

Minnesota Geospatial Advisory Council Meeting Minutes

December 15, 2021

Online via Webex

10:00 a.m. – 12:00 noon

Members Present: Heather Albrecht, Hennepin County; Ryan Bonney, Shakopee Mdewakanton Sioux Community; David Brandt, Washington County; Preston Dowell, St. Louis County; Kari Geurts, MNIT Department of Natural Resources; Len Kne, University of Minnesota; Leanne Knott, City of Red Wing; Britta Maddox, Anoka County; Chris Mavis, Hennepin County; Matt McGuire, Metropolitan Council; Cory Richter, City of Blaine; Dan Ross, MnGeo; Gerry Sjerven, Minnesota Power; Stacey Stark, University of Minnesota; Alex Steele, Minnehaha Watershed District; Shawn Strong, City of Brainerd; Benjamin Timerson, Minnesota Department of Transportation; Patrick Veraguth, Douglas County

Members Absent: Jeff Bloomquist, USDA Risk Management Agency; Kendis Scharenbroich, Pro-West & Associates Inc.; Victoria Reinhardt, Ramsey County

Non-Members Present: Brad Anderson, City of Moorhead; Mitch Bergeson, USGS; Andrea Bergman, MNIT Department of Natural Resources; Will Craig, retired; Shana Crosson, University of Minnesota; Mike Eull, MNIT Department of Transportation; Samantha Huggett, GeoComm; Randy Knippel, Dakota County; Mike Koutnik, retired; Patrick Landisch, Department of Revenue; Karen Majewicz, University of Minnesota; Chad Martini, Stearns County; Andra Mathews, Department of Transportation; Bill Mitchell, MnGeo; Ryan Mattke, University of Minnesota; Rick Moore, MNIT Department of Natural Resources; Akiko Nakamura, Department of Public Safety; Pamela Jo Peters [no org known]; Nancy Rader, MnGeo; Kasey Rankl, MnGeo; Jesse Reinhardt, Hennepin County; Jeff Reinhart, Minnesota Department of Natural Resources; Justin Roberts, Department of Transportation; Matt Robinson, Esri; Molly Shoberg, St. Louis County; Alison Slaats, MnGeo; Molly Swanson, City of Eden Prairie; Steve Swazee, SharedGeo; Brett Thomassie, SURDEX Corporation; Kevin Trappe, Beltrami County; Andy Trcka, MNIT Department of Transportation; Sean Vaughn, MNIT Department of Natural Resources; Sally Wakefield, Minnesota Department of Revenue; Jenna Walz, Sherburne County; Clayton Watercott, MetroTransit; Hal Watson, MNIT Department of Natural Resources.

1. Call to Order

[Meeting presentation slides](#)

Richter welcomed GAC members and guests, and members introduced themselves.

- **Motion:** Approve today's agenda and meeting minutes from 9/29/2021 (Mavis/Brandt) – Motion passed.

2. Review and Accept Committee Summaries (All)

Richter thanked the committees for sharing their accomplishments through their summaries. Some committees have already created their 2022 workplans, so those are included in the agenda packet. The GAC 2021 accomplishments and 2022 workplan document will be completed after the January 19 special meeting to finalize the GAC's 2022 priorities.

- **Motion:** Accept the committee summaries (Mavis/Knott) – Motion passed.

3. GAC Leadership Team (Richter)

Richter presented the list of members who had volunteered to serve as the GAC's leadership team for the current term (July 1, 2021 – June 30, 2023):

Cory Richter, Chair
David Brandt, Vice Chair
Jeff Bloomquist
Len Kne
Chris Mavis
Victoria Reinhardt
Kendis Scharenbroich
Gerry Sjerven

- **Motion:** Approve the membership of the GAC leadership team for the current term (Stark/Steele) – Motion passed.

4. CGIO Update (Ross)

Dan Ross is leaving State of Minnesota government where he has served as the State's Chief Geospatial Information Officer (CGIO) and MnGeo Director, as well as Chief Business Technology Officer for both the Pollution Control Agency and the Board of Water and Soil Resources. His last day will be January 4, 2022. He will serve as the Interim Executive Director for the National States Geographic Information Council (NSGIC) until they hire a new executive director.

The hiring process is underway for a new full-time MnGeo Director and CGIO.

Ross thanked GAC members for their leadership and collaboration which has made so many accomplishments possible.

5. UUMPT Update – Clean Water Council Policy Statement (Swazee)

Swazee provided an update on support for the work of the Underground Utilities Mapping Project Team. The team's goal is to enable mapping all the state's underground utilities, which will be a huge effort.

- The Clean Water Council passed a support resolution. Their support is very significant since they oversee allocations for approximately \$250 million of funding for projects of a significant nature.
- Richter has written a letter of support from the GAC, as authorized at the GAC's September 29, 2021 meeting.
- The topic will be discussed soon by the Association of Minnesota Counties.

6. Open Parcel Data Subcommittee Update (Martini)

The Open Parcel Data Subcommittee of the [Parcels and Land Records Committee](#) is focusing on relationship-building and communication with counties. As part of that effort, subcommittee members sent out a survey on December 3 asking counties if they are willing to participate in a publicly available parcel dataset. A county's approval needed to be received by December 13 in order for their dataset to be included in the first release.

The survey creates a mechanism that will allow the GAC to advise MnGeo which counties agree to have their parcel data be included in an aggregated parcel dataset that is made publicly available. It also will help the subcommittee better understand each county's situation and the technical and non-technical barriers to participation that remain.

The survey asked 8 questions:

- County Name?
- Who/What departments are involved in order to export updates to MnGeo?
- What is your process for exporting parcel data for MnGeo to consume?
- Do you provide all data required in the GAC Parcel Standard?
- Is there data you want to include but not sure how to include it?
- Is your county an Open Data County?
- If your county is an Open Data County, are you ok with the GAC Parcels and Land Records Committee advising MnGeo to publicly publish your parcel data in a public Regional or Statewide dataset? (Note that answering yes means that this will supersede any data agreements your county has previously signed with MnGeo.)
- Do you proactively share spatial data with your jurisdictional neighbors?

Survey Results (as of December 15):

- 42 of 87 counties responded
- 26 of 87 counties said they were an Open Data County
- 24 of 87 counties approved including their parcels in the statewide dataset:
 - Aitkin, Anoka, Benton, Carlton, Chisago, Clay, Cook, Crow Wing, Dakota, Hennepin, Isanti, Itasca, Koochiching, Marshall, Mower, Norman, Polk, Rice, Saint Louis, Sherburne, Stearns, Traverse, Waseca, Washington
 - The two counties that didn't respond "Yes" will be contacted for further discussion

The next survey will be sent near the end of the first quarter of 2022 to determine whether any additional counties will join the statewide dataset. Although there will be holes in the data at first, the subcommittee feels that, over time, more counties will join and progress will be apparent.

Discussion, primarily in the chat:

- Why is it important for a county to formally endorse an open data policy? From NSGIC's perspective, access to data is the only thing that matters. Minnesota lost a full grade in NSGIC's State Geospatial Maturity Assessment on its parcel grade (A->B) because parcel data is not available (Craig)
 - A formal declaration could help to direct the work of the county GIS staff to make the data open (Shoberg)
 - If county staff have an informal understanding, then leave, a more formal policy could help keep the sharing consistent (Slaats)
 - A formal policy would ensure long term data availability. Harder for someone to reverse the decision later. Making it available is a great step, but a formal policy a great follow-up step (Mattke)
 - A formal declaration from the County Board for open data definitely helps as leadership changes (Brandt)
- As a private sector individual (working for GeoComm), it's always helpful for us to know if a dataset is going to be public because it guides us in determining what information we include in the data. Some places have sensitive information (e.g., confidential homes), so they may be more reluctant to share data (Huggett)
- Geoff Maas's [publications with MetroGIS](#) are essential reading on open data in MN (Majewicz)
- Much of this has been researched and is identified in the [Business Plan for Statewide Parcel Data Integration](#). While a bit dated, it still lays out barriers and potential solutions (Ross)
- For hosting the parcel data, I think ArcGis Portal should be considered, where each agency could collaborate their portal environments (Eull)
 - From a long-term data archiving/preservation perspective, going through the Commons might be a good (maybe additional) step (Mattke)
- It's good to see movement towards more free and open data counties since the [GAC Outreach Committee's 2016 survey](#) (Kne)
- If a county doesn't have the data internally, we're asking for something that they don't have. Also, sometimes with staff turnover, a county can lose the knowledge of how to create the data. This is an opportunity for the community to help, especially county-to-county. It's also important to bring information about any barriers that counties face to the GAC so that that GAC can help address them (Martini)

Motion: The Parcels and Land Records Committee recommends that the GAC advise MnGeo about the survey results showing which counties would like to participate in a statewide publicly available parcel dataset. This process would be repeated quarterly. (Mavis/Veraguth) – Motion passed.

7. GAC Hub (Richter, Slaats)

Slaats reported on the progress of the ad-hoc team that is developing policies and procedures to transition much of the GAC's web content to a new GAC Hub site. The team includes representatives from GAC committees and others. Editing will be in the hands of the committees and workgroups. Workflows are intended to be helpful and efficient, not onerous. Slaats then showed an initial draft "container" for the Hub homepage.

Vaughn asked who would approve content and what the process would be? Richter explained that the process is still a concept, but the aim is for efficiency so that content can be published in a reasonable timeframe. MNIT Communications will assist to ensure that the Hub site is accessible and readable. Once the workflow is

developed, there will be front end guidance and training, especially since not everyone has worked with Hub before.

Knott volunteered to join the ad-hoc team.

8. Lidar Update (Sjerven)

On behalf of the 3DGeo Committee, Sjerven provided an update about the status of lidar collects and plans:

- The team applied for funding grants (3DEP program USGS BAAs) in the Upper and Central Mississippi lidar acquisition blocks, both of which were approved! The Upper Mississippi project involved 14 partners contributing a total of \$1,286,736 and the Upper Mississippi involved 20 partners contributing a total of \$1,580,685.
- Douglas County's 3DEP application was also accepted. The county will use a local vendor to collect its lidar data. The county applied for and received funding from USGS 3DEP using the cooperative agreement option where the applicant can select their own vendor.
- Becker County has funding from FEMA for a collect in Spring 2022.
- In southern Minnesota, lidar was partially collected in the southeast in 2021 and is planned for remaining acquisition in southeast and for southwest Minnesota in Spring 2022.

See the slides for maps and additional details about timing and funding.

- Vaughn noted that the additional of two blocks has increased the totals for this project to \$14.3 million with 51,405 square miles covered at Quality Level 1. More counties are asking, "How can we help?"
- Richter thanked the 3DGeo Committee for their continued and substantial coordination work on this project.

9. Break

10. 2022 Priority Projects Survey (Brandt)

Brandt announced that this year's GAC priorities survey will open December 21 and close January 7 [*note: the survey was later extended to January 17*]. It is simple to fill out and asks whether each potential priority is critical, very important, nice-to-have or not needed.

Action Item: GAC members publicize the survey to your stakeholders so we reach as broad an audience as possible.

- The prioritization process gives higher priority to projects that have:
 - Owner: someone to oversee day-to-day activities and report to the GAC
 - Champion: Executive/policy level supporter who can remove barriers
 - Funding, if needed
- Sometimes, getting the word out about a need will increase the likelihood of finding resources and support.

- Veraguth: Dan Ross is the champion of many GAC 2021 priorities – who will replace him? Ross: Ideally the next CGIO.
- Vaughn: All meeting attendees, including guests, should spread the word, not just GAC members. Publicize not just to geospatial professionals but also to supervisors, managers, policymakers. This can also serve to introduce those people to the GAC and to its process of formalizing priorities.
- Geurts: Will publicize to the State Agency GIS Collaborative
- Richter: Other groups could include law enforcement, building inspectors, etc.

11. Higher Education Sector Report (Kne, Stark)

Kne presented an overview of U-Spatial’s activities at the University of Minnesota.

- U-Spatial’s mission is to serve and drive the fast-growing need across the University for expertise, data, and tools related to GIS, remote sensing, and spatial computing.
- Its long-range vision is to be at the nexus of the world’s first “Spatial University” and demonstrate what is possible with spatial thinking.
- It is housed in the Office of Vice President for Research in the Research Computing unit which also includes the Minnesota Supercomputer Institute and the University of Minnesota Informatics Institute. U-Spatial’s offices are on two campuses (Duluth, Minneapolis) which serve the entire UMN system.

See the slides for a list of U-Spatial’s current staff and former RAs, along with statistics on their main activities: help desk, training workshops, classroom support, events, hosted servers, and ArcGIS Online. The annual statistics cover 2011 through 2020 and illustrate U-Spatial’s exponential growth over that period. Currently, their ArcGIS Online site has 17,780 named users and 131,972 maps, apps, and layers.

Stark provided a summary of two current initiatives:

- [The Spatial University](#): The world's first spatial university, the University of Minnesota is advancing spatial sciences and the workforce of tomorrow. The university is committed to the transformative potential of spatial thinking. At the heart of the university's spatial capabilities is U-Spatial. While creating new opportunities and synergies around spatial research, teaching, and service, U-Spatial has been nationally recognized in many venues as a leading model for how universities can successfully integrate spatial data, visualization, analysis, and spatial thinking.
- [K12 Collaborative](#): This partnership supports and promotes the attainment of GIS experience and skills in Minnesota K-12 students. It aims to foster the collaboration of Higher Ed, GIS professionals, teachers, and researchers, to advance best practices for teaching GIS in K-12 environments, and for connecting students to careers utilizing GIS. The partnership supports educators in integrating GIS into their teaching through training and GIS administrative support. The partnership has collaborated with the Minnesota GIS/LIS Consortium to offer Educator Day preceding the GIS/LIS annual conference. Also, U-Spatial’s help desk is open to K-12 teachers.

In 2021, U-Spatial’s sponsored projects and external sales included \$1.2 million of active and funded projects with University of Minnesota units and state agencies, plus \$2.5 million of proposed projects. Stark then touched on 12 projects that U-Spatial has recently been involved with, including a wastewater SARS-CoV2 surveillance study; county multi-hazard mitigation plan updates; and turfgrass research. See slides for details.

12. Legislative update (Ross)

Ross reported that legislation has been prepared to support hiring of a Survey Coordinator at MnGeo as well as lidar activities (acquisition, data storage, management and dissemination). It needs to be submitted by late December or early January. Brandon Hirsch is MNIT's legislative liaison. If there are questions about this legislation after Dan Ross leaves state service and before a new MnGeo director is hired, contact Alison Slaats.

13. Updates on MN GAC priority projects and initiatives

Brandt 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?

He showed the map of counties that consider themselves to have free and open data, either with or without a policy.

- Parcel Data – Slaats
 - Most recent successes:
 - PLRC's Open Data Subcommittee sent out a survey to all counties on December 3 to ask about barriers to sharing data, and specifically ask if counties would like their data to be included in a public GAC-standard aggregated dataset (see earlier discussion in this meeting's Item 6).
 - MnGeo's aggregation process is updated to be able to easily publish public GAC-standard aggregated dataset for counties that opt-in.
 - If you are experiencing a barrier: None
 - Next tasks:
 - Publish public GAC-standard aggregated dataset for counties that opt-in in January 2022
 - Continue reaching out from county-to-county to talk about benefits of sharing data, learn more about barriers and follow up on survey results
- Updated and Aligned Boundary Data – Dowell
 - Most recent success: Transferred the PLSS Status Map to MnGeo
 - If you are experiencing a barrier: Volunteer time
 - Next tasks:
 - Update the PLSS Status Map
 - Continue supporting/documenting the Arrowhead Alignment Project
- Remonumentation of Section Corners – Veraguth
 - Most recent successes:

- Proposed legislation and business case are almost complete; looking for \$10 million/year in funding
 - Working on letters of support; Mavis and Veraguth presented to the Association of Minnesota Counties last week
 - Have a sponsor (would help to have additional sponsors)
 - Barrier: Need to get legislation in revisor's form
 - Next task: Submit legislation
- New Lidar Acquisition
 - See presentation earlier in this meeting (Item 8) for the update
- Accurate Hydro-DEMs – Vaughn
 - Most recent successes:
 - None related to progress
 - 3DGeo starting to receive more questions about this topic. Previous state investments in DEM hydro-modification and resulting datasets will support new DEM Hydro-modification.
 - Barrier: Funding
 - Next tasks:
 - Continue to build awareness that new lidar will require DEM hydro-modification and funding
 - Identification of culverts in new lidar will facilitate DEM hydro-modification
- Culvert Data Standard – Moore
 - Most recent successes:
 - Identifying resources and interested parties to become partners/members in the committee.
 - Researching culvert data practices of other states to identify best practices
 - Barrier: Identifying time to coordinate meetings for the standard. The culvert data standard will become high priority in 2022 in tandem with the DEM Hydro-modification Subgroup
 - Next task: Meeting will be set in January to bring together interested parties for the culvert data standard. Meeting with MnDOT representatives is forthcoming.
- Road Centerline Data – Ross
 - Most recent success: Data submission and validation routines moved to a new portal
 - Barrier: All data providers need to start using the new portal
 - Next tasks:
 - Build and automate the ETL process for aggregating data to the GAC standard
 - Publish to the Geospatial Commons
- Address Points Data – Ross

- Most recent success: Data submission and validation routines moved to a new portal
 - Barrier: All data providers need to start using the new portal
 - Next tasks:
 - Build and automate the ETL process for aggregating data to the GAC standard
 - Publish to the Geospatial Commons
- Underground Utilities Data – Swazee
 - Most recent successes:
 - Major – Support resolution passed by the Minnesota Clean Water Council
 - Minor – November 18, 2021, presentation to the American Public Works Association
 - Barrier: Not a barrier, but facing the most challenging part of the entire project – building Phase 1 (of 3) “Fusion View” software which can generate a unified view of Minnesota’s underground infrastructure
 - Next tasks: Due to the complexity of this project, there are approximately 50 tasks being worked to varying degrees at the same time
- Critical Infrastructure Data – Stark
 - Most recent success:
 - Published the [fire station resource](#) to the Commons with an app for verification
 - Barriers:
 - Hoping to pique the interest of the Fire Marshal and/or other authorities of these data!
 - Finding avenues to publicize beyond GIS community
 - Next tasks:
 - Publish “C.I. resource site” on MnGeo website
 - Publish law enforcement dataset, similar to fire station dataset
- U.S. National Grid Materials – Knippel
 - Most recent success: Developed interface to allow map publishers to contribute to an application that provides access to USNG maps series and map books published anywhere on the Internet
 - Barrier: Time
 - Next tasks:
 - Complete the above interface
 - Migrate existing documentation from ArcMap to ArcGIS Pro
- Imagery update – Slaats
 - Most recent successes:
 - Worked on image viewer recommended by Image Service Sustainability Committee
 - Added county imagery from Rice, Steele, and Carlton County to WMS
 - Barrier: Time constraints to work on committee recommendations; did not accomplish removal of suggested retirement image layers

- Next task: Adding county imagery from Koochiching and Le Sueur counties to WMS
- The implementation of an archive for Minnesota geospatial data
 - Most recent success: Created a test repository with sample datasets from the Commons as a proof of concept
 - Barrier: Working on getting a firm commitment from hosting entity (hopefully UMN)
 - Next tasks:
 - Writing report describing pilot details
 - Figuring out funding

14. Announcements or Other Business

- Veraguth – Douglas County will use a local vendor to collect its lidar data. Douglas County applied for and received funding from USGS 3DEP using the cooperative agreement option where the applicant can select their own vendor. [The 3DGeo BAA has used the GPSC (Geospatial Products and Service Contracts) approach where USGS selects the vendor. See [USGS BAA FAQ.](#)]
- Kne – U-Spatial has job postings for two GIS developers.
- Brandt – The MetroGIS Coordinating Committee met 12/9/21.
 - We received a presentation regarding licensing data and different license types.
 - MESB will continue its role of consolidating address and centerline 911 GIS data from the metro counties and make that available to the state.
 - The level of support for local redistricting within the metro counties will be discussed in early 2022.
- Knott – The GIS/LIS Consortium held a successful virtual annual conference with great presentations. Some people attended who couldn't have attended in-person. Voting on next year's board nominations closes after today. The board's strategic planning session in February will include GAC priorities as part of the discussion.
- Mavis – The Minnesota Society of Professional Surveyors' annual meeting will be at the end of February in Alexandria.

15. Next Meetings

- 2022 GAC priorities special meeting:
 - January 19, 10:00 – 11:00
- Next quarterly meetings:
 - March 30, 10:00 – noon
 - May 25, 10:00 – 1:00

16. Adjourn

Richter thanked everyone for attending the meeting.

- **Motion:** To adjourn meeting (Veraguth/Richter) – Motion passed.