

Minnesota Geospatial Advisory Council Meeting Minutes

March 6, 2019

Blazing Star Room, Ground Floor, Centennial Office Building

658 Cedar St., St. Paul, MN 55155

11:00 a.m. – 2:00 p.m.

Members Present: Brad Anderson, City of Moorhead; David Brandt, Washington County; Preston Dowell, St. Louis County; Scott Freburg, MNIT Dept. of Education; Kari Geurts, MNIT Natural Resources; Madeleine Kerr, University of Minnesota School of Nursing; Len Kne, University of Minnesota; Mark Kotz, Metropolitan Council; Chris Mavis, Hennepin County; Andra Mathews, Minnesota Center for Environmental Advocacy; Philipp Nagel, Bolton & Menk; Ben Richason, St. Cloud State University; Cory Richter, City of Blaine; Gerry Sjerven, Minnesota Power; Ryan Stovern, St. Louis County; Benjamin Timerson, Minnesota Department of Transportation; Brandon Tourtelotte, Pro-West and Associates.

Members Absent: Scott Abel, Red Lake Band of Chippewa Indians; David Bendickson, Minnesota National Guard; Jeffrey Bloomquist, USDA Risk Management Agency; Victoria Reinhardt, Ramsey County; Dan Ross, MnGeo.

Non-Members Present: Andrea Bergman, MNIT Natural Resources; Curt Carlson, MnGeo; Mike Dolbow, MnGeo; Mike Eull, Minnesota Department of Transportation; Brad Henry, Minnesota 2050; Nila Hines, Minnesota Department of Natural Resources; Brenda Hoppe, Minnesota Department of Health; Pete Jenkins, Minnesota Department of Transportation; Robin Mathews, Pine County; Nick Meyers, Esri; Rick Moore, MNIT Natural Resources; Jennifer Nelson, Minnesota Department of Public Safety; Kent Park, Woolpert; Nancy Rader, MnGeo; Justin Roberts, Minnesota Department of Transportation; Chris Sanocki, USGS; Jamie Schulz, MNIT Natural Resources; Alison Slaats, MnGeo; Stacey Stark, University of Minnesota Duluth; Sean Vaughn, MNIT Natural Resources; Pat Veraguth, Douglas County; Sally Wakefield, Minnesota Department of Revenue; Clayton Watercott, Metropolitan Council.

References

This meeting included references to the following resources:

- [Slides](#)
- [Agenda Packet](#)

Call to order (Chair)

Kotz called the meeting to order, and attendees introduced themselves.

Kotz called for **approval of the agenda**. Members approved the agenda unanimously.

Kotz called for a **review** of the meeting minutes from **12/5/2018**. Minutes were approved unanimously.

Committee and workgroup annual reports – review and approval

Kotz noted that we ask every committee and workgroup to provide accomplishments from the previous year and submit their work plan for the coming year. He asked for any comments and called for **approval of the reports and work plans**. They were approved unanimously.

GAC overall accomplishments and work plan review and approval

Kotz relayed that this list was put together by the GAC leadership team, and asked for members to give it a brief review. Brandt noted that it is important to get some recognition of the accomplishments.

Mathews asked if the seat for Surveyors has been announced yet, and Kotz replied that it will become official when new terms start in July. Kotz called for **approval of the work plan and accomplishments**, and they were approved unanimously.

Image Service Sustainability Committee approval

Dolbow presented the slides on a new committee to help govern the MnGeo Image Service. Kotz noted the high use and value of the service, and added that having the GAC provide some guidance is an important role. Vaughn asked if there was a cost to archiving, and Dolbow replied that there was a cost, as well as a variety of options to create archives. Mathews asked if there was a definition of low usage, and Dolbow replied that it was defined in the “decision matrix”, and that usage was not the only factor for decisions. He cited the example of the 1991 statewide collection as having a historical significance, and therefore not likely to become a “retirement candidate” within the service.

Kotz called for **approval of the Committee creation**, which passed unanimously.

Parcel Data Standard revision approval

Kotz noted that after the last revision of the parcel standard, metro counties made several attempts to implement it, and as a result of those attempts, they proposed minor modifications to the standard. Thus, version 1.1 of the standard is being asked for approval. Kotz reviewed the key changes in the slides. For example, the PIN field is no longer mandatory for “non-standard” parcel records, such as those used for right-of-way or water. He called for comments or questions.

Mathews moved to **approve version 1.1 of the standard**, Richter seconded, and the motion passed unanimously.

GCGI standards for state, county and CTU codes revisions

Kotz relayed that the former Governor’s Council on Geographic Information (GCGI) created 10 standards during its existence. Recently those standards were revisited for a review of the language and content. As a result, the Standards Committee proposed changes, which Kotz reviewed on the slides. There were no changes to the State ID or CTU ID standards except formatting.

A change to the county ID standard was proposed: use the 5-digit code that is recognized by the federal government and unique across the country. This would only be required when the data is intended to be used outside of state boundaries.

Mavis moved to **approve the changes to the three standards**, and Dowell seconded. The motion passed unanimously.

Governor's Geospatial Commendation Award language changes

Richter noted that the language for Commendation Awards was reviewed in order to incorporate an additional goal in the awards criteria: "Exemplary use of geospatial technology that effects positive change and/or improves the quality of life in Minnesota". Some minor cleanup of the award language was also made. Richter reviewed the changes from the Agenda packet. The language on how to submit a nomination was also clarified, e.g., individuals within organizations should be named to represent organizations being awarded.

Kotz thanked Richter and her group for the proposed changes. Rader noted that there is already one nomination being prepared for these awards, so we could check now for new or changed group members. Sjerven asked if the dates and timelines could be moved earlier to May, so that the Consortium can include information about the award in their conference program. Rader replied that the deadline is already at the end of May, and posted on the appropriate MnGeo web page. She added that MnGeo has ideas to improve delivery of the decision(s) to the Consortium in the future.

Kotz noted that this group is not officially a Committee of the GAC, and perhaps it should be. Richter replied that it could be.. Geurts asked what the difference was between a Committee and a Workgroup, and Kotz explained that the difference is that Workgroups typically have short-term goals or projects to deliver and complete, whereas Committee work is typically ongoing. Vaughn endorsed the concept of establishing a Committee in order to increase understanding of what organization was responsible for processing award nominations.

Sjerven **moved to approve the proposed changes**, and Stovern seconded. The motion passed unanimously.

Richter commented that the awards group actually benefits from an informal structure. Mathews agreed that it doesn't seem to meet the requirements. Stovern noted that it was formed on an ad-hoc basis. Dolbow added that some existing Committees, such as Standards, only meet when they are needed, so there is precedence for a Committee that has ad-hoc membership. Geurts said she liked the formality of a Committee. Kotz asked the existing awards group to consider the formation of a Committee.

Richter asked if there would be new members in the awards group. Kotz asked who would be interested, and Brandt, Richter, Kne, Mathews, Stovern, Nagel volunteered.

Parcel and Land Records/boundary alignment update

Dowell noted that "Updated and aligned boundary data from authoritative sources" is the third priority identified by the GAC. He relayed the information on the slides, such as inconsistent boundaries between counties, even within one dataset. When additional datasets are brought in, regular discrepancies of up to 150 feet are easy to find. In St. Louis County, they have certified some actual government corners that have been surveyed by a professional. They have aligned their boundaries to those corners in order to create authoritative data.

Along with surveyors such as Dowell, MnGeo has been pursuing a project to align boundary data throughout the state, informed by authoritative data. That means official certified corners such as those done in St. Louis County. A subgroup of the Parcels and Land Records Committee has been identifying how this work fits in with the Committee's work. As they reviewed the Committee's current mission statement, it included the strengthening of ties between the geospatial and surveying professions, as well as standardizing and sharing geospatial data with

alignment to the public land survey. As a result, they decided this work was well within the domain of the Parcels and Land Records group.

They then reviewed a project summary created a few years ago by Wakefield. They focused on the importance of the PLSS and restoring it as foundational data. They then ensured that more surveyors would be involved in leading the effort. The hope is to see future surveyors sharing and publishing their data. There are also committees that exist within professional surveyor organizations with work that aligns with this effort.

Their first focus is on outreach, and then an inventory of PLSS township corners in the state. They have identified that a lot of work remains in order to meet such a goal. They also have identified a significant need for new funding.

Dowell demonstrated the [interactive status map](#) that shows information such as how many corners are certified and county surveyor information. Stovern noted that it also conveys which counties have full time, part time, or no county surveyor. Matthews noted that only a licensed Minnesota Surveyor can establish an official government corner, but that includes work done by DOT surveyors.

Hazard mitigation and climate adaptation initiatives

Stark relayed the slides, noting that she hopes to generate discussion. She noted that GAC members could consider the Council's role in ensuring the availability of critical facilities data, for example. The Geospatial Analysis Center at the University of Minnesota Duluth has worked with about two-thirds of Minnesota counties on hazard mitigation efforts. Their work relies on data published on the Geospatial Commons and other data produced by state agencies, such as the Department of Health and the Department of Natural Resources.

She relayed some of the requirements behind hazard risk and vulnerability assessments conducted under FEMA standards. An example analysis is identifying chemical storage facilities near public water supplies. She explained details behind the slide on essential facilities such as schools, police stations, fire, and critical care. She showed a longer list of ten additional types of Critical Facilities, with various sources, and defined as "critical" for various reasons.

An example area for improvement is the state's ARCHIBUS database, which contains quite a bit of information about state owned facilities and valuations, but which needs to be spatially enabled in order to accurately assess proximity to floodplains.

Hoppe then relayed her slides and information on the Minnesota Climate & Health Program, and efforts to develop a Minnesota-specific climate projection report. There is a lot of activity currently taking place in growing the understanding of data for climate resiliency efforts. More advanced data is required now that past data is less predictive of the future, given the rapid changes taking place on the planet. It can be critical to downscale federal datasets and utilize technical expertise in order to better understand such data. Otherwise, user-friendly interfaces need to be developed in order to allow end users to access and relate this data to other disciplines. She invites members of the GAC and the geospatial community to join the Minnesota Climate Data Community of Practice group; she can field those requests via e-mail.

Hoppe closed by encouraging the audience to check out the California and Massachusetts climate resiliency portals. A new piece of legislation, HF1251, has been introduced in order to fund small area climate model projections for Minnesota.

Kotz noted that this topic is an excellent fit for the Emergency Preparedness Committee. Geurts noted that the Outreach Committee and the State Agency GIS Collaborative also have roles. Dolbow noted that databases behind

these types of critical facilities are frequently only storing address information, not spatially enabled records, which significantly impacts their usefulness in these efforts.

3D Geomatics Committee workgroup updates

Vaughn relayed information on their slides, including organization of the 3D Geomatics Committee. There are currently 5 active workgroups within the Committee. This includes a new [Education Workgroup](#), which is seeking new members. The acquisition workgroup is now working on a Statewide LiDAR Acquisition Plan, coordinated by Slaats, and is also actively recruiting members.

Bergman opened the slides on the Hydrography workgroup, explaining some nomenclature changes and the continuation of work that had been done previously by the GCGI Hydrography Committee. They are organizing membership as well as delivering presentations on the current state of hydrography data and inefficiencies that result from duplicative efforts. Their vision is for a single authoritative hydrography dataset that will restore the public trust in decisions informed by the data.

Schulz relayed slides on the Data Catalog Subgroup, which is working to identify the scope of hydrography needs within the state, identify limitations of the current data, identify gaps, and define requirements for new products. Since current statewide data often doesn't meet the needs of users, some are creating their own data, which leads to duplication.

Moore then discussed the work of the [Breachline Subgroup](#). Much of the hydrographic analyses require hydro-modified DEMs, which in turn require breachlines. The subgroup is working to create a foundational authoritative digital dam breachline dataset. His slides included a Workflow and Business Model with details behind creating a database. They have drafted standardized attributes, methodologies, and a pilot status map for identifying existing areas where breachline work has been conducted.

Vaughn closed that funding this work would cost approximately \$8-10 million statewide. Moore added that culvert data information is essential and extremely useful for these efforts.

Legislative updates

Kotz relayed that Ross had provided no legislative updates to convey in his absence. He noted that the legislation that authorizes the GAC states that we need to renew terms every two years. Rader added that the current members have terms that expire June 30, and that members who want to serve another term will need to go through the Open Appointments process via the Secretary of State. She noted that an e-mail with instructions will go out soon, and that the Surveyor's seat will be established at that time. She concluded by saying that MnGeo always appreciates knowing whether or not current members plan to apply for another term.

Updates on MN GAC priority projects and initiatives

Kotz called for updates from Project Owners on the priority projects. Kne said that he would pass on the ownership of the free and open data priority to Geurts. Geurts noted that the Outreach Committee did have a recent meeting to create the report documents, and that they are soliciting individuals for a co-chair position.

Dolbow noted that MnGeo is working hard to update parcel aggregation code to match the newly adopted standard, and that is a lot of work. Brandt noted that MESB is working on a viewer that will include parcel data. Stovern added that St. Louis County's parcel data is ready to be published in the new standard as well.

Mathews provided an update on the archiving priority, noting that they have compiled recent survey results, and have subgroups working on smaller tasks, such as a priority data list for archiving. They are hoping to present findings to the GAC at the next meeting. Their next steps will be to formalize an agreement and method, and then to outline that at the fall Consortium conference.

Kotz noted that the Road Centerline standard is now in a second round of public review comments. The expectation is that a final version of the standard will be available to submit to the GAC at the May meeting.

Sjerven noted that the 3D Geomatics Committee has spun up an Acquisition group to look at a new LiDAR acquisition, including development of a new statewide plan. He noted that Slaats will be assisting with that effort. Hydro and Education groups have also been created to guide usage of new acquisitions.

Dolbow reported that there were few new details on Address Points or the Basemap Services priorities.

Richter reported that a group will meet on March 20th to assess the EM Damage Assessment Data Standard, and noted that they still need a project Champion. She asked what that person should do, and Kotz offered to clarify that for Richter later.

Vaughn noted that the Hydro-DEM priority is on the list mostly as an awareness item. He noted that he and Moore continue to serve as liaisons to BWSR on methods for hydro-modifications. They are also working on a standard.

GAC SharePoint site(s)

Slaats reported that MnGeo is now providing a collaborative workspace for committees and workgroups to work with. There is a new SharePoint site specifically set up for the GAC, and all GAC members will be able to view it at the “parent” level. Slaats relayed the information on the slides about goals and responsibilities for the site and its “subsites”.

She relayed that the setup for the 3D Geomatics Committee will likely have a document library for each subcommittee. Slaats, Dolbow, and Rader will e-mail details to the GAC members to relay this information. Kotz clarified that the use of this tool is not required of committees and workgroups, but it is an available option.

Announcements or other business

- Kotz relayed that the Metropolitan Council needs to fly aerial photography of the metro in 2020 at 1 foot resolution, and buy-up options will be available.
- Brandt said that the MESB sees a need to have merged metro data in one spot in order to assist with 911 and emergency management. MetroGIS has also been actively working on a stormwater data standard.
- Mavis noted that a partnership between Wisconsin and Minnesota to determine the official state line is developing.
- Geurts noted that she and Timerson continue to chair the State Agency GIS Collaborative, and that state agency employees are welcome to get involved and learn more.
- Timerson echoed the need for an official border between the states. DOT welcomes DNR’s information sharing around ArcGIS Pro. They are also hoping to host the 2020 American Association of State Highway and Transportation Officials (AASHTO) conference in Minnesota.
- Richason noted that St. Cloud State University conducted surveys of geospatial curriculum in 2015 and 2017, and has plans to repeat it in 2019. These surveys help assess the changes in university curriculum

over time. They are also looking to learn from public agencies and private companies what kinds of skill sets they are looking for in candidates when they hire from universities.

- Richter said that municipal governments are focusing on promotions around the 2020 Census, and that the Census is hiring part time workers to do field work next year. She noted that a survey link went out recently to poll individuals for Consortium Spring and Fall Workshop topics.
- Kne noted that the University now has over 8,000 users in ArcGIS Online, and they are seeing very wide and varied uses throughout the University.
- Kerr said that she will be teaching a module on Mapping and GIS with Ryan Mattke for an online continuing education course offered this spring by the University of Minnesota School of Nursing. “CNE 151: Data Science Methods for Clinicians” is an overview course with a focus on understanding new data analytic methods and applications in healthcare.
- Sjerven noted spring workshops and fall conference news, including the recent announcement on the [call for presentations](#) for the fall conference. He added that the deadline will not be extended this year.
- Freburg said that school district boundary and attendance data is now being updated via parcel data for all 87 counties in the state. There are now about 425 school districts and schools using ArcGIS Online.
- Stovern echoed some of Sjerven’s details around Consortium Spring Workshops and fall Conference planning. Some big changes are coming to the Conference, such as digital programs.
- Dowell said that the Minnesota Society of Professional Surveyors had their annual conference in the Twin Cities recently and that it was successful, including some presenters from the geospatial community.
- Mathews asked about the logo design competition for the Conference, and Stovern replied that the competition is closed. She also asked if remote attendance for the Workshops were available, and Stovern asked for that to be requested specifically in the Workshop survey. She closed with a request for resources she can relay to students looking for internships and student worker jobs.

Adjourn

Kotz called for a motion to adjourn the meeting, which was moved and seconded. The group voted to adjourn at 2:00 PM.