Minnesota Geospatial Advisory Council Meeting Minutes

March 3, 2021

Online via Webex

10:00 a.m. – 12:00 noon

Members Present: Ryan Bonney, Shakopee Mdewakanton Sioux Community; Jeff Bloomquist, USDA Risk Management Agency; 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; Bryan McCoy, Headwaters Regional Development Commission; Victoria Reinhardt, Ramsey County; Cory Richter, City of Blaine; Dan Ross, MnGeo; Soren Rundquist, Environmental Working Group; Gerry Sjerven, Minnesota Power; Stacey Stark, University of Minnesota; Alex Steele, Minnehaha Creek Watershed District; Ryan Stovern, St. Louis County; Harvey Thorleifson, University of Minnesota; Kory Thurnau, USDA Forest Service; Brandon Tourtelotte, Pro-West and Associates; Patrick Veraguth, Douglas County.

Members Absent: Benjamin Timerson, Minnesota Department of Transportation.

Non-Members Present: Brad Anderson, City of Moorhead; Curt Carlson, MnGeo; Shelly Carroll, Woolpert; David Chase, North Memorial Health Ambulance Services; Will Craig, retired; Brad Henry, University of Minnesota; Randy Knippel, Dakota County; Rachel Koch, Minnesota Department of Revenue; Tim Krohn, Fond du Lac Reservation; Karen Majewicz, University of Minnesota; Andra Mathews, DOT; Ryan Mattke, University of Minnesota; Matt McGuire, Metropolitan Council; Alex Metzler, Minneapolis Park and Recreation Board; Akiko Nakamura, DPS; Kent Park, Woolpert; Patina Park, Governor's Office; Nancy Rader, MnGeo; Alison Slaats, MnGeo; Steve Swazee, SharedGeo; Mike Talbot, EOR; Sean Vaughn, MNIT DNR; Sally Wakefield, Minnesota Department of Revenue; Jenna Walz, Sherburne County; Clayton Watercott, Metropolitan Council; Kyle Wikstrom, Pro-West and Associates; Peter Wiringa, University of Minnesota.

Call to Order

Kotz welcomed new GAC members Bryan McCoy and Stacey Stark who each introduced themselves.
- **Motion:** Approve meeting minutes from 12/9/2020 (Reinhardt/Brandt) – Motion passed.
- **Motion:** Approve meeting minutes from 1/6/2021 (Reinhardt/Brandt) – Motion passed.

Review and accept committee annual reports and edits to EPC charter

Kotz thanked the GAC committees for all their work and submitting their reports. Kotz encouraged all GAC members to read all the committee reports (pages 2-39 of agenda packet). Kotz noted there were some small housekeeping changes made to the EPC charter.
- **Motion:** Accept the annual reports and edits to the EPC charter (Richter/Mavis) – Motion passed.

GAC accomplishments and work plan review and approval

Kotz reviewed the accomplishments section of the meeting packet (page 40) and pointed out that there are links to all the committee reports. The overall 2021 GAC workplan was put together by Kotz and Richter with input and work from the GAC leadership team. Richter asked to modify the workplan to change the item about creation of a YouTube channel to "explore" the creation of a YouTube channel.

- **Motion:** Approve the GAC workplan with the change to "explore" the creation of a YouTube channel (Brandt/Huset) – Motion passed.

Making progress on GAC priorities and initiatives; metrics, etc.

Ross and Richter led a discussion about the best ways to measure progress on GAC priorities and asked GAC members for ideas on how to measure and report progress. Richter said that GAC priority owners are being asked to answer three questions about ongoing work:

1. What is your most recent success?
2. Are you are experiencing a barrier?
3. What is your next task?

Richter noted that the GAC has had several priorities on our list for years. Using measures will help us know if we are making progress on them.

One important GAC priority is free and open data. This has become more of a guiding principle, and we need to figure out the next steps. Do we keep it as a priority on our list or transition it to a guiding principle that every committee and workgroup integrates into their work?

Geurts: Liked the idea of transitioning the open data priority to a guiding principle since it has always been difficult to tie this to an action item for the Outreach Committee. Perhaps we look to every committee for how they are working towards that.

Ross: Agreed that it should be embedded in the GAC as part of every committee's work. It is already part of the Standards Committee (all standards are freely available) and the Parcels and Land Records Committee.

Richter: How can we make sure that GAC priorities are moving and not just lingering on the list?

Veraguth: We need to have a timeline on things and then work to get them done.

Richter: Yes, when a project team has a workplan with project goals that would be expected.

Brandt: The series of archiving workgroups (Archiving, Archiving Implementation, Archiving Pilot) has been a good model because there is a finite time on each workgroup. Breaking down tasks into smaller components is helpful. This keeps the effort fresh and encourages people to participate if there is a finite time commitment.

Richter: Agreed, the finite length and focus (of subgroups/workgroups) both help. The Parcels and Land Records Committee provides another example since they are breaking their work into focused tasks for workgroups.

Ross: Having a committee/workgroup working on a priority helps ensure progress on moving the priority forward; he gave lidar as an example.

Geurts: Agreed, for the top 5 or 10 priorities, a committee/workgroup is needed to make progress.

In meeting chat:

- Mathews: Can the projects/champions and workgroup/committee be tied together on the priorities list?
- Mattke: Great idea!

Richter: Restated this idea with the reminder that having a team improves a priority's success score in the priorities matrix.

Kotz: The team does not necessarily have to be a GAC team; for example, it could be a MnGeo team.

Mathews: Agreed. DOT is following this model to set priorities and it has proved successful.

Richter: Asked that the free and open data priority be a part of each committee and workplan.

- **Motion:** Remove the free and open data priority from the priority list and instead make it a tenet of the GAC. Each workgroup and committee should include this tenet in their workplan (Richter/Stovern) – Motion passed.

Kotz thanked everyone for the valuable discussion.

In meeting chat:

- Craig: Great move on Free & Open data!
- Geurts: This is a great effort and improvement!
- Mathews: This is great! I have asked to help the Outreach Committee in response to the call for participation. Thank you for developing this.

Outreach Committee Success Story Hub

Wikstrom demonstrated a pilot Esri Hub site using the MN GIS/LIS Consortium's account. This site is not public. Currently, the demo site contains success stories from Wikstrom's company as examples. The idea is that the Outreach Committee could replace those examples with a wide variety of Minnesota GIS success stories.

Wikstrom expanded on the idea saying that it could be a place for each committee/workgroup to use – they could have an area here to share their successes and to post feedback surveys. Additionally, it could be used to link to open data sites. Wikstrom demonstrated examples of these three areas on the site (success stories, feedback surveys and links to open data sites).

In meeting chat:

- Wakefield: This looks really nice. Good start!
- Knott: Nice job, great outreach tool!
- Geurts: I am really glad to see the ideas we had in the Outreach Committee come to life. A couple concerns: How will this be hosted and who will manage the site? Thanks!
- Ross: MnGeo is responsible for supporting the GAC Kari. I also see ties to the Mn Geospatial Commons.

Lidar update

Sjerven and Vaughn shared slides that provided an update on lidar in Minnesota. Highlights included:

- Minnesota submitted two funding requests for quality level 1 (QL1) lidar to USGS for 3DEP funding – one in the northeast (Lake Superior LAB (Lidar Acquisition Block)) and one in southern Minnesota. Both were recommended for funding and the share that USGS is paying is substantial.
- Maps of the areas were shared. Vaughn noted that the Lake Superior LAB is adjacent to the Rainy Lake LAB that received USGS funding last year but will be flown this spring.
- Vaughn emphasized that the good news to take away for lidar work is that for Minnesota, it is being coordinated through the GAC 3DGeo Committee.

In meeting chat:

- Sjerven: If you have any questions, and we run out of time, please add them here and I'll make sure we get you the answers
- Geurts: Looks great. Glad to see that all your hard work to get the acquisition is paying off!
- Anderson: Red River Valley LiDAR from May 2020 about to be delivered to us. Huge area down to SD border. Just FYI Sean
- Knippel: Re: LiDAR - Any information on cost-sharing instruments to streamline the process and avoid JPA's with everyone?

Archiving Implementation report and Pilot Workgroup approval

Mattke said the Archiving Implementation Workgroup final report is finished. He shared the mission statement: "Define and facilitate the implementation of an archive for Minnesota geospatial data by building on the work of the Archiving Workgroup", and then acknowledged members from the GIS and library community. He summarized the work contained in the final report that included sections on Program Design, Technology, Workflow and Funding.

Note that the team is still collecting information about why creation of an archive is important. Please fill out the Archiving Historical Geospatial Data - Survey.

Mattke then proposed that a new workgroup be formed to develop an archiving pilot. He summarized its mission, objectives, group members, planned activities, deliverables and timeline.

Motion: Approve the formation of a new Archiving Pilot Workgroup (Richter/Reinhardt) – Motion passed.

Legislative update

National Equity Map: Reinhardt is part of a National Association of Counties (NACo) initiative, serving on the environmental and land use committee that informs national policies. One of the resolutions she worked on includes the creation of a national equity map. Such a map must be based on good data and is necessary for making good decisions. We will need this map to address climate change and other issues moving forward, such as the Presidential Executive Order, Tackling the Climate Crisis at Home and Abroad. Swazee said that the University of Florida has done analysis that is applicable to disasters, including hurricanes in Puerto Rico; he will share information with Reinhardt. Ross said that the Minnesota Pollution Control Agency is also working on issues of equity.

Digital Coast Act: Ross reported that this bill, under consideration for a long time, was signed in December 2020. Minnesota is considered coastal due to the Great Lakes, so this act brings funds to the state. The act provides statutory authority for and revises the National Oceanic and Atmospheric Administration's (NOAA's) Digital Coast program. The program currently exists under NOAA to provide data, tools, and training that communities use to manage their coastal resources.

Minnesota budget request: Ross described a Minnesota state budget request he has been working on that would be for additional lidar acquisition (to be the Minnesota match to USGS funds), and to also be used for data distribution and education. Additionally, the funding would go towards a statewide survey coordination position.

Updates on MN GAC priority projects and initiatives

Richter introduced three update items that priority and initiative owners should report on:

1. What is your most recent success?
2. Are you are experiencing a barrier?
3. What is your next task?

She noted that the list of priories includes a rank, but this will be taken off in the future. While the initial rank in the priority meeting helps us decided on which priorities are important to focus on for the year, it doesn't imply an ongoing rank or that one is more important than another.

- Parcel Data: Slaats reported
    - Most recent success: Meeting of the Parcels and Land Records Committee and establishment of an Open Data Parcel subcommittee co-chaired by Ryan Stovern and Alison Slaats. The goal of the subcommittee is to build an aggregated parcel data viewer, educate end users on proper parcel data usage, and work with the Outreach Committee to advocate for open data.
    - Barrier: none

- o Next task: Set up workgroup meeting to define next steps and timeline to work towards sharing parcel data publicly for open data counties.

- Updated and Aligned Boundary Data: Veraguth says they are looking for workgroup participants.
  - o Most recent success: The Parcels and Land Records Committee established the Boundary Alignment subcommittee.
  - o Barrier: none
  - o Next task: A goal of the subcommittee is to build a PLSS inventory map and increase awareness on why alignment is necessary.

- Remonumentation of Section Corners
  - o Most recent success: Parcels and Land Records Committee established the Remonumentation subcommittee.
  - o Barrier: none
  - o Next task: A goal of the subcommittee is to build a legislative proposal for remonumentation

- Road Centerline Data. Ross reported:
  - o Most recent success: Internal statewide aggregation of road centerlines with address ranges to the NG911 data model
  - o Barrier: Challenges but not barriers
  - o Next task: Snapping across county boundaries
  - o Curtis Carlson (in chat): Current Record Count Statewide RCL : 581200

- Address Points Data. Ross reported:
  - o Most recent success: Statewide aggregation of address points to the NG911 data model
  - o Barrier: Challenges but not barriers – not currently available to provide to the public
  - o Next task: Statewide aggregation of updated data from authoritative sources
  - o Curtis Carlson (in chat): Current Record Count Statewide ADP: 2404588

- Underground Utilities Data
  - o Swazee reported that a best practices document on underground utilities is coming out soon.

- Critical Infrastructure Data
  - o Stark reported that she has been working with counties, working through U-Spatial and planning a small group meeting and next steps. We'd like to make this usable for other local data owners. Have HSEM director on board with importance of project and can help work through emergency community challenge.

- New Lidar Acquisition
  - o Most recent success: Successful grants for NE MN and Southern MN
  - o Barrier: Challenges but not barriers

- o Next task: Completion of Joint Funding Agreements with each funding partner and completion of Task Order for each acquisition
- o Sean Vaughn (in chat): Lidar data was collected in the North Dakota portion of the Red River Basin with a 1-mile project specified buffer into Minnesota. The North Dakota Lidar is collected at both a Quality Level-3 and Quality Level-2. Although it is a current time stamp of capture, QL3 is only slightly better than what we have in hand here in Minnesota and not something we would pursue for Minnesota. To my knowledge, North Dakota did not have lidar in much of the area recently collected. QL2 is the current minimum lidar base specification (LBS) that supports development of a 1-meter DEM, we already serve a 1-meter DEM as part of our MN data holdings.
- o Sean Vaughn (in chat): More on MN Lidar in Relation to Red River: Our Minnesota 3DGeo Committee base spec is Quality Level-1, which supports a 0.5-meter DEM. More importantly, the QL1 supports improved capture and mapping of the human infrastructure above the DEM and is the minimum level usable for MnDOT. We feel QL1 is the best option for Minnesota that will provide service to the greatest amount of sector applications.

- Image Service Improvements
  - o Most recent success:
    - Update of image service with Ramsey County 0.5 ft 2020 leaf-off imagery (natural color and CIR)
    - Update of composite image service with 2020 leaf-off imagery of the 7-county Twin Cities metropolitan area and 2019 statewide NAIP leaf-on imagery from the USDA Farm Service Agency
  - o Barrier: none
  - o Next task: Follow up on recommendations of Image Service Sustainability Committee to add and retire some image layers.

- Archiving Implementation. Mattke referred to his earlier presentation as the update.

- U.S. National Grid Materials
  - o Knippel reported that he is working to build out materials to support USNG map and has created 10K maps for Minnesota. Maps for Wisconsin have also been created. Randy is working on helping other states.

- Accurate Hydro-DEMs
  - o Vaughn shared a map of digital breach lines. This shows a decade of work – where work has been done and where it needs to be done.

- Culvert Data Standard
  - o Rick Moore, the owner of this priority, was not at the meeting, but Vaughn asked to make sure he is on the GAC outreach mailing list.

- Trails Data Standard
  - Kotz said that in November/December, the proposed [trails and bikeways data standard](#) was out for public review, generating more comments than any other previous standard. The comments were very helpful and will improve the standard. The Standards Committee is currently working through these comments. Since the subject matter experts creating this standard were bicycle transportation experts and the committee hasn't yet been able to recruit additional experts for other types of trails, the proposed standard has been scaled back and is now just a bikeways standard. Kotz anticipates that this standard will come to the GAC for approval at the next or following GAC meeting.

- Success Stories for Geospatial Technology
  - The Hub presentation from earlier in this meeting was mentioned. Richter asked people to let her know if they are interested in becoming part of this effort.

Announcements

- Knott – Was voted by the MN GIS/LIS Consortium to be the MN GIS/LIS GAC ExOfficio, starting in July. Thanks to Ryan Stovern (current MN GIS/LIS GAC ExOfficio) for nominating her for this role.
- Veraguth – A StoryMap is being created to showcase the Grant County remonumentation pilot project. Veraguth will be giving a presentation about this project; contact him for the link.
- Geurts – Continuing work with the State Agency GIS Collaborative and will report more about their work at upcoming GAC meetings.
- Mathews spoke on behalf of Ben Timerson who was absent. MnDOT will be hosting the AASHTO GIS for Transportation symposium this year. The event was rescheduled from last year to April 19-22, 2021 and will be virtual. Monday, April 19th will consist of four morning and four afternoon workshops. The regular sessions kick off on Tuesday, April 20th. The presentations consist of three concurrent tracks. These will be recorded so if you miss one you can go back and watch it later. For more information, see the [registration webpage](#).
- Thorleifson – Focused on being steward of data for protecting groundwater for drinking water. Work is evolving, producing digital and paper, but moving towards machine readable. Legislation to further this digital twin model. Moving to geospatial knowledge. It's all about optimizing data to protect our drinking water.
- Brandt – Will be speaking at the NACo conference about success stories on pandemic – has metro examples. Looking for non-metro examples.
- Stovern – Noted that Knott will be replacing him on the GAC. GIS/LIS Spring Workshops are coming up soon. It will be determined by June if the GIS/LIS fall conference will be in person or virtual.
- Mavis – He and others from the Parcels and Land Records Committee are working on a remonumentation StoryMap that shows the work done in the Grant County pilot. Mavis will share Veraguth's presentation invitation with Rader to send to GAC members. Mavis also announced that Will Craig had nominated Hennepin County and the Mapping Prejudice project for the Finnegan Freedom of

Information Award – from the [Minnesota Coalition on Government Information](#).
From the meeting chat:
- o Rachel Koch: Well-deserved award!
- o Ryan Mattke: Many thanks to Will for the nomination!
- o Will Craig: Hennepin deserved this award.
- o Rachel Koch: I was lucky to see Kevin present and it was fantastic.
- o Will Craig: Thanks for your kind words, Chris.
- Kne – [Governor's Geospatial Commendation Awards](#) are due by June 30, 2021.
- Richter – Reminded people to share job postings so they get a wide and diverse response. The City of Blaine will be posting a GIS analyst position and a crime analyst position that includes GIS skills.
- Ross – The state exercised the third year option on the Esri enterprise license agreement that many partners use. The [NSGIC geospatial maturity assessment](#) is coming up this summer, so some GAC members should expect questions related to this effort at that time. Ross thanked Will Craig for his work on this effort at NSGIC.

Adjourn

Kotz thanked everyone for attending the meeting. Next meeting on May 26.