

Minnesota Geospatial Advisory Council Meeting Minutes

September 4, 2019

Blazing Star Room, Centennial Office Building

658 Cedar St., St. Paul, MN 55155

11:00 a.m. – 2:00 p.m.

Members Present: Timothy Baker, University of Minnesota, Crookston; David Brandt, Washington County; Kari Geurts, MNIT Natural Resources; Renee Huset, City of St. Paul; Len Kne, University of Minnesota; Leanne Knott, City of Red Wing; Mark Kotz, Metropolitan Council; Chris Mavis, Hennepin County; Victoria Reinhardt, Ramsey County; Cory Richter, City of Blaine; Dan Ross, MnGeo; Soren Rundquist, Environmental Working Group; Gerry Sjerven, Minnesota Power; Alex Steele, Minnehaha Watershed District; Ryan Stovern, St. Louis County; Kory Thurnau, US Forest Service; Benjamin Timerson, Minnesota Department of Transportation; Brandon Tourtelotte, Pro-West and Associates; Patrick Veraguth, Douglas County.

Members Absent: Jeff Bloomquist, USDA Risk Management Agency; Harvey Thorleifson, University of Minnesota.

Non-Members Present: Will Craig, retired; Mike Dolbow, MnGeo; Brad Henry, Minnesota 2050; Mike Koutnik; Esri; Andra Mathews, Minnesota Department of Transportation; Ryan Mattke, U of M; Matt McGuire, Metropolitan Council; Akiko Nakamura, Minnesota Department of Public Safety; Nancy Rader, MnGeo; Justin Roberts, Minnesota Department of Transportation; Catherine Rowley, City of Minneapolis; Alison Slaats, MnGeo; Tarek Tomes, MNIT Services; Sean Vaughn, MNIT Natural Resources; Sally Wakefield, Minnesota Department of Revenue.

References

This meeting included references to the following resources:

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

Call to Order

Kotz opened the meeting and welcomed new members. The members and attendees introduced themselves.

Kotz called for an approval of the agenda, striking the legislative updates section. Craig requested a new agenda item on state NSDI scores, which Kotz added. **Stovern moved approval of the agenda with the changes, and Richter seconded. The motion passed unanimously.**

Kotz called for a motion to approve the [meeting minutes](#) from the 5/29/2019 meeting. **Mavis moved for approval, Stovern seconded. The motion passed unanimously.**

Ross introduced the Minnesota IT Services Commissioner, Tarek Tomes. Tomes thanked the members for joining and serving on the Council. He expressed appreciation for the inter- and intra-governmental work that is shared and mentioned its importance to Governor Walz. He noted that the more we can collaborate, the more effective we are in serving Minnesotans, and that the geospatial sector provides an avenue to highlight service delivery and inform stakeholders in a powerful way. He cited an example of mapping car towing in St. Paul during snow

emergencies, and how that was powerful in identifying ways to communicate with citizens and reduce towings. He hopes to visit Council meetings more frequently and listen in.

Ross added that Tomes had previously asked him about the potential of the GAC forming a data committee that specifically used data to improve outcomes. He noted that the GAC will be discussing a data committee later during the meeting. Kotz noted that the GAC directs broad priorities but does not have a deliberate data committee effort. Tomes expressed an opinion that open data movements have progressed well, but still have potential to deliver even more productive results, perhaps by linking various portals together. He is seeking a body to both assess the vast amount of available data, and identify gaps that need filling, in order to pursue the Governor's objectives. He feels a more in-depth view of what the data tells us might form a powerful conversation about investment and strategy. Ross replied that this conversation is also taking place at the national level for Data.gov.

Review and accept committee summaries

Kotz addressed the committee summaries included in the meeting packet, noting that we do not technically approve them, but that members can use this opportunity to ask questions. **Reinhardt moved to accept the committee summaries, and Mavis seconded. The motion passed unanimously.**

Description of GAC annual process and logistics

Kotz explained the process to identify projects and initiatives, survey the community, prioritize, and further advise MnGeo and the community on priorities. He reviewed a few of the current priorities shown on the slide and then explained how the prioritization process works. A critical piece of the prioritization is assessing the likelihood of success based on items such as funding and the presence of a champion. The GAC will execute this process at the December meeting.

Kotz then explained the slides on why the GAC creates priorities, how sector representation works, and the GAC leadership structure. The GAC will choose chair, vice chair, and members for the leadership team at the December meeting. Ross noted that some members have already expressed interest in the leadership team.

Approve charter and work plan of Awards Committee

Richter noted that the details on the Awards Committee proposal are in the agenda packet. Essentially this proposal formalizes an ad-hoc committee and uses that formalization as a way to promote the work of the Committee. For now the new Committee will include former members and then ask for new member volunteers in December.

Kotz asked about the Work Plan describing potential conflicts of interest among Committee members. He would like a clarification that a Committee member contributing a nomination would only have a conflict if their organization would be the award recipient. Richter replied that's why the language states that there *may* be a conflict of interest, and agreed with the fundamental clarification.

Kotz then asked if the name should remain "Governor's Awards Committee", and instead just be "Awards Committee", and Richter agreed to that change. Kotz called for a motion. **Reinhardt moved to approve the charter and work plan, thereby creating the Awards Committee, and Huset seconded. The motion passed unanimously.**

Reinhardt commented that the work of the Awards Committee is important and appreciated its formalization.

Archiving Workgroup Recommendations

Kotz explained the difference between a Committee and a Workgroup. Mattke presented a review of his slides on the Archiving Workgroup. Their summary report is included in the agenda packet. He thanked the workgroup members for their involvement and noted that the work benefited from a highly involved community.

He recommended the creation of an Archiving Implementation Workgroup in order to create an actual archive, after which a committee may become necessary to guide its use.

Vaughn noted that with lidar, we need to specify if we're talking about the point clouds or the derived products, or both. Mattke agreed that an implementation workgroup would need to specify details of any data to be archived. Koutnik commended Mattke and Majewicz for their work on the committee. Mathews asked about how to recruit members for an implementation workgroup. Mattke said we would likely have to "draft" members in addition to getting volunteers, because there may be requirements for specific skills and knowledge.

Ross said that a few items to address will have an even bigger scope, such as solving the financial questions. If we can create a sustainable financial model for state lidar collections, for example, that could impact the archiving work. Tourtelotte noted that including the financial aspects helps educate potential volunteers on the need to prioritize. Mattke added that storing the data is only one aspect of the costs; in addition, a data curator would be required to be effective, and that would be a much larger portion of the costs. He appreciates distributing calls for testimonials.

Slaats added that this is excellent work and that we don't even know what some of the benefits of this work might be ten or fifteen years from now. Mattke agreed that longitudinal studies will definitely benefit, and that if any of this data were on a paper map, it would fall within the scope of his position to archive. In contrast, digital data does not currently fall under the scope of his duties. Ross added that digital data that is archived needs to be discoverable.

Koutnik added that discoverability is important, but the data also needs to be accessible and usable to the community. He noted that outreach and communication efforts need to explain the value of data archiving to business operations, especially since this will be an ongoing effort. Perhaps a committee on explaining the value proposition of our work would be useful. Mattke closed by noting that he welcomes comments on the formation of an implementation workgroup.

Removal of Coordinate Exchange Standard from GAC web site

Kotz explained the history of the coordinate exchange standard, and how current technologies make it less useful than it was when it was created. The Standards Committee has asked that it be removed from the web page of GAC Standards. **Reinhardt moved that we remove that standard from the GAC Standards web page. Brandt seconded the motion. The motion passed unanimously.**

Image Service Sustainability Committee recommendations

McGuire introduced himself and explained the purpose of the Imagery Committee and reviewed the Committee's first recommendation of a change of status to 12 layers. He explained the reasoning behind the status changes, including usage, coverage, resolution, time of year, and historical significance. He showed the list of recommended retirement candidates on the slide, which was also in the agenda packet and repeated here for convenience:

Layer Name	Geographic Area	Season	Type	Resolution
2013 Scott	Scott Co.	spring	Color Infrared	0.15 meter (6-inch)
2013 Dakota	Dakota Co.	spring	Color Infrared	0.15 meter (6-inch)
2013 Carver	Carver Co.	spring	Color Infrared	0.15 meter (6-inch)
2011 Rice	Rice Co.	spring	Color Infrared	1-foot
2010 Scott	Scott Co.	spring	Color Infrared	0.15 meter (6-inch)
2010 Dakota	Dakota Co.	spring	Color Infrared	0.15 meter (6-inch)
2008 Twin Cities	Twin Cities	spring	Natural Color	0.3-meter
2014 McLeod	McLeod Co.	spring	Color Infrared	0.15-meter (6-inch)
2013 Meeker	Meeker Co.	spring	Color Infrared	0.5-meter
2011 Murray	Murray Co.	spring	Color Infrared	1-foot
2009 south shore (WI)	Wisconsin lakeshore	summer	Color Infrared	0.3-meter
2009 nw border	Northern border	summer	Natural Color	0.3-meter

Ross noted that for some of these layers, MnGeo is the only repository. McGuire responded that the Committee does not suggest that imagery data be deleted; they are only suggesting that they be removed from MnGeo’s WMS service. There were a few questions about the individual layers, and McGuire provided more details.

Reinhardt enquired about what “retired” meant, and McGuire responded that this new “retirement candidate” status will be added to the list of layers on MnGeo’s website. If this status is approved, the layers will still be available but will be considered for retirement within a year. After a year passes, the layers will be removed from the service but likely remain in the list of prior years collections. Reinhardt expressed an interest in retaining a list of layers that are no longer available, and McGuire agreed that should be part of the communication process.

Ross added that this work complements the archiving work, and if we implement archiving recommendations, these layers will become prime candidates to archive, meaning that they will still be available, just in a different way.

Ross noted that MnGeo is considering changing the compression we use currently so that more resolution can be conveyed within the service. We just need to test performance, and Ross asked that as we get new data, he’d like the Committee’s help with assessing that. MnGeo knows that the imagery service is popular and that changes need to be communicated. Kotz and McGuire noted that there is no need for the GAC to make a motion about the status changes, the Committee’s presentation was merely about communications.

Update and Preview of MN State Lidar Plan

Sjerven introduced the presenters (Vaughn and Slaats) and reviewed their slides on the State Lidar Plan. Vaughn explained the purpose of the 3D Geomatics Committee and its structure of subgroups. They have a goal of acquiring “Quality Level 1”, high density lidar for the entire state.

Sjerven noted that the #7 priority of the GAC is a State Lidar Plan, which Ross is championing and Slaats is organizing. As a result, the Committee formed a subgroup on the Minnesota State Lidar Plan. That subgroup is examining opportunities and developing plans.

Slaats explained that a series of vendor meetings was conducted in order to gather more background information about the available technologies and options for data collection. Twelve vendors were invited, and nine participated; each was allowed an hour to provide details on their technologies.

Vaughn noted that the vendor meetings helped build confidence within the subgroup on the available technologies. He then reviewed potential obstacles ahead, such as long-term data storage, which no vendor touched upon during their meetings. He also noted that outreach and education will continue to be a priority, and how new lidar data will be needed to meet new business needs.

Sjerven noted that the obstacles can also be described as challenges. At a workshop in June, approximately 45 individuals gathered in Arden Hills, and one of the major questions that came out of that meeting was how the data will be stored and hosted. Sjerven then introduced the basics of the plan, its purpose, length of implementation, and impacts on various regions of the state.

Vaughn reviewed the timeline of both the plan and potential USGS funding through the 3D Elevation Program (3DEP). They have some key deadlines coming up soon. He closed with a summary of the plan as relayed on the slides.

Ross commented that a Quality Level 1 acquisition statewide would cost approximately \$30 million. Timerson asked if the collection would be staged across various regions to spread out the costs, and Vaughn agreed, saying that as data was collected, it would be distributed as soon as available, even if it was only for a region at a time.

Mathews asked if the Committee and subgroups needed to recruit members from other Committees, and Vaughn responded that they are already recruiting. Sjerven said that the biggest challenge has been forming the message and connecting with the long list of interested stakeholders at the right time. For now, that large group of stakeholders seems to be “waiting in the wings” while subgroup leadership has worked on deliverables.

Brandt asked how we compared to other states on this. Ross replied that last year 5 states requested funding via the 3DEP Broad Agency Announcement (BAA). MN is supposed to be in the next batch, and the USGS funding runs out in 2023, so they want to get the whole nation in before then if they can. Veraguth asked if the northeast corner had set funding or not, and Ross and Sjerven replied that there is not. Sjerven added that a lot of interest has been communicated for the Northeast as a pilot project. Ross said that partial cost share has been identified for the Northeast, and that the key right now is to get the plan out.

Discussion of Request from MNIT Commissioner

Ross said that he would like to know if we need a “Data Committee” or workgroup, and if so, what do they work on. Such a group could work to identify data sets that could be leveraged as inputs for the Governor’s priorities. Kotz replied that our prioritization process in place only partially addresses this need. One way we could engage would be to add the Governor’s priorities to the community survey to see if they then become GAC priorities.

Ross replied that the Commissioner wants to know what data exists, in what state; what data gaps exist, and the initial costs to fill those gaps; and what it will take to make such data sustainable. He wants to have something that can be taken through the legislative process.

Wakefield asked if we know what currently exists for data that can be used towards these goals. At Revenue, they have a new assistant commissioner that is specifically looking at racial disparities on things like tax refunds and

credits. The GIS team has been asked to assist on that effort, so it's clear that many agencies are likely doing direct work on these goals.

Ross replied that he believes that our community looks at things differently from the perspective of location. Wakefield replied that without knowing what each agency has for data, it's difficult to assess the gaps. We need subject matter experts to assess what we would need before we can know if we have it or not.

Brandt noted that similar efforts are taking place at Washington County, and that he sees ways that a data view can be cross-cutting amongst agencies. Ross added that if we can help such data be discoverable, it can reduce the potential for duplication of effort.

Mathews asked if the Outreach Committee could speak to its mission with regards to this request. Kne said he could see a fit, but it's really beyond the scope of that Committee's work. He noted that a lot of the data required for these efforts would not be considered "GIS data". He would be concerned with our community being the ones to recommend appropriate data. In contrast, we could potentially identify patterns that would be useful, but it's a lot of work.

Reinhardt added that Ramsey County recently received a grant to collect data and share it with the St. Paul School District, towards an effort to more holistically help children and their families. The effort was more about identifying trends than individuals and was really groundbreaking. Unfortunately, some members of the community misinterpreted the effort as labeling certain children or districts, and as a result the effort was scaled back, simply because of the community reception. She recommends that we figure out the possibilities for success in meeting this request, not only within the rules of law, but in the eyes of public perception.

Knott asked if there is a way to reconsider the questions being asked, to preempt the potential negative questions in advance in order to guide public reception. Reinhardt replied that Ramsey County did that proactive messaging, and it still didn't work.

Timerson asked if instead we should just go after the non-social issues such as clean energy and infrastructure. Kotz replied that he feels this request needs to be clearer, and that subject matter experts on each of these topics need to make the decisions on what data is needed, and then we could partner with those experts on finding ways to find that data (if it's spatial). He doesn't feel we'll be successful on our own without subject matter experts.

Stovern noted that we can't rely on a lot of data sets as accurate until we have our foundational data sets such as the public land survey. Reinhardt noted that the issue for Ramsey County was the sharing across boundaries; that the information is available at single sources. Wakefield added that important data is frequently not spatially enabled.

Vaughn asked if it would be worth our effort to explore lidar data as a foundational product that will help any of those priorities. Lidar maps everything that's outside, so it can be much more than just a DEM.

Ross closed by saying the Commissioner targeted this group because we collaborate and we are people that get things done. He feels it deserves a longer conversation.

NSGIC Data Report Card on State Geospatial Maturity

Craig presented that the Coalition of Geospatial Organizations (COGO) did a report card on the federal government and its delivery of foundational data. There were eight different themes, and the report card revealed that the

federal government did OK on some of those themes, and not so well on others. The state representatives for NSGIC decided to do a similar report card for every individual state, adding collaboration as a theme.

Forty states responded to the initial survey, and grades A-F were assigned. A few states rose to the top, and Minnesota was one of them: only two states scored higher than 7, and only four states scored 6, including us. This gives us great responsibility to deliver on the promise of the high grade we earned. Other states are looking to us in successfully leading.

Ross added that the full report will be relayed in December.

Updates on MN GAC priority projects and initiatives

GAC Rank	Project or Initiative Name	Status	Project Owner	Champ
1	All public geospatial data in MN to be free and open to everyone	Active	Len Kne	Ross
2	Assurance that the MnGeo imagery service will be maintained and improved via a sustainable funding model, including policies on what layers are added and removed over time. Evaluate improvements such as Web Mercator, tiling, downloading options, and increased refresh frequency.	Active	Mike Dolbow	Ross
3	Updated and aligned boundary data from authoritative sources	Active	Preston Dowell	Ross
4	Statewide publicly available parcel data	Active	Mike Dolbow	Kotz
5	A policy and procedures for archiving and preserving historical geospatial data	Active	Ryan Mattke	many
6	Statewide publicly available road centerline data (including a data standard)	Active	Norman Anderson	Ross
7	New Lidar data acquisition across Minnesota for use in developing new derived products guided by committee developed standards	Active	Gerry Sjerven	Ross
8	Statewide publicly available address points data	Active	Norman Anderson	Ross
9	MN focused basemap services	Active	Sonia Dickerson	Ross
10	A parks and trails data standard	Active	Jim Bunning	Ross
11	An emergency management damage assessment data standard to provide an accepted specification to support a request for State or Federal assistance after a disaster	Active	Anderson/Richter	

12	Accurate hydro-DEMs (hDEM) that serve modern flood modeling and hydro-terrain analysis tools, and the development of more accurate watercourses and watersheds	Active	Sean Vaughn	
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Kotz called for updates on the priorities listed above:

- On #1, Geurts noted that their group has been meeting to deliver success stories to promote open data. They are also coming up with ways to collaborate with other GAC committees. They plan to meet in September.
- On #3, Stovern noted that more efforts continue to bring surveyors and geospatial communities together. Thurnau added that the Forest Service wants to adjust their parcel data and wants local involvement.
- On #4, Dolbow relayed progress that MnGeo has aggregated all 87 counties to the new standard to share with state agencies, and that the next step is to validate the “field mapping” with open counties before sharing the data for those counties on the Commons. For non-open counties, MnGeo has agreed to send requests from non-state agencies to the source county. Ross noted that there are currently 27 counties of open data and 3 working on changing policies or procedures.
- On #6, Ross said that the 911 team has been working with counties on merging together their data to create statewide centerlines. A draft aggregated dataset has been created but is not ready for public consumption.
- On #8, Ross noted that MnGeo is close to a compilation on address point data, but there are still counties without city coverage. Both centerline and address efforts will follow a similar process of confirmation on the ETL for individual counties.
- On #9, Ross said we’re still discussing opening up those services.
- On #10, Brandt noted that the metro datasets are being worked on. Ross added that there is no statewide standard, but the MN Great Outdoors application does deliver standardize data. Kotz added that he has not heard of any proposed parks and trails standard yet.
- On #11, Rader added that the workgroup has delivered a preliminary draft standard for review by a small group before a larger group review. Kotz added that the initial reviews are targeted to key stakeholders. Koutnik said they are trying to get a wider exposure to the Emergency Management community.
- On #12, Vaughn noted that this is always a work in progress, that BWSR is working on standardized databases, and QA/QC is needed on all of these products. He would like to see a modification for the next round of priorities.

Announcements or other business

- Sjerven said that if you’ve ever attended a Consortium conference, you should be receiving e-mails biweekly at least. The Consortium is concerned that these e-mails may be blocked by some agencies, and would like to know from individuals if they are not receiving those e-mails, so that any issues in delivery can be resolved.
- Veraguth noted that [MACS](#) is doing a pilot project in Grant County for remonumenting with some LCCMR funds.
- Stovern noted that the GAC letter of support helped the Grant County project. Regarding the Fall Conference, he added that the hotel blocks are closing soon. Sjerven noted that changing the dates on the

hotel blocks can reveal availability, since the initial block is set for Tuesday-Thursday, whereas some slots for Wednesday-Thursday may still be open. Stovern closed with some additional notes about the Conference and a potential open Board position.

- Mavis added that he will be presenting at “Meet Me At The Corner” at the Fall Conference. It will use the same format as last year and include a Stearns County representative.
- Kne noted that GIS Day is November 13, and USpatial will have a Borchert lecturer, [Shaowen Wang](#) of the University of Illinois, on a talk titled “Geospatial Discovery and Innovation in the Era of Artificial Intelligence and CyberGIS”. The event starts at noon and the talk is at 4 pm.
- Tourtelotte noted that Pro West president Annette Theroux is retiring and will be succeeded by Kendis Scharenbroich. He said that parcel fabric in Pro was unveiled at the Esri User Conference in July.
- Dolbow noted that the State of the Map US conference is in Minneapolis this coming Friday, Saturday, and Sunday.
- Ross relayed another question from the Commissioner was if this group would be interested in a GIS Day event in the Capitol Rotunda. He was curious if individuals around the community would be interested in presenting, particularly around outcomes. MnGeo would organize the logistics but needs volunteers on content.
- Brandt noted that a lot of efforts are continuing at all metro counties on NG911, and there are numerous efforts at Washington County on public health and previously unexplored areas.
- Timerson provided an update on the AASHTO GIS-T conference, which is April 14-17, 2020 in Minneapolis, and that the call for papers is expected to come out soon.
- Reinhardt noted that a GIS Day event in the Rotunda will be a very good way to get publicity, which can help in funding requests. It doesn’t have to be too fancy, even just an open invitation to see how data can help with policy decisions. Timerson asked if we should be concerned about the legislature not being in session, and Ross said we should be able to work some communications efforts to engage. Reinhardt encouraged conducting an event and capturing the information so that the legislators that can’t attend can still access the content.
- Thurnau noted that the Forest Service is discussing authoritative PLSS data and sharing it with locals and the BLM. The Fish & Wildlife Service is also very interested in parcel mapping along the St. Croix River.
- Knott noted that the SE GIS User Group meeting will be hosted at Owatonna Public Utilities on October 24th. The event will include lunch and will be free and open to the statewide community. She said the group is always looking for subject matter experts to present to the group.
- Rundquist noted that the Environmental Working Group is looking at publishing a 10-year study of nitrate data in Minnesota’s groundwater. They’re also looking at publishing a manure application tool.
- Rader reminded members that there are still three openings on the GAC, particularly for a Greater Minnesota regional organization, a tribal organization, and K-12.
- Koutnik said that a new release of AGOL will come in September, including a release of a “Tracker” product.
- Slaats noted that MnGeo worked with the Office of the Minnesota Secretary of State on a Geo-enabled Elections project, which revealed that Minnesota’s data on voters is very good.

Adjourn

Kotz adjourned the meeting at 2:06 pm.