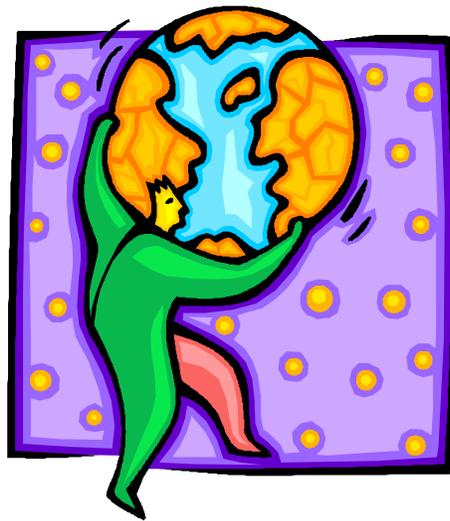


Missouri GIS Advisory Committee Strategic Plan



Drafted in March 2003 by:

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Missouri GIS Advisory Committee Strategic Plan

Introduction

Missouri's geographic information and related technology (GI/GIT) activities across state government were initiated in 1976. As agencies became more active with GIS in the mid-1990s, a "Strategic management plan for the management and coordination of Geographic Information System (GIS) technology and the creation of a state Spatial Data Center" was drafted in July 1993, which presented and advocated a statewide approach. The Governor then proposed and the Legislature authorized and funded in the fiscal year 1995 Missouri Budget Bill the development of "a clearinghouse for information on use of GIS systems and on those public databases available to improve the quality and efficiency of state governmental services and decision making through wider application of improved GI." This became the Missouri Spatial Data Information Service (MSDIS) housed at the University of Missouri's Geographic Resource Center (GRC).

The Office of Information Technology (OIT) was established in 1995. This development provided a home for the GI/GIT activities taking place within the state. The new chief information officer (CIO) Mike Benzen was approached to garner his support for MSDIS. A revised "Strategic Management Plan for GIS Technology and the Maintenance of MSDIS" was submitted in March 1996 in coordination with OIT. Following review of this plan, the Missouri GIS Advisory Committee (MGISAC) was organized later that year.

A very active committee membership includes representatives from the following state agencies Conservation, Mental Health, Natural Resources, State Emergency Management Agency, Revenue, Office of Administration, Agriculture, Economic Development, Information Technology, Transportation, Insurance, and Health and Senior Services as well as other sectors including academia, county and city government, regional planning organizations, federal agencies, and the MSDIS. Where many committees struggle when it comes to attendance, this committee continues to outgrow its meeting space.

Gubernatorial directive established the standing committee under the Office of Information Technology. The Advisory Committee reports to the chief information officer, and continues to provide annual reports to the Information Technology Advisory Board (ITAB).

The strategic plan charts the future course of spatial information technology integration and development in the state of Missouri and sets forth the vision, mission, outcomes, objectives, and products for the Missouri GIS Advisory Committee. The strategic plan represents MGISAC's reporting measures to the Office of Information Technology for progress toward making spatial information technology easy for people to use; making sure the data and information are documented, discoverable, and available; and defining and evolving new and innovative ways to put it to use. The Missouri GIS Advisory Committee Strategic Plan will help the Office of Information Technology lead Missouri into a spatially enabled information age for the state and its citizens.

A subcommittee comprised of the following individuals was formed for the purpose of drafting the strategic plan. However, the plan was developed with input and consensus of the MGISAC members.

Subcommittee Members

Tony Spicci (DOC) GIS Coordinator MGISAC Chair	Tim Haitcoat (MSDIS) Program Director	Jeff Schloss (DNR) GIS Coordinator
Liz Cook (USDA) GIS Specialist Secretary	Jason Smith (DHSS) GIS Specialist	Jennifer Peterson (City Utilities of Springfield) Senior Engineering Technician
Renee Holder (DNR) GIS Specialist	Stephen Daw (Missouri Mappers Assoc.) Director of GIS	Ryan Burson (OA) State Demographer
Julia Cole (EastWest Gateway) GIS Program Manager	Ann Peton (UMC-RUPRI-) Program Director	Mark Duewell (DHSS) GIS Manager (MGISAC Vice-Chair) (Strategic Planning Chair)

The subcommittee began the strategic plan development process with the reevaluation of the original nine issues of the 2001-2002 MGISAC Strategic Plan as well as consideration of the chief information officer's expectations for spatial information technology's role in government operations. The subcommittee then evaluated the committee's strengths, weaknesses, opportunities, and barriers. Using this information and the best judgment of the subcommittee, members established priority goals and produced a new list of themes as follows:

- Outreach/Education/Training
- Data Layers/Data Standards
- State Architecture
- Policy/Legislation
- Statewide Coordinator
- Homeland Security
- Management and Oversight

The subcommittee prioritized the above themes. Outcomes and measures were compiled within each area to track and fulfill these identified opportunities. This plan will be reviewed and updated on a biennial basis.

Vision

Improving Missouri with Geographic Information Systems

Mission

Foster cooperation among state, local, and federal agencies, educational institutions, private industry, and others in the field of Geographic Information Systems (GIS); provide guidance for the Missouri Spatial Data Information Service (MSDIS) in fulfilling the objectives of the Missouri GIS Strategic Management Plan (SMP); develop GIS standards for the state; provide an arena for discussions of relevant GIS issues; provide expert advice to the chief information officer (CIO) and the GIS community on GIS related issues; facilitate resolution of GIS issues impacting the state; coordinate and facilitate statewide training as needed; and work together with other states on standards and other GIS issues.

Theme Area 1: Outreach/Education/Training

Target Outcome: Increase visibility and understanding of the work of the MGISAC so the committee's purpose, mission, and work is understood more fully by state and local government agencies, the Missouri General Assembly, private enterprise, and others.

Objectives

- ◆ **Expand visibility and understanding of MGISAC's work within Missouri.**
 - **Strategy:** *Increase the utility of the Web site for MGISAC by posting information such as meeting dates, meeting agendas, meeting minutes, and the like, in a timely manner.*
MEASURE: The Communications subcommittee will track contributions to and activity on MGISAC Web pages.
 - **Strategy:** *Use written communication through the Office of Information Technology to provide annual updates to ITAB. Increase presence at conferences and events utilizing MGISAC exhibit booth. Develop articles and participate in different media venues.*
MEASURE: Completion and submission of updates to OIT. Track number, size, and type of conferences attended. Monitor posting of white papers, standards, I-Team plans, and the like, on MGISAC Web site and in appropriate media outlets.
 - **Strategy:** *Create separate MGISAC Web site that is supported through MSDIS*
MEASURE: Ensure the MGISAC has a distinct uniform resource locator (URL) and Web site.

◆ **Host and attend conferences in state and region.**

- **Strategy:** *Organize and host the state GIS conference with associated educational workshops in odd years to promote MGISAC activities and the development of professional networks and user groups. Actively participate in and support the Mid America GIS symposium with associated educational workshops in even years to allow for regional interaction of GIS professionals and the sharing of knowledge, processes, and protocols. Identify conferences and events for MGISAC and/or MSDIS to participate in.*

MEASURE: Odd years – State conference held and attendance and participation reported. Even years – Mid America GIS Consortium (MAGIC) symposium held and attendance and participation of Missourians reported. Log conferences attended by membership as representatives of the MGISAC.

◆ **Expand GIS Day participation**

- **Strategy:** *Participate in, encourage, and support annual GIS day events.*

MEASURE: Create a separate MGISAC Web page that contains available resources (presentations, vendor provided, organizations, events calendar) along with a feedback interface that GIS Day participants and sponsors can use to share their events/stories.

MEASURE: Post to the MGISAC web site a summary of activities and create a white paper that can be provided to MGISAC members and their affiliated organizations for use in articles/press releases.

MEASURE: GIS Day activities will occur or be sponsored in each of the represented entities of the MGISAC and be included in the annual report.

◆ **Educate and inform citizenry about GIS issues.**

- **Strategy:** *Develop introductory GIS materials for exhibit booth as well as training and informational materials for managers, legislators, the public, and so on.*

MEASURE: Ensure that printed copies are available for participant use at conferences and that information is available via the MGISAC Web site.

- **Strategy:** *Participate in national organizations and initiatives and inform citizenry about these issues and opportunities.*

MEASURE: Utilize the MGISAC Web site and monthly MGISAC meetings to provide information through regular updates and reports.

◆ **Expand knowledge and awareness of Geographic Information Technology (GIT) training opportunities.**

- **Strategy:** *Identify and post inventory of training opportunities on Web site and update quarterly.*

MEASURE: Verify that information is available and that quarterly updates are made.

Theme Area 2: Data Layers/Data Standards

Target Outcome: To promote accessibility of all GIS data within Missouri.

Objectives

- ◆ **Establish and publish an inventory of data holdings available at the MSDIS.**
 - **Strategy:** *Inventory the data holdings available at the MSDIS, grouping them thematically and posting this information in a searchable format.*
MEASURE: Completion and maintenance of this inventory activity on MSDIS Web pages.

- ◆ **Facilitate metadata development for inventory databases.**
 - **Strategy:** *Increase utility of data holdings by working with data producers to aid in the development of Federal Geographic Data Committee (FGDC)-compliant metadata for their data contributions to the MSDIS Web site.*
MEASURE: Percent of data holdings with FGDC-compliant metadata within MSDIS archive.

- ◆ **Identify gaps in the data inventory.**
 - **Strategy:** *Conduct data survey and needs assessment across the state and cross-reference them to the data holdings at MSDIS, identifying incomplete or unavailable data that are needed by the widest audiences and are of the greatest utility to data consumers.*
MEASURE: Completion of survey and needs assessment, and presentation to the MGISAC.

- ◆ **Develop a comprehensive searchable, graphical interface.**
 - **Strategy:** *Increase utility of MSDIS Web site for data discovery and query by thematically grouping data holdings and by developing a more comprehensive graphic user interface for interaction with the metadata elements compiled for these data.*
MEASURE: Redesign of MSDIS Web site and development of a schedule to establish and track milestones. This schedule will be developed jointly by MSDIS and MGISAC.

Target Outcome: To facilitate the development of GIS information in Missouri.

Objectives

- ◆ **Establish an implementation team (I Team) and develop an implementation plan for each thematic layer identified by the MGISAC.**
 - **Strategy:** *Identify data stewards and develop data specific implementation plans for data layers. Publish plans on Web site for review, comment, and revision. Publish final draft of implementation plan on MGISAC Web site.*
MEASURE: Completion of data development plans for identified thematic layers based on milestones set by MGISAC.

- ◆ **Increase the amount of data development funded by alternative sources.**
 - **Strategy:** *Identify federal and private grant opportunities (research or operational) in line with the objectives and direction of the agency database development activities that could be pursued. Compile these projects and provide a summary of these external monies.*
MEASURE: A report summarizing those database development activities undertaken that were jointly or wholly funded from external (i.e., other than state revenue) funding sources to be submitted by MGISAC to the OIT and Office of Administration-Budget and Planning.

Theme Area 3: Missouri Adaptive Enterprise Architecture

Target Outcome: Integrate GIT into the Missouri Adaptive Enterprise Architecture Plan (MAEA) – providing guidance for the development and enhancement of the State Information Technology infrastructure.

Objectives

- ◆ **Coordinate the development of an enterprise architecture plan for GIT integration into the Missouri Adaptive Enterprise Architecture Plan.**
 - **Strategy:** *Synthesize and summarize findings as a template for integration and adoption of GIT within the architecture plans of state and other governance sectors..*
MEASURE: Coordination of GIT template development.

- ◆ **Ensure GIT representation at appropriate state architecture domain meetings as development of the MAEA Plan progresses.**

- **Strategy:** Working with the OIT, appoint appropriate GIT representatives for the domain areas and committees generated by the MAEA to make recommendations for implementation of architectural elements relevant to GIT. Identify within these discussions those federal, state, and local initiatives that the MAEA would impact.
MEASURE: Active attendance and participation of the MGISAC designees in the activities of the SAP domains.

Target Outcome: To promote interoperability and standardization among core data layers being developed by the state and local government agencies and organizations.

Objectives

◆ **Development and endorsement of geospatial standards for database development and attribution.**

- **Strategy:** Review existing state, federal, and international geospatial standards. Create or add new components, modify components, or adopt reviewed standards. Publish through MSDIS and MGISAC Web sites for peer review and comment. Revise as appropriate and incorporate final standards within MAEA Framework.
MEASURE: Review and adoption of two (2) geospatial standards per year by the MGISAC. Incorporation of the standards as compliance components and standards within the MAEA Framework.

◆ **Implementation of and migration to two (2) geospatial standards annually by the state of Missouri**

- **Strategy:** Work with the OIT to gain official recognition and adoption of the proposed geospatial standards as endorsed by the MGISAC and incorporated into the MAEA Framework.
MEASURE: Recognition and adoption of two (2) geospatial standards per year for the state of Missouri.
- **Strategy:** Create awareness of geospatial standards within the state through the development of a local government review group.
MEASURE: Dissemination of geospatial standards for review through MGISAC Web site and list servers. Active review process with constituencies coordinated through the Local Government Review group.

Theme Area 4: Policy and Legislation

Target Outcome: Coordinate, monitor, and support policy and legislation that impacts geographic information within the state.

Objectives

- ◆ **Identify, develop, and coordinate funding opportunities to support GIT activities in the state.**
 - ***Strategy:*** *Identify funding opportunities and build the necessary coalitions to obtain funding for initiatives that align with the mission of the MGISAC.*
MEASURE: Research and report monthly on funding opportunities and assist in the development of partnerships and coalitions to obtain funding for relevant initiatives.
- ◆ **Coordinate and support policy and legislation that affects statewide GIT activities.**
 - ***Strategy:*** *Working with the OIT, research, review, track, and report on policy and legislation before the state legislature.*
MEASURE: Provide monthly updates to MGISAC members.

Theme Area 5: Statewide Coordinator

Target Outcome: Establishment of a state GIS Coordinator position.

Objectives

- ◆ **To establish a position to coordinate and facilitate geospatial technology activities for Missouri.**
 - ***Strategy:*** *Define the duties, roles, and responsibilities for the position. These are to include, but are not limited to, facilitating organizational cooperation, championing GIT in state government, coordinating funding, developing legislative action items, and acting as liaison to federal, regional, and local organizations. Create a justification package for the position based on this information. Investigate and establish funding mechanism and define the placement and authority of the position in state government.*
MEASURE: Delivery of justification package and funding scenario for the coordinator position to the OIT.

Theme Area 6: Homeland Security | Emergency Management

Target Outcome: Integrate GIT into Homeland Security and Emergency Management \ Response activities.

Objectives

- ◆ **Develop and maintain a Homeland Security GIS Action Plan.**
 - ***Strategy:*** *Create a MGISAC Homeland Security subcommittee to identify action items that will best infuse GIS into Missouri's Homeland Security. Action items will be*

identified through experience and expert knowledge as well as review of other state homeland security activities available through NSGIC and other organizations. Coordination and leadership of these action items will be dispersed to the appropriate stewards. Each action item will then be developed with activities, policy implications, milestones and timelines, outreach, education, budgets, and data-specific implementation plans.

MEASURE: Completion of Homeland Security GIS Action Plan and submittal to OIT and Homeland Security Officer.

◆ **Promote and coordinate use of GIT in federal \ state \ regional \ local emergency management \ response.**

- **Strategy:** *Identify Homeland Security liaison from MGISAC Homeland Security Subcommittee to participate in federal, state, regional, and local meetings where GIS and its application in public safety can be promoted and coordinated.*

MEASURE: Logged, active participation by MGISAC liaison in meetings with monthly reports to the MGISAC.

◆ **Promote the development and maintenance of the data and infrastructure necessary to support Homeland Security Emergency Response.**

- **Strategy:** *Coordinate with OIT, Office of Homeland Security, and MSDIS on the development of the communication infrastructure necessary to support Homeland Security efforts. Evaluate for Missouri the Homeland Infrastructure Foundation Level Database (HIFLD) and Homeland Security Infrastructure Program (HSIP) documents and the data needs listed as to their status and level of availability. Develop an action plan for the development of the databases and geospatial layers necessary to support homeland security planning, mitigation, risk assessment, and other operations.*

MEASURE: Completion of data development plans for identified data layers based on priorities set jointly by MGISAC, Office of Homeland Security, and OIT. Completion of secure access and password/firewall protected portal to homeland security data and related geospatial layers.

◆ **Actively support efforts to implement Homeland Security GIS Action Plan in key organizations for a GIS infrastructure.**

- **Strategy:** *Identify operational stewards for Homeland Security activities and promote the development of specific staffing, training, funding, and implementation plans for these agencies.*

MEASURE: Completion of implementation plans for identified agencies submitted to Office of Homeland Security and OIT.

Theme Area 7: Management and Oversight

Target Outcome: Coordination and oversight of GIS related activities in Missouri.

Objectives

- ◆ **Review MSDIS operations and budget and provide recommendations.**
 - **Strategy:** *Review quarterly MSDIS' operational status and financial reports relating to MGISAC activities, and ensure that activities align with the MGISAC Strategic Plan where appropriate.*
MEASURE: Quarterly reports generated and presented to the MGISAC for review. MGISAC will review the MSDIS work plan annually.

- ◆ **Develop a review process to aid coordination and oversight of GIS related activities in Missouri.**
 - **Strategy:** *Provide review for GIS related contracts, procurements and grants across the state. Inventory and identify existing projects to report on successes and lessons learned.*
MEASURE: Develop a review protocol. Provide recommendations on GIS project and program related matters.

- ◆ **Maintain proactive planning and review process for activities of the MGISAC and the MSDIS.**
 - **Strategy:** *Ensure that the various MGISAC subcommittees meet regularly so that coordination and development of work plans, tasking, and tracking metrics for outcomes are reviewed and revised as needed. Specifically, the strategic planning activity needs review and revision biennially.*
MEASURE: Creation and review of annual work plan for MGISAC and MSDIS. Biennial update of Strategic Plan.