

Minnesota Geospatial Advisory Council Meeting Minutes

May 30, 2018

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 Bendickson, Minnesota National Guard; Jeffrey Bloomquist, USDA Risk Management Agency; Andra Bontrager, Minnesota Center for Environmental Advocacy; 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; Mark Kotz, Metropolitan Council; Chris Mavis, Hennepin County; Philipp Nagel, City of Waseca; Victoria Reinhardt, Ramsey County; Ben Richason, St. Cloud State University; Cory Richter, City of Blaine; Dan Ross, MnGeo; Gerry Sjerven, Minnesota Power; Ryan Stovern, St. Louis County; Benjamin Timerson, Minnesota Department of Transportation; Brandon Tourtelotte, Eagle View Technologies.

Members Absent: Scott Abel, Red Lake Band of Chippewa Indians; Len Kne, University of Minnesota.

Non-Members Present: Geoff Bitner, Minnesota Department of Transportation; Will Craig, retired; Mike Dolbow, MnGeo; Brad Henry, Minnesota 2020; Peter Jenkins, Minnesota Department of Transportation; Susan Ledray, Hennepin County; Geoff Maas, MetroGIS; Matt McGuire, Metropolitan Council; Chad Nunemacher, Houston Engineering; Nancy Rader, MnGeo; Chris Sanocki, USGS; Alison Slaats, MnGeo; Sean Vaughn, MN.IT @ Natural Resources; 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 reminded the members to provide MnGeo staff with lead time if they plan on attending remotely. He announced that MnGeo will be adding a “breadcrumb” to the GAC portions of the MnGeo website in order to distinguish pages that are pertinent to the GAC vs MnGeo in general. He commented that there are two open seats on the Council (one to represent regional government in Greater Minnesota and one to represent federal government).

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

Kotz called for a **review** of the meeting minutes from **3/28/2018**. Minutes were approved unanimously.

Review and accept committee summaries

Kotz called for any questions or comments on the committee summaries. He noted that there is a lot of activity taking place, particularly under the 3D Geomatics Committee. Members approved the committee summaries unanimously.

Thank you letters to members and supervisors

Kotz noted that Sjerven had previously raised the idea of writing “thank you” letters to members and their supervisors. Members agreed with this concept. Kotz will be requesting the e-mail addresses of supervisors within the next few days. Bontrager asked if participation on committees would be mentioned, and Kotz noted that it could be added.

Updates on MN GAC priority projects and initiatives

Kotz reviewed the priority projects and initiatives. On the first item, he called for an update from the Outreach Committee. Geurts reported that the Committee hasn’t met recently but will be getting together soon. The latest effort is a survey of cities on open data. The Outreach Committee has also been attempting to coordinate with other committees on items that can be communicated to the broader community.

Kotz requested an update on the imagery service sustainability, and Dolbow relayed that it would be addressed in a future slide. Moving to address points data, Kotz noted that [the standard](#) has been approved by the GAC, and that MetroGIS is pursuing a validation process and transfer of their data to the new standard.

Ross noted that MnGeo is pursuing data updates for the Local Update of Census Addresses (LUCA) to try and find all available address data sources. He has spoken with the 911 director on how to open up address data after 911 efforts are complete. MnGeo is hoping to have all 911 address data completed and validated by the end of the year.

Regarding Street Centerline data, Kotz called on Maas for an update on the Standard. Maas replied that the standard is out for public review, closing June 8th. Many comments have been coming in and the Standards Committee will review those, convening in early July for recommendations. Ross added that the 911 team will move the centerlines into the standard as soon as it’s available, again with a goal of completion at the end of the year.

Kotz called for input on imagery service enhancements, and Dolbow replied that such work really can’t convene until work on the second priority is completed.

Kotz noted that the archiving group being led by Ryan Mattke has scheduled a meeting. Moving to parcel data, he noted that the standard has been approved, and MetroGIS has a target date of moving to the standard in July. He noted that the Metropolitan Emergency Services Board includes two counties in addition to the 7 represented by MetroGIS (Chisago and Isanti), and that those two counties may move to include their parcel data in the MetroGIS compilation in the future. Stovern added that the Parcels and Land Records Committee is pursuing documentation of best practices on how to implement the standard.

Regarding updated and aligned boundary data, Dowell noted that the letters of support from MnGeo, the GAC, and MN GIS/LIS were sent to the LCCMR grant request for this project. They met in the Arrowhead to look at processes moving forward. The development of a PLSS standardized dataset has begun, which will likely take a lot of time and buy-in.

Kotz called for information on priorities 9 & 10, and Dolbow and Richter replied with no updates, respectively. Bendickson added that HSEM is learning as they go with their implementation of WebEOC.

Kotz called on Sjerven for an update on LiDAR data and related standards. Sjerven noted that on July 12 there will be a gathering of 3D Geomatics work groups to make sure they all understand the direction of the Committee and their individual missions. Requirements from individual work groups need to be defined so they can be coalesced into a standard set. Committee leaders are trying to remind members to focus on preferably one workgroup at a time. Ross added that a recent survey on elevation data is moving forward, which should feed into those requirements.

Regarding a basemap, Ross noted that MnGeo is having internal discussions on how an internally-developed basemap can be exposed so that others can use it.

Kotz asked about an update to the Parks & Trails data standard. Ross noted that MnGeo is pulling in information from a variety of sources for an application that is due to roll out in June. This application has some parks & trails data, but it is geared toward recreational uses and legacy-funded parks & trails. MnGeo is hoping to publish this data to the Geospatial Commons. Brandt added that MetroGIS is looking at populating the data at a higher level than previously attempted. Ross noted that the new application could include all parks and trails at some point. Maas added that a staff person is looking at the details of an implementation of the data standard; they have a [version available on the Commons](#) at this time as a pilot.

MnGeo support for priority GAC projects

Ross introduced the idea of MnGeo actively pursuing some projects to support the GAC priorities. Dolbow explained the concept of a “free and open data aggregated parcel layer” as shown on the slides. Kotz supported the idea, saying it adds value, and also applies some positive reinforcement for the goals of free and open data. Stovern added that such a layer would be useful to demonstrate techniques of using parcel data for aggregation and other analyses. Bontrager added that such a layer would be very useful in her work. She understands it won’t always be the most current or at the most detail, but would still be useful in many ways. Mavis added that communicating such benefits to counties is useful. Bontrager asked if such data could be published online, and Kotz noted that it will be free and open, which enables all kinds of uses.

Ross added that metadata will always point back to the counties as the authoritative source, but many of those will be moving toward the standard anyway so the compilation won’t be much different than what can be obtained directly from the counties. Geurts added that this would be considered a good success story that the Outreach Committee would support. Ross said that such an effort would be supported with a project manager within MnGeo. Bontrager asked if it would be supported in a web service as well as a static download, and Dolbow replied that a web service is a known need from the community. Kotz called for a motion to support the effort. **Reinhardt moved that the GAC endorse MnGeo’s efforts to create an “open data aggregated parcel layer”, Stovern seconded, and the members unanimously approved.**

Dolbow explained the ideas around the imagery service sustainability as shown on the slide. Stovern supported the idea of getting ahead of the curve on how to manage the space required. Kotz supported the idea of involving the community. McGuire noted that he is willing to lead a group to develop a decision matrix on deciding when layers can be retired and archived. Bendickson said that as long as we still have an archive somewhere, this is a useful effort. Kotz said that if a small number of individuals need access to a dataset, that group should be able to fund such access. Richter said that sustainability is something she supports, particularly around archiving. Bontrager

added that imagery should be a part of the discussion of the new archiving group. Rader said that the group should also address how data is archived, because what is stored and how it is stored will impact the user who needs to access such archives. Ross said that MnGeo pays for the current service out of the General Fund, and has no plans to change that yet.

Craig noted that archiving the data means making it freshly available, and Ross noted that such decisions should be part of such a workgroup's mission.

Legislative update

Ross addressed the slides on the legislative updates. He said that there was no geospatial legislation in the state legislative session. No action was taken on funding for an opioid tracking program. Reinhardt noted that the state of Washington just passed a bill holding the pharmaceutical industry accountable for a number of efforts, which the industry supported. The Clean Water Council recently adopted a position on warning labels and instructions about not flushing prescriptions down the toilet. She believes that additional legislation is coming on prescription drugs.

At the national level, NSGIC is tracking NOAA's Digital Coast Program. They are also tracking the 3D Elevation Program (3DEP) authorization and the NG911 act, which are moving pretty slowly. Kotz asked about the Geospatial Data Act, and Ross replied that one more House sponsor came on last week. It still has an opportunity to move, but needs more sponsors.

Vaughn asked about the Digital Coast Program's stated ROI of 250%, and Ross replied that everything from tools to data that can be analyzed are included in that ROI. It is calculated from a nationwide perspective. Ross noted that the Digital Coast Program leaders will be in Minnesota for the NSGIC Conference.

MnDOT's State Plane & Low Distortion Projections Proposals

Kotz called on Bitner to present his slides on the topic. Bitner explained that he is seeking support for a redefinition for Minnesota's State Plane Coordinate System. He included background and justification to support the proposal, and the implementation plan.

Bitner also explained details around Low Distortion Projections. Of the 87 counties in Minnesota, we have 67 unique ground planes. Those multiple names for single parameters are an obstacle to registering the system(s) with the European Petroleum Survey Group (EPSG). Our goal going forward in redefining the county coordinate system is to limit distortions to less than .1 feet per mile. The new system will be based on a modified ellipsoid, reducing the zones to 20 regional zones. The National Geodetic Survey (NGS) may host the new low distortion projections as "special purpose zones".

The main driver of this effort is NGS's goal to issue [a new datum in 2022](#). Bitner requested that members review the Federal Register notice, contact him with concerns and questions, and prepare to support DOT's proposal for new systems.

Reinhardt asked if a single state plane system can be successful without changing the county systems, and Bitner replied that they are separate. Reinhardt noted that the efforts to get on the same page may be very difficult if county systems have to be redone. Bitner replied that we won't see any visible improvement in the distortions as a result of this effort, but we will see a more modern implementation that is more compatible with the software in use today. The end user won't notice a real difference beyond a small shift in coordinates. Kotz asked about the timing for a letter of support, and Bitner said that the target is December 2019. Kotz said that the proposal makes a

lot of sense, but just be aware that change is difficult for people. Jenkins added that states that have adopted a single state coordinate system have not created low distortion projections on a regional basis. At DOT they are hoping that the efforts can be used by multiple agencies and counties. DOT is hoping to fund some of the efforts in the hope that everyone will eventually be able to adopt it.

Bitner noted that questions and comments can be directed to him via phone or e-mail.

The Value of Accurate Section Corners

Mavis presented his slides on the Public Land Survey System (PLSS) and the value of accurate corners. PLSS corners are described with a wide variety of terms. Just about every legal boundary in the state is defined by PLSS corners. Over 300,000 were originally set by the government surveyors in Minnesota. Mavis explained several benefits of having accurate corners and remonumentation efforts in the state. He showed the members several slides that illustrate the benefits of these efforts, and problems that arise when older records aren't updated. He is seeking support from the geospatial community around educational efforts about the value of corners.

Modernizing Land Records Systems

Kotz called on Ledray to discuss modernization of land records. Ledray explained that she is on the legislative committee of the Real Property Council of the Minnesota Bar Association. One of the questions they have posed is: with all the technology available today, is the land records system established in the 19th century still effective? They have held listening sessions throughout the state, inviting people who use land records: GIS users, surveyors, attorneys, and other fields. They posed several questions and then listened to input.

Maas noted that he attended the listening session in St. Paul and was impressed with the diversity of attendees. Ross echoed that observation for the session he attended in Duluth. Ledray noted that her group members were impressed with the varied perspectives of the attendees. Some of the common themes that emerged included the urgency of land record reporting turnaround times and the shortcuts that are being taken on behalf of landowners. Title insurance doesn't always cover these problems and it definitely doesn't prevent them. They also heard that there is a lack of expertise in land records, and that new technologies often impact the public's perception of land records. They heard that land owners are asking for "the last deed", which doesn't solve much of anything. "Fixing" things is often very costly. There is a lot of interest in creating a uniform system that can be learned, and apply to any county in the state. Perhaps using just one vendor for recording systems is one avenue. This would help the more modern approach of working at a regional or state level as a land records user.

Ledray's committee also heard in various parts of the state how the County Boards are dictating how funds are being spent when those funds are scarce. They heard a lot of support for a Torrens-like system to be able to rely on a chain of ownership and the current state of a title. Then, when "the last deed" is requested at a county courthouse, that can actually translate into a legal title. Unfortunately, maintaining the Torrens system within a county is more expensive.

Ledray's committee has recently hosted speakers from Canada and Spain to present and share their knowledge. These experts can be tapped in the future. The committee is now looking to process the information that has been gathered. They want to support several ideas, such as a GIS portal to find, map, and view property and understand the ownership, identify the property tax information and special assessments, survey and boundary information, zoning and use restrictions. One of the challenges of such a portal would be a desire to add more and more information on top of the map. They are trying to identify the requirements that would best support the overall

vision. They would like to be a partner in educating on corner monumentation and funding that type of effort. They also support the consistent use of property identifiers. They want to look into a certificate of title system in order to support less expensive property transfers. They want to support more consistent recording systems so that counties could share staff. Uniformity of systems can also reduce expenses. They want to address historical issues such as mineral rights. They are looking for more input and comments.

Ross commented that the geospatial community wants to know how we can assist Ledray's committee as it continues to move. Ledray replied that her personal vision is to restructure and bring in various stakeholders and communities to provide input. Reinhardt asked how MetroGIS could fit into this effort, since its members have been working together for a long time as a region. Richter said that many of the goals are admirable, and stated that the public end user is very different than the government end user. Education is likely a bigger effort on the public side; our community provides tools but not the actual process. Stovern noted that Ledray could reach out to the Parcels and Land Records Committee, and Kotz offered to coordinate that communication.

Sector Report

Kotz called on Bloomquist for his sector report. Bloomquist noted that he is still trying to recruit a second federal representative to join him on the Council. He has compiled a list of Federal GIS contacts for himself to rely on for communications and relayed that on his slides. He is trying to get more periodic updates from his contacts on a regular basis in order to share those with the GAC.

He relayed that the Census will be starting a review program in early 2019. The Farm Bill has not passed yet so a lot of USDA work is in flux. US Fish & Wildlife is working on satellite needs and finishing up NWI in Minnesota this fall. Kotz noted that Chris Sanocki from USGS regularly attends GAC meetings.

Announcements or other business

Rader noted that two nominations have been received for the Governor's Commendation award. She will forward those to the Awards Committee members.

Anderson said that he has been immersed in the LUCA effort. He has several field efforts being pursued in order to make sure that they have the best address point data they can support. The City of Moorhead's GIS efforts were recently featured on the front page of Esri's Newsletter for State and Local Government. (A [copy of the newsletter](#) is hosted on the ProWest website.)

Stovern relayed that GIS/LIS Spring Workshops took place a few weeks ago. Plans for the fall conference are moving ahead, and they are working with NSGIC on concurrent conference efforts. The Minnesota Map competition judging should be done soon.

Freburg added that he is now receiving input from the education community almost monthly, because his efforts to introduce GIS into the K-12 community have been successful. He has seen a high quality of cartography in the map competitions.

Bendickson said that Northland Community College is looking for members of a panel to develop a curriculum for a two year geospatial intelligence analysis certificate.

Geurts noted that she and Timerson are running a state agency collaborative designed to enable more communication and collaboration amongst state agency GIS users. They are planning a GIS training day for state agency employees on November 15th.

Richter added that LUCA is also an important effort in her area, in addition to preparing for Public Works efforts.

Bontrager noted that her organization moved and will have an open house on June 20th. She reiterated that the centerline standard is still open for review until June 8th.

Richason added that the geospatial intelligence analysis curriculum that Bendickson mentioned is also being worked on at St. Cloud State University. They are noting a lot of interest from students. They are developing a Bachelor of Elective Studies in geospatial science, which would allow a student to come in and define their own curriculum around things like UAS or drone photography.

Timerson noted that DOT has recently hired Blaine Hackett.

Brandt noted that metro counties are assisting cities with LUCA. Washington County is working on implementing a new computer aided dispatch system for the sheriff's office.

Ross added that Minnesota will have a 90 minute session at the NSGIC conference. Kotz asked if there will be a formal call for presentations, and Ross said there would be in a few weeks.

Vaughn recently attended a LiDAR presentation at DOT. A new technology recently purchased by Quantum Spatial was demonstrated, which can capture very high degrees of resolution from aerial flights. As we pursue updated LiDAR, we need to be forward thinking about the potential uses.

Nunemacher asked if a second call for presentations would go out for GIS/LIS, and Sjerven said one might. He noted that there may be more slots available for presentations, particularly in the lightning round format. Interested users should send an e-mail to conference@mngislis.org if they are interested in being able to be placed into an available time slot.

Craig noted that it is a breakthrough for us to hear from a county land records attorney.

Slaats invited members to check out the Minnesota Great Outdoors application when it gets announced in June. She wants members to use it to find places to recreate, but also wants members to review the basemap that is being used. This basemap, which is built on OpenStreetMap data, is a service MnGeo would like to extend to the community if it can be sustainably supported.

Maas reiterated the public review of the centerline standard, adding that feedback on the centerline standard strengthens the impact of the standard.

Brandt noted that the regional stormwater data summit was very well attended, and Maas added that a turnaround document is being prepared by a 17 member steering team.

Kotz noted that the Met Council has an increasing need for sidewalk data, and they have defined preliminary needs that will be presented in the future. Ross added that DOT does ADA surveys every year and typically sidewalks are included in those efforts.

Adjourn

Kotz adjourned the meeting at 1:59 p.m.