# Minnesota Governor's Council on Geographic Information

FY2009 end-of-year Committee Reports

- Accomplishments
- Future Plans

## Committees

- Digital Elevation
- Emergency Preparedness
- Hydrography
- Land Records Modernization
- Outreach
- Standards
- Strategic Planning

**Purpose:** Promote the creation of statewide digital elevation data that is consistently accurate and available to the public.

Co-Chairs: Ron Wencl, U.S. Geological Survey

763-783-3207

rwencl@usgs.gov

David Claypool, Ramsey County

651-266-7170

david.claypool@co.ramsey.mn.us

- Actively promoted elevation projects and activities in MN
  - GIS/LIS conference panel session
  - Information exchange and status of known projects
  - Support Red River Basin & southeast MN projects
- Delivered technical information and support
  - Technical presentations/briefings at Committee meetings
  - Technical resources posted on Committee web page
  - Committee members assisted in preparation of statewide elevation program documentation
- Supported Legislative proposal by documenting specific needs and applications for high resolution elevation data

## **Future Initiatives:**

- Assemble work teams to:
  - Review technical specifications for statewide high resolution elevation data program
  - Study data collection costs, establish budget guidelines and evaluate existing data sources
  - Prioritize data collection areas and partnership options
- Support communication of statewide elevation program and technology

- Coordinate with State Agency and Statewide Advisory Groups for Elevation Program requirements
  - Start efforts in Summer 2009 for Spring 2010 acquisition
  - Develop data distribution strategy and prototype
- Continue statewide technical leadership role in Elevation Data and Applications development
- Recommendations for long term data maintenance and stewardship

**Purpose:** Serves as Minnesota's principal organization for promoting, coordinating, and standardizing GIS use across all levels of the state's Emergency Management community.

Co-Chairs: Kris Eide, MN Department of Public Safety, Homeland Security and Emergency Management 651-201-7404 kris.eide@state.mn.us

> Steve Swazee, U.S. Navy (Ret.) 651-456-5411 sdswazee@earthlink.net

- Grew committee membership from 122 to 170, with 60 serving on one of the committee's five work groups. <u>Now believed to be the largest state organization of its type</u>. Membership includes individuals from the:
  - GIS, emergency management, public health, public safety, and first response communities, who represent
  - Federal, state, county, city, service, corporate, academic and out-of-state entities (IL, NC, WI).
- Continued substantial development of the committee's public web site that serves as the:
  - Membership and event management hub through its electronic enrollment, contact data base, and event registration features, and
  - Public information hub on GIS/emergency preparedness through extensive links and informational downloads. The site has become a <u>national level hub</u> for U.S. National Grid (USNG), Red River Valley flooding, and pandemic influenza.

- Expanded committee's 2008 SharePoint effort (68 authorized users), into a ground breaking virtual workspace for GIS support during disasters. Refinement continues based on experience using:
  - Dakota County's SharePoint to exchange "For Official Use Only" and "Sensitive Security Information" data,
  - SharedGeo's GeoMoose based Common Operating Picture platform and Jabber secure Instant Messaging system,
  - Minnesota Geospatial Information Office (MGIO) provided online email and FTP backup file transfer capability,
  - National Interagency Fire Center's servers for product storage, and
  - Collaborative local efforts to obtain data.

- Continued administrative efforts to create a state sponsored GIS "Go Team" for disaster response including:
  - 9-page plan of action for formally creating a state GIS Go Team and improving the state's Emergency Operations Center (EOC) GIS capabilities sent from Commissioner Badgerow to Commissioner Campion,
  - Lessons Learned document concerning the Emergency Preparedness Committee (EPC) participation in the Republican National Convention security efforts released as part of the Proceedings of the Geospatial Information Technology Association 2009 National Conference, and
  - Memorandums of Understanding and procedural documents are under development that will facilitate formal activation, payment for services and standardized operating procedures.

- Supported the Republican National Convention National Special Security Event (NSSE) by:
  - First deployment of EPC's GIS Go Team and <u>first national use</u> of local GIS support inside the U.S. Secret Service (USSS) Multi Agency Communications Center (MACC).
  - Providing 24/7 event coverage using 10 individuals who received greater than 10 hours of specialized training provided by FEMA, USSS, and the EPC,
  - Creating and deploying a first generation Common Operating Picture that linked together the MACC and state EOC, and
  - Working through technical and procedural issues to achieve the <u>first national</u> <u>use</u> of Civil Air Patrol ARCHER imagery in support of a National Special Security Event.

- Supported the Red River Valley Flooding response by:
  - Developing and deploying a collaborative online work environment that allowed 25+ volunteers to map 220 miles of the Red River Valley in under a week with 1:24,000, 10 KM USNG standard map products for the entire valley and 1:6,000, 1 KM product for urban areas.
    - Maps incorporated latest available imagery, 2-foot contour intervals, previous flood extents, and were updated as new event information became available.
    - Products were available to the response community 24/7 through an online interface that allowed map selection by geo-location.
  - Contributing more than 1124 hours of event geospatial support.
  - Preparing to provide a National States Geographic Information Council (NSGIC) sponsored national webinar concerning the response during Fall 2009.

- Continued efforts to promote introduction of the U.S. National Grid in MN's GIS, emergency preparedness and first response communities. Efforts have placed Minnesota in a position of *national leadership*:
  - Worked with the GCGI Standards committee to develop the formal state standard passed by the full GCGI on March 25, 2009,
  - Provided training and support materials to various Minnesota organizations, as well as some out of state entities,
  - Continued working with local response communities on production of map books,
  - Featured as the story line for a front page article in the *Pioneer Press* on May 5, 2009, a feature article of Edina City publication, *About Town*, Winter 2009, and a soon to be released article on the FGDC web site, and
  - Entered discussions with GIS personnel of Wisconsin's Department of Military Affairs concerning joint USNG support to National Guard exercise Valiant Guard 2011.

- Promoted GIS use in the emergency preparedness and public safety communities through presentations and/or displays at the:
  - 2008 Minnesota GIS/LIS Conference (Oct),
  - Sherburne County CERT Meeting (Nov),
  - 27th Annual MN Government IT Symposium (Dec),
  - NSGIC National Webinar (Jan),
  - 2009 Minnesota Governor's Homeland Security and Emergency Management Conference (Mar),
  - GITA National Convention (Apr), and
  - Various smaller meetings with state, regional, county and city officials.

- Other substantial and ongoing efforts included:
  - Submitting articles for the GIS/LIS Newsletter,
  - Continuing development of what is believed will be the <u>first "state</u> <u>endorsed" program</u> for training GIS personnel in emergency management practices and procedures,
  - Continuing work toward a November 30<sup>th</sup> conclusion to the CAP grant for what is believed to be <u>a first in the nation effort</u> to create "state endorsed" data layers for schools, hospitals, fire stations and police stations.
  - Hosting quarterly meetings/training with attendance *averaging 34* during the past year (up from 22 in 2008).
  - Creating a Next Generation 9-1-1 Work Group.
  - Nurturing startup of the SharedGeo nonprofit that achieved IRS *tax-exempt status on May 14, 2009*.

#### **Future Plans (summer):**

- Near term points of focus (pandemic influenza/AMEM):
  - Completion of the CAP grant,
  - Formal introduction of committee's education plan,
  - U.S. National Grid related development activities,
  - Extensive upgrading and additional resources pages for USNG, Pandemic Influenza, HAZUS-MH, General Response, Common Operating Picture, Law Enforcement, WMD, Environment, Radiological, Wildfire,
  - Development of "Field support" products for the emergency preparedness and response communities, and
  - Refining and expanding Go Team operational capabilities
- Distant points of focus:
  - *"Continuing to eat the elephant, one pound at a time"* through ongoing execution of committee's Vision Statement.
  - Maintaining sight that this committee is about <u>saving lives and</u> <u>reducing suffering</u> through the power of GIS!

- EPC should continue to exist after the GCGI ends.
- Relative to the GCGI's other committee's, the EPC will probably require an organizationally unique structure.
  - It has both advisory and *operational* functions!
  - Continuing growth strongly suggests need for funding/administrative support.
  - State version of the Homeland Infrastructure Foundation Level Data Working Group?
- The number and extent of the rapidly expanding issues associated with emergency preparedness and response strongly suggest the need for a full-time support node in Minnesota government (e.g. New York State's Office of Cyber Security and Critical Infrastructure Coordination).
- Legislative involvement is needed to solve data sharing issues.

Purpose:

Promote consistent development of hydrography data and enable data exchange through coordination, cooperation and standards development.

**Co-Chairs:** 

Tim Ogg, Board of Water and Soil Resources

651-297-8024

tim.ogg@state.mn.us

Susanne Maeder, Land Management Information Center

651-201-2488

susanne.maeder@state.mn.us

Mark Olsen, MN Pollution Control Agency 651-757-2624 mark.olsen@state.mn.us

- Forum for information exchange on data development
- MN hydrography framework implementation (ctd.)
  - Integrated storm sewer data to NHD for Metro area (Met Council)
    - MN is *first* state to do this!
  - Developed work plan to research methods for integrating DNR 24K hydrography geodatabase and NHD data (EPA grant).
  - Participated in needs assessment, testing and evaluation of a national hydro event creation tool.
  - Fostered development and sharing of information:
    - Delivered presentations and technical workshop at National NHD/WBD Stewardship Conference (4/09)
    - Gave presentations on MN framework at:
      - EPA National GIS Workgroup meeting Chicago, IL (9/08)
      - NSGIC fall meeting Keystone, CO (9/08)

### **Accomplishments (continued):**

#### Watershed Data Development

- DNR's Statewide 'Minnesota Catchments' data made available for distribution through DNR Data Deli
- State's watershed definitions reviewed (as outcome of DNR Lakeshed Project)
- Minnesota's portion of 'Watershed Boundary Dataset', created from DNR's 'Minnesota Catchments', certified by NRCS

#### • Storm Water Guidelines

- Committee members participated on Storm Water Standards Work Group to complete draft guidelines for storm water data exchange
- Committee reviewed draft storm water guideline for consistency with surface water standards

#### **Future Initiatives:**

- Implement plan for use and maintenance of the framework
  - o Refine roles and responsibilities
  - o Implement MN NHD data update process
  - o Implement event creation and maintenance process
  - o Foster development and sharing of applications and tools
  - Integrate DNR 24K hydrography data improvements into MN NHD (2008 EPA Grant)
- Plan for future maintenance and stewardship of MN Watershed Boundaries
- Continue Phase 1 wetlands mapping activity and maintenance strategy
- Continue development of storm water mapping guidance

**Purpose:** Work to research and develop support for statewide Land Records Modernization for local governments.

**Co-chairs:** 

Sally Wakefield, 1000 Friends of Minnesota

651-312-1000 swakefield@1000fom.org

Curt Carlson, Regional MLS of MN, Inc.

651-251-3254 ccarlson@northstarmls.com

- Prioritized and focused committee goals via internal survey
- Redefined Committee mission and name
- Held 4 very well attended meetings via ITV with up to 8 sites participating from throughout the state
- Collected testimonials with examples about the value and benefit of parcel data to local governments
- Illustrating and posting testimonials on LRM website
- Began discussion about common attribution of parcel data leading toward discussion of "best practices" for attribution or RFP development

#### **Future Initiatives:**

- Continue to meet to explore issues and identify solutions to coordinate activities related to LRM:
  - Continue discussion of "common attribution" best practices
  - Develop "Model RFP" for adaptation by local governments seeking parcel data development
  - Continue to provide a forum for coordination of state agency parcel related efforts
  - Support MCGISA initiatives related to land records modernization.
  - Identify vehicles to communicate the need for accurate parcel information to satisfy the business needs of local government including if possible, quantification of the benefits

- Recommend committee work continue under the umbrella of the Statewide Advisory Group
- Recommend strong cross communication with State Agency Advisory Group, perhaps via workgroup
- Recommend committee change name to Digital Cadastral Data Committee (DCDC)
- Recommend mission change to: The Digital Cadastral Data Committee works to promote the research, education, implementation, and distribution of statewide guidelines surrounding the digital mapping of cadastral related data to promote and facilitate the development and sharing of data throughout the state, region, and nation.

**Purpose:** Works to connect the Council with its constituencies and to publicize its work to the broader community.

Co-chairs: Joshua Gumm, Scott County 952-496-8061

jgumm@co.scott.mn.us

**Jeff Grussing**, United Services Group/Great River Energy 763-241-2336 jgrussing@usgweb.com

- Facilitated Committee Outreach Initiatives
  - Strategic Plan, Drive to Excellence, MGIO
  - Working to assist LRM with Outreach needs
  - Revised Council's informational poster
- Involvement in Seminars and Presentations
  - Outreach attendance at the Government IT Symposium
  - Outreach member hosted the Midwest Utility Group User Group

- Promoted Inter-organizational Communications
  - Attended GIS/LIS Strategic Planning Retreat and other GIS/LIS Board meetings
  - Members attended LRM & Digital Elevation Committee meetings
  - Shared and discussed collaboration efforts and experiences

### **Future Initiatives:**

- Participate with other professional organizations and their associated conferences
- Continue and expand on attendance to other Committee meetings to identify Outreach needs
- Assist in communication and public relations for the MGIO & Advisory Council transition
- Explore other organizational relationships (Planners, Surveyors, Utilities, Public Health, K-12 Educators)

- Outreach should stay a committee of the Minnesota Geospatial Advisory Council (Statewide)
- Priority could be given to MGIO outreach needs



**Purpose:** Help coordinate strategies for integrating geospatial data and business processes across all levels of government.

Co-Chairs: Eileen Quam, MN Office of Enterprise Technology

651-556-8017

eileen.quam@state.mn.us

Mark Kotz, Metropolitan Council

651-602-1644 mark.kotz@metc.state.mn.us

- Finalized multi-year CTU identifier standard process
- USNG standard approved
- Progress on storm sewer data standard
- Streamlining standards info on web

- Finalized multi-year effort to put in place a responsive and sustainable state municipal identifier standard process
  - Completed work begun in previous years
  - Worked with LMIC to create an online database and cross reference table for CTU identifiers
  - Approval of state CTU identifier standard
    - Public review
    - Committee approval
    - GCGI approval
    - Posting on OET website

- USNG standard approved
  - In conjunction with EP Committee
  - Approval of state USNG standard
    - Public review
    - Committee approval
    - GCGI approval
    - Posting on OET website

- Storm sewer data standard in progress
  - Storm sewer data workgroup led by PCA
- Streamline standards info on web
  - Standardize the format of all existing state geospatial standards
  - Streamlined committee website

### Looking Back... Ten GCGI Standards:

- 1. State IDs
- 2. County IDs
- 3. CTU IDs
- 4. IDs for reaches and watercourses
- 5. IDs for watersheds
- 6. IDs for lakes and wetland basins
- 7. US National Grid
- 8. Coordinate exchange
- 9. Measuring and reporting positional accuracy
- 10. Minnesota Geographic Metadata Guidelines

## **Future Initiatives - Standards**

- Complete and approve storm sewer data standard
- Revise MGMG
- Respond to National Address Data Standard

- Develop a long-term solution to the state standards approval process. What role does MGIO play?
- Standardized practices/policies for data access MGIO could be a real leader – maybe not in the realm of this committee

- Standardized/coordinated data sharing with map services shared federation of architecture (trust, reliability, SLAs)
- Shared, standardized applications and web services not just data!
- Geospatial commons and broker

- Where does this committee fit in the new organizational structure?
  - Some initiatives are state-wide data standards
  - Some might be best started with state agencies shared architecture
  - Some will need the leadership and/or resources of the MGIO geospatial broker

**Purpose:** Identifies emerging opportunities, desired outcomes, and guiding principles to cultivate a strategic plan for the MGIO

Co-Chairs: Victoria Reinhardt, Ramsey County 651-266-8363 victoria.reinhardt@co.ramsey.mn.us

Mike Dolbow, MN Department of Agriculture

651-201-6497 mike.dolbow@state.mn.us

### **Accomplishments:**

• Championed broad vision and priority goal for the Council:

"The creation and adoption of a state governance model for GIS, utilizing and expanding upon the ... governance structure for a proposed Minnesota Geographic Information Office"

- Endorsed and supported the Drive to Excellence project on GIS Coordination, leading to successful legislation creating the Minnesota Geospatial Information Office (MGIO).
- Created and endorsed guidelines for geospatial advisory bodies in governing the MGIO.

### **Future Initiatives:**

- Present initial recommendations on transition from Governor's Council governance structures to new MGIO Advisory structures.
- Create a two-year strategic plan for the MGIO that identifies top priorities and desired outcomes from the Applied Geographics Program Design Document.
- Sponsor geospatial strategic planning sessions at MN GIS/LIS Consortium and MN Government IT conferences.

- Strategic planning recommendations for the MGIO will be reported directly to the CGIO
- Strategic planning recommendations for the state as a whole will be reported directly to the chair of the Minnesota Geospatial Advisory Council (MGAC)
- Suggested alternating cycle for planning and monitoring:
  - Year One: Planning Identifying goals and opportunities
  - Year Two: Monitoring Measuring progress against goals
- Committee will continue to consist of members from both state government and the wider community