Minnesota Geospatial Advisory Council Meeting Minutes

September 19, 2017

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: Scott Abel, Red Lake Band of Chippewa Indians; Jeffrey Bloomquist, USDA Risk Management Agency; Andra Bontrager, Minnesota Center for Environmental Advocacy; Preston Dowell, St. Louis County; Scott Freburg, MNIT @ Dept. of Education; Madeline Kerr, University of Minnesota School of Nursing; Len Kne, University of Minnesota; Mark Kotz, Metropolitan Council; Chris Mavis, Hennepin County; Victoria Reinhardt, Ramsey County; 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, EagleView Technologies.

Members Absent: David Brandt, Washington County; Kari Geurts, MNIT @ Natural Resources; Dan Ross, MnGeo; Danielle Walchuk, Region Nine Development Commission, David Bendickson, Minnesota National Guard; Brad Anderson, City of Moorhead; David Kelley, University of St. Thomas.

Non-Members Present: Susan Brower, Minnesota State Demographer's Office; Will Craig, retired; Mike Dolbow, MnGeo; Brad Henry, Minnesota 2020; Randy Knippel, Dakota County; Geoff Maas, MetroGIS; George Meyer, Otter Tail County; Nancy Rader, MnGeo; Chris Sanocki, USGS; Alison Slaats, MnGeo; Sean Vaughn, MN.IT @ Natural Resources; Sally Wakefield, Minnesota Department of Revenue; Ron Wencl, USGS.

References
This meeting included references to the following resources:

- Slides
- Agenda Packet

Welcome and Business

Welcome new members

Kotz opened the meeting announcing that new members are here and asked for introductions. Members present introduced themselves, their desire to participate on the Council, and the sector they represent. Non-member attendees also introduced themselves. Kotz explained the absences.

Approval of agenda

Richter motioned, Reinhardt seconded, and the motion was approved unanimously.

Approval of meeting minutes from 5/31/2017

Sjerven motioned, Richter seconded, and the motion was approved unanimously.

Review and accept committee and workgroup summaries and update to Standards Committee work plan (All)

Kotz reviewed the task and explained that details are in the handout for the meeting. No questions were raised. Bontrager moved, Mavis seconded, and the motion was approved unanimously.

Update on letters of support from May meeting (Kotz)

Kotz explained that two letters of support were requested from the GAC. First, support for NSGIC coming to Duluth for their conference in 2018, which has now been decided, negating the need for a letter. Second, for an LCCMR proposal on improving watershed management by modernizing hydrography data. That letter was composed and delivered. Vaughn explained that the proposal was not granted a hearing by the LCCMR.

Description of GAC annual process and logistics (Kotz, Rader)

Kotz explained that this is a basic orientation for new and current members. He explained that there are currently four committees (see slides). Each current committee has at least one chair, most have either co-chairs or vice-chairs. Each committee has a page on the GAC website (see http://www.mngeo.state.mn.us/committee). Kotz explained that the committees report to the GAC, and perform most of the work accomplished by the GAC.

Bontrager promoted the work of the Standards Committee, noting that Maas has created a decision tree explaining how it interacts with the GAC. Kotz added that committees do periodic presentations to the GAC at meetings.

Kotz further explained how the GAC identifies statewide projects & initiatives and prioritizes those via sector representatives and communications with the broad community. The 2017 GAC priorities were shown on slides. Kotz explained that a new round of prioritization would take place for 2018 priorities. He explained the process as it was outlined on the slides. The value of each priority is assessed, along with its likelihood of success – measured by the presence of an owner, funding scenarios, and other details.

Kotz explained that the prioritization is important because it is how the GAC represents the voice of the state GIS community, primarily as advice to MnGeo but also via other avenues. He explained that one of the key duties of GAC members is to represent their sector, even though that may be a difficult task. Each GAC member is also provided a NSGIC membership.

Rader reminded the room that much information is available on the GAC website, and encouraged attendees to let her know if they have questions or spot anything that needs correction.

Bontrager asked for an explanation of sector reports, and Kotz noted that we do one or two of those at each meeting to attempt to have members explain how they interface with their sectors.

Vaughn added that he is a strong believer of coordination and collaboration, and that promotion of statewide data efforts is extremely important. GAC members can take high-level needs back to their sectors and agencies, and can help committee chairs build support for data creation and maintenance. Kotz added that the GAC can issue letters of support, but also members can do individual efforts to build support.

Reinhardt added that there have been unsuccessful attempts to have GAC presentations at the Association of Minnesota Counties (AMC), but there are still ways to involve AMC for things like supporting legislative initiatives. That is important when it comes to funding for new initiatives. It is not easy to gain AMC's support because GIS has not had great visibility in the past, but that is changing, and there are new people championing GIS efforts. That can be a powerful voice at the legislature. When it comes to funding these efforts, policy makers need to be aware of how much effort and costs go into making spatial products.

Dolbow relayed to the group that coming meetings are December 6, 2017, March 28 and May 30, 2018.

Approval of new 3D Geomatics Committee (Sjerven, Vaughn)

Vaughn spoke to the slides. A new steering committee has been created to guide the effort. Sjerven and Vaughn are co-chairing, and Vaughn explained the reasons behind the new name of the committee, having a strong correlation with 3D mapping and engineering disciplines behind acquisition of point cloud data. He explained the mission statement of the committee, the multidisciplinary approach, and the recent history.

Vaughn explained that procurement is a very important part of the committee's work, because 3D data representing our landscapes needs to be updated over time to be useful and successful as a foundational data set.

Sjerven explained that additional details are in the meeting handouts. He explained that there have been about 10-12 meetings of this group, with many different voices, so they have been trying to focus on the name and narrowing the active group to the steering committee. They have been meeting regularly over the summer. He noted that the committee name needed to be general enough to be inclusive, although it is a challenge to let potential stakeholders know that LiDAR technology is one of the key components under the committee's mission. Right now, they are looking for feedback from GAC members.

Henry asked if the scope is only above ground, since his group is in the process of putting together a 3D underground project. Vaughn replied that underground is not excluded, although that is very new. Sjerven added that not everyone could be on every multidisciplinary sub-committee of the group. Thus, they are hoping to leverage the Outreach Committee to survey the community and find which areas have the most momentum to drive subtopics and specific goals.

Kotz asked for a motion to approve the new 3D Geomatics Committee's charter. Richason moved, Stovern seconded, and the motion passed unanimously. Sjerven added that many outreach efforts are still underway and planned, noting that they will look to finalize the 2018 work plan at the next meeting. Kotz thanked Sjerven and Vaughn for their involvement and efforts.

Geospatial Data Act (Kotz)

Kotz explained that a group called the Coalition of Geospatial Organizations (COGO) at one time gave very poor grades to the federal government on the National Spatial Data Infrastructure (NSDI). In 2015 new legislation was proposed called the Geospatial Data Act to attempt to improve the levels of coordination at the federal level for supporting the NSDI. It did not make it through committee. It has been proposed again in 2017 with some added language.

Reactions from national organizations are mixed; overall, the intent appears positive. However, there are some problems with language affecting federal government procurement, depending on the interpretation. Kotz opined that until COGO can reach agreements on that language, which seems unlikely, this legislation is likely going to stall.

Mavis noted that the act has been brought up to surveyor organizations, which are generally against the current language. Kotz noted that COGO's voice would be very powerful if they could agree on it. Reinhardt said that influence is not necessarily only achievable via letters of support (or a position against): suggested changes can be drafted and supported, or concerns can be expressed in a letter. Mavis said that we do not exactly want this overall intent to die, and that the differences should be worked out. Craig added that such a letter could go to COGO and that Senator Hatch (UT) is the author.

Motion: Reinhardt moved that we draft a letter to send to the COGO office, cc'ing Senator Hatch's office and other legislative sponsors, explaining that we would like these issues to be worked out so that the legislation can move forward.

Wakefield asked what the surveyor concerns are, and that MNIT's legal counsel should be leveraged to make sure we coordinate with the Governor's Office. Mavis replied that GIS and surveying communities have had different interests in the past, and they are two different kinds of professions that have different positions on data collection and licensing.

Kne asked if we are staying neutral on the language, and what our request would be. Kotz said we would only encourage COGO to come to an agreement in order to move it forward.

Kotz called for a vote on Reinhardt's motion, and it passed unanimously.

Local Update of Census Addresses (LUCA) program

Brower explained that the LUCA work and collaboration with MnGeo is to get cities and counties more involved in sharing data compared to the past. Getting the data in order is important before the Census happens.

Brower explained the context of efforts at the federal level. So far, there has not been a ramp-up of Census funding at the federal level when compared to previous decades. As a result, the Census Bureau appears to be under staffed, making it important for us to have our data in order at the state level.

Brower referred to the slides. At stake is Congressional representation for Minnesota, demographic data for state-level redistricting, and federal funding allotments. As a result, we need to do our best to complete accurate data that fairly represents the population. The LUCA program is the best chance for local organizations to influence that counting and provide the best data to the Census.

The Census has a Master Address File (MAF), which they add to over the decades with data sources such as the US Postal Service, Social Security Administration, and other datasets not typically available to states or local government. LUCA invitation letters typically go to the highest elected official available, such as the mayor or county board chair. Brower asked members to make sure that they know those letters are being found by the right people.

Reinhardt added that she will be signing that form for Ramsey County, and that Matt Koukol will be the key contact for the county. She suggested that those letters are likely best directed to the GIS folks who are going to be doing the work. It does not come electronically. Brower offered that she could help track down letters for any government agency in MN.

Bontrager asked if there was a deadline to respond to the invite, and Brower replied that it is December 15. It is better to register earlier and get access to online training materials. After an agency receives their packet to review (in February), they have 120 days to return it (in April). Meyer commented that he looked at the electronic submittal process (the "GUPS") and that it appeared somewhat confusing to him, and that trainings have been cancelled. Brower replied that the Census Bureau staff charged with those trainings are stretched thin. Meyer suggested that a state GIS user group might be a good target for training.

Reinhardt added that the funding situation is definitely a problem. Ramsey County offered to be a test site for assistance and communication.

Brower noted that there are currently 12 counties registered for the 2020 LUCA. At the LUCA website, you can see an interactive map of who has registered at the county, city, and tribal level. The Demographer's Office will be working with MnGeo to submit for local governments that don't register, and to coordinate with those that do register. She noted that this opportunity to share data with the state is very specific but can be leveraged for other efforts, and they are encouraging local governments to do that.

Sector Report (Kerr)

Kerr explained that even though she is an at-large member, she considers her sector to be the health industry. She explained that residence location has an impact on an individual's health. She showed slides on health outcomes across the state, and provided details on three activities that her students pursue on spatial learning: Age-Friendly Cities Checklist, Crisis Mapping (via Humanitarian OpenStreetMap Team), and the Omaha System Windshield Survey of Local Communities.

Kerr noted that the GAC provides a valuable connection to the broader state GIS community, and information about valuable technology developments that might impact students. Bontrager asked if Kerr would be attending the Bemidji GIS/LIS Conference and recommended that Kerr connect with the strong nursing program at Bemidji State.

EPC Update on USNG (Knippel)

Knippel presented slides to the group. The Emergency Preparedness Committee (EPC) currently has two focuses: the damage assessment standard, and the US National Grid (USNG). Regarding the USNG, he noted that their efforts are fundamentally about basic mapping with emergency responders. Their training on the USNG helps first responders learn how to use and map USNG coordinates within a half hour. Many phone apps support the system. A large part of the effort is to educate individuals about the problems that USNG solve, particularly agreeing on one coordinate standard so that the "ground rules" don't need to be agreed on during an emergency situation.

Knippel added that in addition to phone apps, Esri has been developing many tools in ArcGIS Online, tools for ArcGIS Desktop, and enhancements to their geocoding service. EPC recently conducted the Upper Midwest USNG Summit in Lacrosse and had almost equal representation of attendees from the GIS and emergency response sectors. SharedGeo's new website usngcenter.org has many details on these types of efforts. He provided details of progress on efforts both locally and nationally.

Knippel noted that the US National Grid is a national standard (for search and rescue, adopted by FEMA, NAPSG, FGDC and USGS). He urged everyone to put grids on maps – a UTM grid on a map provides a spatial reference for users. It is still taught to military personnel under the Military Grid Referencing System (MGRS), which is essentially equivalent. He asked members to contribute to educational efforts on this.

Reinhardt noted that she was able to find the app in the app store, and asked how it would be used. Knippel replied that awareness needs to increase among the public, dispatch personnel, and emergency responders. All of that educational process needs to happen at the same time to ensure success. Reinhardt noted that she has seen the USNG trail marker signs around the region. Knippel responded that he would like assistance from the Outreach Committee on helping inventory which organizations have implemented USNG trail markers or other products.

Wakefield asked about use in hurricane response, and Knippel said he doesn't know specifics about those efforts because often the response organizations are self-contained. Knippel said this is why it's important to have grids on all kinds of maps because you never know which kind of map will be used in an emergency.

Kotz added that the Lake County emergency manager is a strong proponent of USNG because there are a lot of wilderness trail areas where no other location information would be available. Knippel closed by saying that an internet connection is not required for GPS on phones to work.

Updates on MN GAC Priority Projects and Initiatives

Kotz explained that we undertake this exercise at every meeting. The first priority in 2017 is free and open data. Kne responded that the Outreach Committee has been working on a survey of cities. Maas added that the latest count of counties with free and open data policies or procedures is now 25.

Regarding imagery service, Dolbow noted that there have been no major changes but that MnGeo is aware of the 2017 NAIP acquisition that will likely be a priority to add to their service when it is available. Dolbow also added that his team is working on instructions for using the imagery service over HTTPS and with ArcGIS Online, and while HTTPS is available, the "mashups" with Web Mercator basemap services are not very pleasing to the eye.

Meyer addressed the Parcel Data Transfer Data standard, noting that once the Address Point Data Standard is approved, they are prepared to move on the Parcel Standard. Maas added that the Address Standard, which fuses the MetroGIS standard with the NG911 standard, is now out for public review. (*This review ended 9/22. –Ed*) That standard should be foundational, allowing other standards with address components to be "folded in".

Kotz noted that at some point, those standards will come before the GAC for approval. Assuming both the GAC and state agencies approve of such a standard, they can become official state standards.

Regarding the Street Centerline Standard, Maas noted that both the MetroGIS and NG911 groups are working to coalesce their individual approaches and reconcile the details. The metro group is meeting next week and working toward a situation where validation against the standard can support 911 needs as well as others. No standard is advanced at this point.

Kotz explained that the Damage Assessment Standard grew out of work last year. Richter noted that the group is still working on composing a preliminary standard. They will have a panel discussion at the GIS/LIS conference, and reminded folks that they are only focusing on the standard for collected data, not **how** the data is collected.

Dolbow addressed the basemap and geocoding services and mentioned that there has been no significant work on those other than new state agency customers requiring the use of those services from MnGeo, which helps increase their priority. He also explained that MnGeo's work on Parks and Trails applications are likely to inform that standard. He also explained that data standards do not have to be "structured" data, and that unstructured data such as what is found in OpenStreetMap can work well for data such as parks and trails.

Elect Chair, Vice Chair, Leadership Team

Kotz explained the election process for these positions. Dolbow proctored the election of the following:

- Chair: Kotz
- Vice-Chair: Brandt
- Leadership team: Bloomquist, Kne, Reinhardt, Richter (In addition to chair, vice chair and state GIO)

Kotz explained the leadership team concept. The group decided to elect the entire slate of nominations, increasing the leadership team to the members noted above, Kotz, Brandt, and Dan Ross.

Announcements or other business (All)

Sjerven and Abel noted they are looking forward to seeing members at the GIS/LIS Conference in Bemidji. Bloomquist is compiling a list of federal GIS contacts in order to prioritize data needs. Bontrager is organizing the Minnesota nonprofit GIS users group to meet at the conference – anyone interested in GIS activities in the nonprofit sector is welcome to attend.

Stovern noted that the conference is doing well for registrations; attendance could approach 500, which will push the capacity of the venue. Meyer advised that the Pine to Prairie group is a potential resource for advocacy on Free and Open Data. He looked back at Otter Tail County's records, and found that their open data policy had essentially zero impact on their revenues stream from data sales.

Reinhardt noted that she is very appreciative of prior recognition from this community and encourages attendance at the conference. There is a codeathon happening in downtown St. Paul this weekend, which will include an open data portal announcement.

Richter noted that many cities are having open houses in the fall, and that creates a good time to connect with officials at the city level. Many of her peers have been discussing the LUCA. She encourages cities to reach out to partners such as USpatial to come and present at city open houses.

Freburg noted that there will be three Polaris awards and two lifetime awards, plus a new distinguished educator award, presented at the conference. He asked that members nominate educators for that award in the future.

Richason noted that SCSU and Northland Community College have received an NSF grant on integrating unmanned aerial flight imagery acquisition into spatial and K-12 research.

Kne noted that the U has students that can be made available for smaller projects, not just internships, and he can serve as a point of contact for that. He also noted that ArcGIS Online use at the University has exploded over the last several years, and it is being used not just in geography courses, but across all kinds of disciplines.

Vaughn added that MNIT at DNR has developed a culvert inventory application. He has lobbied that culverts should be inventoried at the state level because of the influence on water flow modeling. He advocates that we might be able to crowdsource the locations of culverts. This impacts hydrology models as well as LiDAR collections; all culverts create a "digital dam" in LiDAR collections. Being able to identify those will increase the ability to correct hydrological models. The DNR app might be leveraged in that capacity. Reinhardt asked Vaughn to get in touch about Clean Water funding possibilities.

Maas issued a final pitch for comments on the Address Point Data Standard, which closes for public comment on Friday. The MetroGIS Coordinating Committee and Centerline group will be meeting soon.

Wencl noted that the Binational Great Lakes Forestry Remote Sensing Workshop in Cloquet will be taking place on LiDAR and aerial imagery collection, and he'll soon be at a NOAA funded meeting in Ashland, Wisconsin on Lake Superior Coastal mapping.

Sanocki noted that he is working with the USGS Minnesota Water Science Center, which has now merged with Wisconsin and Michigan for a new center that is yet to be named. He added that he is interested in the stormwater standard efforts, and that it would be related to the culvert inventory.

Stovern noted that the Arrowhead regional GIS group now has a formal agreement from the ARDC to support their membership meetings and sponsorship from the Forest Service.

Adjourn

The meeting adjourned at 2:00 PM.