains, including information technology, justice, spatial data infrastructure, and non-profits organizations. Based on the Working Group’s knowledge of other states’ geographic information coordination councils and on a review of NSGIC’s state profiles, the Working Group developed a list of state councils that might serve as useful models, making an effort to get a range of governance structures and enabling mechanisms. We contacted the GIS coordinators in each of these states first through email, and then by phone to set up interviews.

Given the limited availability of state GIS coordinators during the summer of 2006 and given our project time constraints, we interviewed GIS coordinators from eight states (see Table 1). These interviews resulted in geographic information technology governance profiles for each state, including Arizona, Arkansas, Massachusetts, Missouri, New York, North Carolina, Pennsylvania, and Utah. Visit http://www.sco.wisc.edu/wigicc/related_documents.php to download copies of the eight state profiles.

Table 1. Interview Participants and Co-contributors

Dennis Goreham	Manager, UT Automated Geographic Reference Center
Gary Irish	Program Manager, AZ Land Resource Information System
Christian Jacques	Director, MA Office of Geographic and Environmental Information
Shelby Johnson	State GIO, Arkansas Geographic Information Office
William Johnson	Asst Deputy Director & CIO, NY GIS & Critical Infrastructure Coordination
Jim Knudson	Director, PA State Geospatial Technologies
Zsolt Nagy	Manager, NC Center for Geographic Information & Analysis
Eugene Trobia	State Cartographer, AZ Geographic Information Council
Anthony Spicci	GIS Supervisor, RSD, MO Department of Conservation

Based on a review of the governance literature, on the interviews we conducted, and on our own experience and discussions, the Working Group developed a set of criteria with which to evaluate potential governance models (see Appendix A), as well as two sample models to serve as starting points for discussion, and a states' governance models summary handout, all of which may be found on the project website.

Stakeholder Engagement

The Working Group recognizes that the engagement of a wide range of stakeholders is essential to the creation and operation of geographic information coordination council. We believe that the collaboration and participation fostered by this process will lead to enduring public and private partnerships, leading to improved coordination and efficiency of geospatial activities in Wisconsin. Stakeholder engagement and inclusion was achieved through a multi-tiered approach, including a project website (<http://www.sco.wisc.edu/wigicc>); five listening sessions; follow-up surveys and email feedback; focused meetings with key stakeholder groups; a Governance Summit; and, final proposal comment period.

WIGICC Working Group Website. Through the website, the Working Group communicated project goals, background research, activities, and results. The Working Group also encouraged anyone who had comments on how a coordination council should be formed and structured, or who had feedback on the council development process, to contact the Working Group through this website. All feedback received and alternative models suggested were then posted to the website for public inspection.



Photos: Listening Session Participants

Listening sessions and follow-up survey. The Working Group hosted five “Listening Sessions” around the state to facilitate dialogue among a wide range of stakeholders, and to solicit ideas and feedback on the scope, composition and structure of WIGICC. These sessions were structured into large group and small group discussions, lead by a professional facilitator and assisted by volunteer table facilitators. In addition, the Working Group conducted a follow-up survey to clarify ideas and questions that arose during these sessions. Over 150 people participated in these meetings.

Focused meetings with key stakeholders. In addition to the listening sessions, the GIO, SCO and members of the Working Group met with key stakeholder groups, including policy makers, the Wisconsin Tribal GIS Network, the Wisconsin Land Information Association Board, and others.

Governance Summit. Synthesizing the ideas expressed during these sessions, the Working Group brought forward a draft council proposal for discussion at a “WIGICC Governance Summit,” held in early September. In addition to small and large group discussions, attendees were asked to participate in advisory ballots regarding the administrative location and enabling mechanism for a WIGICC. Eight-three people attended the Summit from across the state.

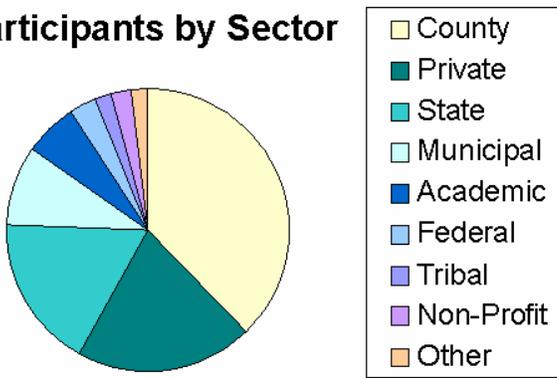
Photos: Governance Summit Participants



Overall Participation. Prior statewide coordination efforts largely focused on county governments. For this effort, however, the Working Group encouraged a wide range of stakeholders to participate in the council creation process, such as Tribal Governments, municipalities and the private sector. Attendance by sector for the five listening sessions can be found in Chart 1: Listening Sessions Attendance, while attendance by sector for the Governance Summit can be found in Chart 2: Governance Summit Attendance.

Chart 1. Listening Sessions Attendance, Breakdown by Sector (150 Participants Total)

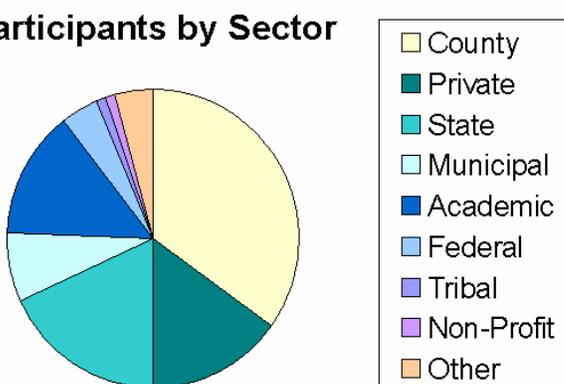
% Participants by Sector



- County Gov't - 47 (37%)
- Private sector - 26 (20%)
- WI State Agencies - 21 (17%)
- Municipal Gov't - 11 (9%)
- Academic - 7 (6%)
- Federal Agencies - 4 (3%)
- Regional Gov't - 3 (2%)
- Tribal - 3 (2%)
- Non-Profit 2 (2%)
- Other - 2 (2%)

Chart 2. Governance Summit Attendance, Breakdown by Sector (83 Participants Total)

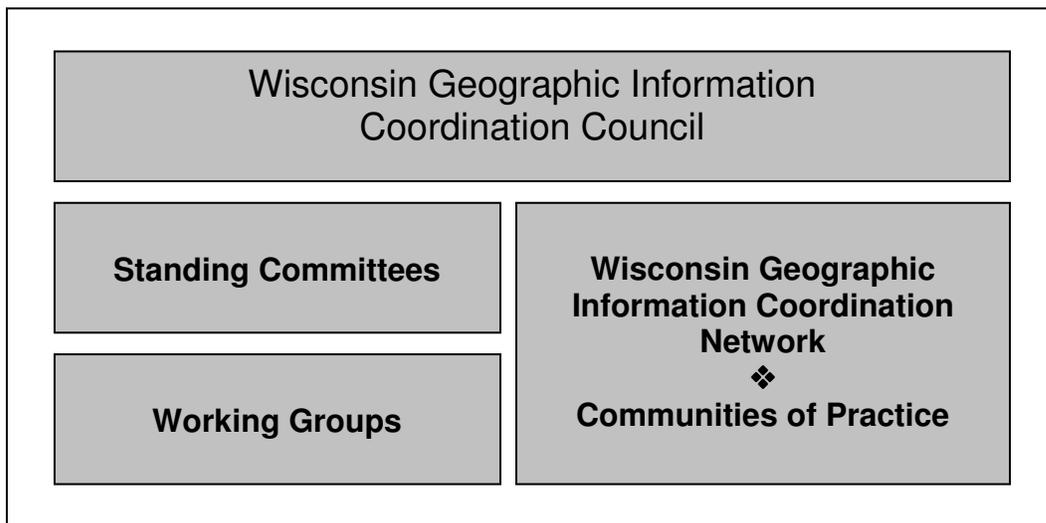
% Participants by Sector



- County Gov't – 27 (33%)
- Private sector - 12 (14%)
- WI State Agencies - 14 (17%)
- Municipal Gov't - 6 (7%)
- Academic - 11 (13%)
- Federal Agencies – 3 (4%)
- Regional Gov't - 4 (5%)
- Tribal - 1 (1%)
- Non-Profit 1 (1%)
- Other - 3 (4%)

Proposal Development. Building on a long history of cooperative geographic information activities, this collaborative effort resulted in a draft Council proposal that is appropriate for the times and mitigates some of the deficiencies of previous arrangements. Broadly, the proposed structure is comprised of a Council (“Wisconsin Geographic Information Coordination Council”) and a geographic information coordination community forum (“Network”) - including communities of practice, as well as standing committees and *ad hoc* working groups that can be created and dissolved as needed (see Figure 1). The proposed Council is relatively small group of individuals representing a broad range of sectors, including municipal, county, state, federal and tribal governments, regional planning commissions, private businesses, non-profits, and academia.

Figure 1. Proposed Interim Coordination Council



The Working Group believes that the draft proposed governance model is inclusive, representative, and participatory – creating a forum that meets multiple needs, and that, in general, the statewide GIS community supports the mission, vision, goals, and structure of WIGICC as proposed during the Governance Summit (see Figure 2). As of December 2007, however, a Council administrative location and an enabling mechanism have not been definitively determined. Furthermore, the draft Council proposal will need to undergo a period of public review and comment in early 2008.

Figure 2. DRAFT Wisconsin Geographic Information Coordination Council**VISION**

The Wisconsin Geographic Information Coordination Council (WIGICC) is a sustainable, stakeholder-governed, statewide mechanism that provides leadership and direction for the cooperative development and use of geographic information and technologies.

MISSION

WIGICC facilitates the delivery of public services, encourages economic development, and helps protect the public and the environment by improving the quality, accessibility, utility, and value of geographic information and technologies.

ROLE

- Provide statewide leadership, support, guidance, and strategic planning.
- Coordinate the acquisition and development of geographic information.
- Facilitate equitable access, sharing and exchange of geographic information.
- Provide a forum to address policy issues surrounding geographic information and related data, including open records, liability, licensing, and privacy.
- Advise and consult with decision makers on the appropriate use of geographic information technology to address critical societal issues, and on related capital expenditures.

RESPONSIBILITIES

- Implement, assess and revise the statewide geographic information strategic plan.
- Develop appropriate measures and assess progress toward stated goals.
- Define stakeholder roles and responsibilities
- Facilitate data sharing and program coordination
- Identify and recommend policies that foster equitable and appropriate data sharing, including aspects dealing with legal issues, data security, costs and benefits
- Identify funding to support the creation and maintenance of geographic information and geospatial technologies in Wisconsin
- Advise stakeholders how they can support the goals and activities of WIGICC
- Evaluate and promote geographic information standards and best practices
- Communicate council activities and related issues
- Educate leaders, citizens, and organizations about the need for and benefits of using geographic information, technology, and services.
- Promote geospatial course offerings and use of geographic technologies in education.

LESSONS LEARNED

Listening Sessions and Governance Summit participants clearly supported the need for a Wisconsin Geographic Information Coordination Council. However, they also expressed serious concerns and questions about the proposed Council's role – would it be advisory, to whom and under what circumstances, and about the Council's scope and function – how would it differ from the previous statewide coordinating body, the Wisconsin Land Information Board (WLIB), and would it have authority, if any, over the existing Wisconsin Land Information Program (WLIP)? Perceiving that a smaller Council might be more efficient and nimble, participants indicated a preference for a relatively small Council. They also expressed strong interest in how WIGICC would ensure ongoing representative and participatory engagement of the GIS community. The Working Group tried to address each of these concerns in the draft Council proposal, which will be made available for public review and comment in early 2008.

Through this effort, we focused on fostering understanding and rebuilding trust among stakeholders, and on generating enthusiasm and support for a new statewide coordination council. The hiring of an experienced professional facilitator played a significant role in this success. Even so, we had limited success engaging GIS staff from Tribal Nations in this effort. Large scale listening sessions, for example, may not be a mode of communication in which they are traditionally comfortable participating. In the future, we must do a better job of reaching out to Tribes in ways that are appropriate and respectful given their culture, history and norms. Furthermore, maintaining the attention and interest of the community proved difficult at times. While the listening sessions and summit activities were well-attended, continuing communication is critical to keeping stakeholders engaged in the process.

As this effort moves forward, the geographic information coordination community will need to make a deep commitment to participatory processes, one that is genuinely inclusive of the broader community and accessible to members of that community in a timely and meaningful way. To be successful, the GIS community, and especially Council members, will need to be as skilled as possible at convening meaningful conversations, facilitating conflictive dialogues in a clear and collaborative manner, navigating complex issues, and giving all members a voice that is validated and respected on a continual basis.

NEXT STEPS

As discussed earlier, when our State GIO departed in August 2007, the WI DOA terminated the Grant Award with less than half the grant amount expended. This setback greatly impacted our ability to achieve all that we had initially intended towards the establishment of a Wisconsin Geographic Information Coordination Council (WIGICC) and Network. Nonetheless, the WIGICC Working Group, in cooperation with the geographic information community, have made significant progress towards this goal, including research into other states' governance models, broad engagement of the state's geographic information community in the decision-making process, and a draft Council proposal, which will be made available for public comment in early 2008. The Working Group also is considering the creation of an interim Council as a possible option to demonstrate the value of statewide geographic information governance and coordination, before approaching the Governor and Legislature for formal recognition and establishment.

Over the next two years, the Working Group proposes to pursue the following:

Goals

- Develop draft charter for the Council
- Hold open public comment period on draft Council proposal and charter
- Establish the WIGICC Network
- Develop short term goals and action plan for Council
- Assemble and convene Council
- Develop WIGICC Business Plan
- To demonstrate the council's value, identify and facilitate the impact of geographic information collaboration on a least two critical statewide business applications
- Formalize Council via Executive Order or legislative action.

Appendices

A. Coordination Council Model Evaluation Criteria

Criteria for the Evaluation of Potential Geospatial Governance Models Structures and Operation DRAFT July 30, 2007		
Legitimacy and Voice	Participation	<ul style="list-style-type: none"> • Ensures broad, equitable, inclusive, and balanced representation of stakeholders (e.g., diversity of stakeholders, diversity of expertise, geographic diversity), and allows all members to contribute to decision-making in a substantial way • Encourages (or requires) state agency cooperation and participation
	Consensus Orientation	<ul style="list-style-type: none"> • Mediates differing interests to reach a broad consensus • Provides mechanisms for dispute resolution between stakeholders
	Accessibility	<ul style="list-style-type: none"> • Accessibility of Council to stakeholders through open meetings and availability for direct contact with Council members
Direction	Mandate	<ul style="list-style-type: none"> • Enabling mechanism (e.g., Executive Order, Legislation, Administrative policy) provides clearly articulated mandate
	Strategic Vision	<ul style="list-style-type: none"> • Clearly and cooperatively articulated vision and mission for Council • Clearly and cooperatively articulated statewide strategic plan to which all stakeholders see how they can contribute and from which all can benefit • Clearly defined benefits and risks
Roles and Relationships	Roles and Responsibilities	<ul style="list-style-type: none"> • Clearly defined role and responsibilities of Council • Clearly defined role and relationship of Council with respect to other organizations, such as the Wisconsin Land Information Association and its committees, etc. • Clearly defined roles and responsibilities of Geographic Information Office (GIO), and State Cartographer’s Office (SCO)

	<p>Communication</p>	<ul style="list-style-type: none"> • Creates and formalizes direct lines of communication between Council and stakeholders (e.g., county boards, associations, etc) • Facilitates face-to-face interaction and relationship building between Council and stakeholders, and among stakeholders • Retention and sharing of institutional knowledge to new comers/succession • Outreach, education and awareness
<p>Performance</p>	<p>Responsiveness</p>	<ul style="list-style-type: none"> • Flexibility to access expertise and resources from within and from outside the Council to address and resolve issues • Flexibility to adjust or create committees and working groups as needed • Flexibility to adjust meeting frequency and location as needed
	<p>Political Efficacy</p>	<ul style="list-style-type: none"> • Minimizes the impact of political bias • Minimizes the impact of change in administration • Enables the geospatial community to articulate a united vision to policy makers • Increases awareness and understanding of geospatial-related issues and activities among policy makers at all levels and with the public • Involves the highest level of policy makers in geospatial decision making • Promotes the incorporation of geospatial-related issues into statewide policy and decision making
	<p>Effectiveness and Efficiency</p>	<ul style="list-style-type: none"> • Clearly defined performance metrics and ongoing assessment • Readily understandable structure and manageable size • Tangible links and reciprocity between Council, Geographic Information Officer, State Cartographer’s Office, and stakeholders • Tangible benefits and deliverables accrued widely and at all levels • Utilizes best practices from the private sector • Capacity building at all levels • Staffing levels specifically focused on coordination and other Council goals • Ability to develop and influence adoption of guidelines and standards • Ability to identify funding sources and to influence how funds are expended • Ability to provide incentives for participation (and possible enforcement?)

Accountability	Accountability	<ul style="list-style-type: none"> Clearly defined reporting requirements of the Council to the Geographic Information Officer (GIO), State Cartographer (SCO), Chief Information Officer (CIO), Legislature, and Governor Clearly defined reporting requirements to stakeholders
	Transparency	<ul style="list-style-type: none"> Provides transparent and democratic mechanisms for broad participation in policy development, decision-making and recommendations for funding allocations
Fairness	Equity	<ul style="list-style-type: none"> Broad, equitable and balanced representation , with all members participating in full voice All stakeholders are able to actively participate in the Council and associated committees All stakeholders and the public receive sufficient value from the Council
	Rule of Procedure	<ul style="list-style-type: none"> Clearly defined, open and fair operating and voting procedures
Sustainability	Sustainability	<ul style="list-style-type: none"> Ability to persist under change in administration Ability to persist under budgetary constraints Sufficient funding, administrative support and technical support Ability to encourage state agency participation
<i>Additional Criteria Suggested by Listening Session Participants</i>		
Legal		
Funding		
Data Security & Integrity		
Administrative Capacity		
Authority		

B. DRAFT Proposal for an Interim Wisconsin Geographic Information Coordination Council (WIGICC) – Coming in early 2008!