

Minnesota Geospatial Advisory Council Meeting

May 27, 2020

Webex. See meeting invite for details.

11:00 a.m. – 2:00 p.m.

Agenda

1. Call to order (Chair)	11:00	15 min
a. Introductions		
b. Approval of agenda		
c. Approval of meeting minutes from 3/11/2020		
2. Review and accept committee summaries (All) – <i>page 2</i>	11:15	5 min
3. Standards update (Kotz)	11:20	5 min
4. GAC SharePoint Site	11:25	5 min
5. Geospatial Commons advisory group	11:30	10 min
6. GIS/LIS salary survey update (Stovern)	11:40	5 min
7. COVID-19 Impacts to Minnesota Travel Patterns (Timerson)	11:45	10 min
8. Break Networking	11:55	30 min
9. Sector reports (Tourtelotte and Rundquist)	12:25	20 min
10. Updates on MN GAC priority projects and initiatives <i>page 14</i>	12:45	20 min
11. Legislative updates	1:05	10 min
12. Announcements or other business	1:15	15 min
13. Adjourn	2:00	

Agenda Item 2. Review and Approval of Committee & Workgroup Summaries

3D Geomatics Committee Steering Team

Report date: 05/19/2020

Prepared by: Steering Committee Co-Chairs: [Sean Vaughn](#), [Gerry Sjerven](#)

Meetings:

- Steering Team
 - 1/21/2020, 2/18/2020, 4/21/2020, 5/19/2020
- Data Acquisition Workgroup
- Hydrogeomorphology Workgroup
- Education Workgroup
- Infrastructure Workgroup
- Vegetation Workgroup

Progress on work plan & Next Steps:

- Committee and Workgroups are on track for meeting objectives for the year.
- Discussion and formation of the Data Acquisition Workgroup in progress, Workplan in progress
- Working with Workgroups to update Website design and content and expand membership
- **Data Acquisition Workgroup**
 - Continue to support potential 2021 lidar acquisitions and future funding opportunities
 - The Acquisition Team has completed writing the final draft version of a [MNIT LCCMR proposal](#) that strives to:
 - Conduct forestry fieldwork, produce lidar-derived statistical data layers, develop empirical forest inventory models, and create comprehensive all-lands forest inventory dataset
 - Develop hydro-modified DEMs and derived products to support integrated land-water-vegetation resource management and decision making at the watershed scale
 - Design, develop and deploy an education program for understanding and effectively using lidar data and lidar derivative products.
 - Design, develop and implement lidar data and derivative product storage and dissemination system

- **Hydrogeomorphology Workgroup**

- Identified potential topics and speakers for upcoming monthly meetings. These speakers inform members on ways hydrography data is currently used and could be improved with LiDAR-derived hydrography.
 - Tyler Grupa – using spatial recognition to help identify ditches and direct water flow. Ditch vs. stream
 - Sarah Porter – using ACPF database - modelling manure application in the state of MN
 - Rick Moore – update to the MN catchment dataset
 - Jen Crea – updates to the Missouri River and Rainey River basin line work
- Formalized ***Foundational Hydrography Data Stewards Subgroup***
 - This group facilitates technical conversations that originate from the DNR Geospatial Water Resources Team (GeoWRT) and 3D Geomatics Hydrogeomorphology Workgroup to provide foundational hydrography datasets for spatial data end users in the state.
- Breachline subgroup finalized Standardized Attributes and will be publishing the attributes and geodatabase template on the website along with the Digital Dam Breachline Work Map
- Breachline subgroup is in the process of developing a plan for the QA/QC of breachlines as well as a subgroup fact sheet
- The Breachline Database subgroup changed its name to the ***DEM Hydro-modification Subgroup*** and updating its mission to reflect its expansion of scope to include hydro-modified DEMs. The expanded role of the subgroup focuses more on the hydro-modification of Digital Elevation Models (DEMs) of which breachlines are a component of the hydro-modification process. The subgroup and website will be a resource for DEM hydro-modification.
<https://www.mngeo.state.mn.us/committee/3dgeo/hydro/hydromod/index.html>
- Support Data Acquisition workgroup in grant writing
- Meeting Dates
 - HydroGeo Workgroup: January 14, February 11, March 10, May 12
 - Foundational Hydrography Data Stewards Subgroup: January 27, April 27
 - DEM Hydro-Modification Subgroup: January 22, February 26, March 24, April 28

- **Education Workgroup**

- Finalized a draft of the workplan
- Discussions continue on what Lidar education looks like for all stakeholders for entire state
 - Discussing modes of delivery, video/online options

- Continue to identify other members for the workgroup as well as potential Agency liaisons
- Developed draft of educational needs and plan for acquisition workgroup
- **Infrastructure Workgroup**
 - Developed planning document on next steps for workgroup
 - Identified initial members of the workgroup and Cultural Resources subgroup
 - In the process of scheduling conference call with all members
- **Vegetation Workgroup**
 - Vegetation Working Group reconvened after a year and half hiatus
 - 13 people attended, coming from DNR FOR, FAW, USF, UMN, and NRRI. Varying backgrounds include wildlife biologist, forester, remote sensing science, planner, etc
 - Reviewed the draft workplan, and asked for comment. We will be finalizing workplan next meeting
 - We had a round robin, most people's interests were with regard to ...
 - The meeting ended with a discussion of the meeting format moving forward. We decided to have a meeting every other month at 2PM on the second Tuesday of the month, to start meetings with a round robin, discuss past business, address new business, and then have a working group member(s) give a presentation on their current work as it pertains to the working group.

Archiving Implementation Workgroup

Report date:

Wednesday, May 13, 2020

Prepared by:

Ryan Mattke, Workgroup Chair, matt0089@umn.edu

Meetings:

The workgroup met on January 31, February 21, March 20, and April 17.

Meeting minutes are available here: <http://www.mngeo.state.mn.us/workgroup/archiving/>

Workgroup will continue to meet monthly.

Progress on work plan:

- Work Plan and Charter approved at December 11 GAC meeting.
- Divided the work for the six activities and deliverables and identified workgroup members for each subgroup.
- Subgroups for Outreach, Funding, Pilot Project, Program Design, and Technology Plan have begun meeting.

Additional comments:

Awards Committee

Report date:

May 26, 2020

Prepared by:

Cory Richter
crichter@blainemn.gov

Meetings:

5/20/2020

Progress on work plan:

1. Elected new co-chairs to govern the committee
2. Developed a logo and branding
3. Social media promotion of the advertisement for the 2020 Governor's Commendation nominations

Additional comments:

Emergency Preparedness Committee

Report date: May 26, 2020

Prepared by:

Chair: Stephen Swazee, Executive Director, SharedGeo, sdswazee@sharedgeo.org, 651-456-5411

Vice Chair: Randy Knippel, GIS Manager, Dakota County, Randy.Knippel@co.dakota.mn.us, 952-891-7080

Full Committee/Steering

Meetings:

- Full committee: March 19, 1st CY Quarterly Meeting: Cancelled due to COVID-19 concerns
- Leadership Team:
 - March 16: COVID response map and community volunteer program efforts discussed
 - May 20: Review of EPC developments, upcoming efforts and IT changes

Progress on work plan:

- Conduct at least 3 meetings of the full committee:
 - No progress this period; shifting to delivery via Zoom due to COVID-19
- Conduct at least one meeting of the leadership team (Chair, Co-chair, and Project Team chairs):
 - As noted above, two meetings so far this CY and moving toward a bimonthly model
- Randy Knippel to serve as EPC liaison to the [Metropolitan Emergency Managers Association](#) (MEMA) by attending that association's monthly meetings:
 - Ongoing as defined above

Additional comments:

- EPC Chair Swazee and Minnesota developed geospatial technology appeared in nationally syndicated PBS "Market-to-Market" segment on [April 17, 2020](#) per nationwide U.S. National Grid implementation efforts.
 - A complete rework of the EPC IT infrastructure, as well as development of a disaster response viewer for the public is currently underway.
 - Effort to create database of GIS personnel willing to volunteer services during disasters gets underway week of May 25 with outreach email send.
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Critical Facilities Project Team

Stacey Stark, Associate Director, U Spatial, slstark@d.umn.edu, 218-726-7438

Meetings: No formal meetings, coordination activities only this period

Progress on work plan:

- Hold meeting for interested collaborators:
 - No meetings except as noted above
- Create ArcGIS online map for counties to validate their data:
 - Underway

- Present at Association of MN Emergency Managers, September 2020:
 - Accepted, event pending
- Publish comprehensive statewide dataset of fire and police to [Minnesota Geospatial Commons](#):
 - Developmental efforts underway

Additional comments: None

Damage Assessment Project Team

Cory Richter, GIS Coordinator, City of Blaine, crichter@ci.blaine.mn.us, 763-717-2639

Brad Anderson, GIS Manager, City of Moorhead, brad.anderson@ci.moorhead.mn.us, 218-299-5125

Meetings: No formal meetings, coordination activities only this period

Progress on work plan:

- Submit draft data standard version 0.3 to GAC Standards Committee for formal community review:
 - Draft submitted and approved by Standards Committee for formal 90-day public review,
 - [Website supporting public review completed](#), and
 - Announcement of 90-day review period sent to greater Minnesota GIS community through the [MN GIS/LIS Consortium](#) E-announcement of May 20.

Additional comments: None

Underground Infrastructure Project Team (Forming)

Barbara Cederberg, CEO, [Gopher State One Call](#) (GSOC), barbara.cederberg@gopherstateonecall.org, 651-681-7303

Meetings: No formal meetings, coordination activities only this period

Progress on work plan: Development pending

Additional comments: This is an exploratory effort to determine feasibility of developing a Project Team to address a myriad of issues involving the interplay of GIS, underground infrastructure, safety, emergency response and business efficiency. To date:

- April 30: Discussion between EPC Chair Swazee, GSOC CEO Barbara Cederberg, and GSOC General Counsel Dean Parker on steps to create a Project Team
 - May 8: EPC Chair and Vice-Chair briefed MGAC Chair Kotz on developments
 - May 20: EPC Chair briefed [Office of Pipeline Safety](#) GIS lead Sean Mangan on developments
 - May 27: Request for volunteers will be sent to current EPC members, greater MN GIS community and select members of the Emergency Services Sector. Ms. Cederberg to do same with underground infrastructure community.
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U.S. National Grid Project Team

Randy Knippel, GIS Manager, Dakota County, Randy.Knippel@co.dakota.mn.us, 952-891-7080

Meetings:

- March 5: U.S. National Grid (USNG) Center map interface update effort discussions
- April 22: National event - USNG Implementation Work Group online meeting

Progress on work plan:

- Create/update USNG statewide maps:
 - Complete - [Dakota County will host the new 10K USNG maps](#), until a better solution is developed
- Work with the nationwide [USNG Implementation Working Group](#) (USNGIWG) to expand Minnesota efforts into a national effort:
 - Project Team members actively participate in USNGIWG efforts, most recently during April 22nd meeting noted above and through ongoing assigned USNGIWG activities
- Engage in training opportunities and presentations as they arise:
 - May 7: In response to a request from the [Minnesota chapter of the Society of Broadcast Engineers](#), EPC Chair Swazee provided an online brief on importance of adoption of USNG.
- Work with Minnesota 501(c)3 geospatial research nonprofit SharedGeo to:
 - Develop a mechanism to allow any USNG maps and map books to be added to the [USNGcenter.org](#) map interface:
 - Underway
 - Deploy and document dynamic magnetic declination diagram north arrow for use with USNG map production:
 - Underway
 - Actively pursue opportunities to facilitate implementation in state and local governments across the nation:
 - Creation of maps and map books – No progress this period
 - Develop mechanism and capacity to allow students to provide USNG maps and mapbooks – Obtained verbal participation commitments from U of M, U of Wisconsin and an indication of interest from Iowa State University
 - USNG Emergency Location Marker (ELM) program - Continues to expand nationwide with installs now at [NASA's Cape Kennedy](#), [the Atlanta Metro](#), and most recently [Kennesaw Mountain Battlefield National Park](#)

Additional comments: None

Image Service Sustainability

Report date: 5/29/2019

Prepared by:

Matt McGuire
Metropolitan Council
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651.602.1964

Meetings:

No meetings since the last status report

Progress on work plan:

Yearly workplan is published. https://www.mngeo.state.mn.us/committee/image_service/index.html

Additional comments:

Waiting for new imagery for next meeting

Outreach Committee

Report date: May 12, 2020

Prepared by:

Kari Geurts, (kari.geurts@state.mn.us)

Nick Meyers, GISP (nmeyers@esri.com)

Meetings:

The Committee met on February 12 2020. During this time Kari and Nick have had several discussions on collaborative efforts with the GIS/LIS Consortium and LMC (League of MN Cities).

GIS/LIS: We are discussing the potential of working with the GIS/LIS consortium to share all the GAC committees content using something like Google Suite or ArcGIS Hub. The full Outreach committee will discuss at future meetings.

LMC: We have worked with LMC and they will be writing an Open Data article in their spring newsletter. This will include interviews with many Cities and Counties around the state that we have received commitments to be part of this article. The article will also include information about COVID-19 and the importance of GIS in response to the pandemic.

Progress on work plan:

- *Activities: The committee will be meeting on a regular basis.*
 - Committee will be collecting success stories to promote the value of open data.
 - Committee members will be working with other GAC committee members to determine what outreach activities they want to pursue and how to coordinate across the committees to reach the appropriate GIS audiences.
 - Committee discussed the need for "branding" to be created to help make sure the look, feel, and message is consistent across all subcommittees.
- *Accomplishments:*
 - Committee reviewed and approved 2020 work plan.
 - Kari wrote a response to the request from the GAC One Minnesota Plan Response Working Group.
 - Discussed a joint effort with GIS/LIS consortium to share all GAC communication.
 - Plan to publish LMC article in spring newsletter about open data.
 - Nick presented to the GIS/LIS Board on Feb 28th to discuss a shared engagement strategy between GAC and GIS/LIS. The GIS/LIS Board was excited for the idea and willing to provide some support in making this successful.
- *Progress toward achieving proposed goals:*
 - Identified writing local success stories with Open Data from Moorhead, Blaine, Minneapolis, Rice County, and a few small cities.
 - Plan to work with Cory to provide updates on committee progress
 - Work on Branding Guidelines in 2020 for outreach
- *Problems or impediments:* Still working through logistics with GIS/LIS consortium to find a way to share/distribute all communication.
- *Required assistance:* None

Additional comments: None

Parcels and Land Records Committee

Report date:

05/18/2020

Prepared by:

Preston Dowell, 218-742-9824, dowellp@stlouiscountymn.gov

Meetings:

None

Progress on work plan:

Preston Dowell presented at the MSPS annual conference on February 21, 2020 to inform MSPS members about the project.

Worked with GAC One Minnesota Work Group regarding the Parcel and Land Records committee and its tasks.

On February 24th, 4 members of the PLRC met with the Arrowhead GIS Collaborate and discussed standard data for PLSS corners for the arrowhead. When this model is complete, it could be used as a pilot for the PLSS inventory and also a standard for PLSS data management.

Additional comments:

We are working to revise the work plan for GAC approval.

Standards Committee

Report date:

May 13, 2020

Prepared by:

Mark Kotz, Chair (mark.kotz@metc.state.mn.us)

Curt Carlson, Vice Chair (curtis.carlson@state.mn.us)

Meetings in 2020:

January 10, 2020 – standards logistics subgroup

April 1, 2020 – full committee meeting

May 18, 2020 – full committee meeting

[Meeting minutes available here](#)

Progress on work plan:

- Compare existing GAC standards to NENA standards and make appropriate adjustments to ensure usefulness for NextGen 9-1-1
 - Review and modifications to Address Standards proposes
 - Additional review scheduled for 5/18 committee meeting
- Work with stakeholder groups to modify remaining original GCGI standards to the GAC format and have adopted by the GAC. This will involve review and possibly changes to these standards.
 - No progress
- Work with EPC representatives toward approval of a damage assessment data standard
 - Draft approved by Standards Committee for public review expected to start around the end of May.
- Continue work on streamlining the logistics for developing and maintaining standards
 - Postponed until fall due to staff availability due to pandemic response
- Facilitate the creation of usage guides for key GAC standards
 - No progress
- If ready in 2020, work with stakeholders on a stormwater data standard
 - No progress
- If ready in 2020, work with stakeholders on a parks and trails data standard
 - Working with stakeholder group to finish a draft to submit to the committee

Agenda Item 10. GAC Priority Projects and Initiatives

GAC Rank	Project or Initiative Name	Status	Priority Owner	Champ
1	All public geospatial data in MN to be free and open to everyone	Active	Kari Geurts	Many
2	Updated and aligned boundary data from authoritative sources	Active	Preston Dowell	Ross
3	The implementation of an archive for Minnesota geospatial data	Active	Ryan Mattke	many
4	Statewide publicly available parcel data	Active	Alison Slaats	Kotz
5	Improvements to the MnGeo Imagery Service, such as Web Mercator support, tiling, and complementary options such as “composite of latest leaf off imagery”, and downloading options	Active	Alison Slaats	Ross
6	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	Many
7	Statewide publicly available road centerline data	Active		Ross
8	New LiDAR data acquisition across Minnesota for use in developing new derived products guided by committee developed standards	Active	Gerry Sjerven	Ross
9	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	Brad Anderson/ Cory Richter	
10	Statewide publicly available address points data	Active		Ross
11	Maps, procedures, templates and other materials to help all levels of government implement the U.S. National Grid	Active	Randy Knippel	Knippel
12	A parks and trails data standard	Active		
13	A forum (committee, workgroup, etc.) for MN geospatial professionals to discuss and share best practices, standards, lessons learned, etc. for implementing and supporting the geospatial components of NG9-1-1			
14	A forum (committee, workgroup, etc.) to explore development of statewide data representing underground utilities			
15	Statewide and regional (e.g. Twin Cities metro) publicly available basemap services			
16	A guide for describing in metadata the specifications of unmanned aircraft systems (UAS), unmanned surface water vehicles (USV), and unmanned underwater vehicles (UUV)			
17	An inventory and assessment of Minnesota’s geospatial data assets			
18	Identifying a custodian and maintenance workflow for statewide critical infrastructure data			
19	A culvert data standard	Active		