

Minnesota Geospatial Advisory Council Meeting

May 26, 2021

Webex. See meeting invite for details.

10:00 – 12:00.

Agenda

1. Call to Order (Chair)	10:00	10 min
a. Introductions		
b. Approval of Agenda		
c. Approval of Meeting Minutes from 3/3/2021		
2. Review and Accept Committee Summaries (All) – <i>page 3</i>	10:10	5 min
3. GAC Appointments for Next Term – Process Update (Kotz, Rader)	10:15	10 min
4. GAC Leadership Transition Plan (Kotz) – <i>page 17</i>	10:25	10 min
5. GAC Web Presence (Ross, Richter)	10:35	15 min
6. NAIP Update (Bloomquist)	10:50	5 min
7. Break	10:55	5 min
8. Low Distortion Projection Update (Bitner)	11:00	15 min
9. Legislative Updates	11:15	10 min
10. Updates on MN GAC Priority Projects and Initiatives (Richter) – <i>page 18</i>	11:25	20 min
11. Announcements or Other Business	11:45	15 min
12. Adjourn	12:00	

GAC Members

- 1 City, Twin Cities metro
 - Renee Huset, St. Paul Regional Water Services
- 1 City, Greater Minnesota
 - Leanne Knott, City of Redwing
- 1 County, Twin Cities metro
 - Victoria Reinhardt, Ramsey County
- 1 County, Greater Minnesota
 - Patrick Veraguth, Douglas County
- 1 Regional government, Twin Cities metro
 - Mark Kotz, Metropolitan Council
- 1 Regional government, Greater Minnesota
 - Bryan McCoy, Headwaters Regional Development Commission
- 2 State agency representatives
 - Kari Geurts, MNIT Services @ MN Dept. of Natural Resources
 - Benjamin Timerson, MN Dept. of Transportation
- 2 Federal government
 - Jeffrey Bloomquist, US Department of Agriculture
 - Kory Thurnau, US Forest Service
- 1 Tribal government
 - Ryan Bonney, Shakopee Mdewakanton Sioux Community
- 1 Non-profit organizations
 - Soren Rundquist, Environmental Working Group
- 2 Business
 - Gerry Sjerven, Minnesota Power
 - Brandon Tourtelotte, Pro-West
- 1 K-12 education
 - vacant
- 2 Higher Education
 - Harvey Thorleifson, University of Minnesota
 - Stacey Stark, University of Minnesota Duluth
- 1 MetroGIS
 - David Brandt, Washington County
- 1 MN GIS/LIS Consortium
 - Ryan Stovern, St. Louis County
- 1 Surveyor
 - Chris Mavis, Hennepin County
- 3 At-large
 - Len Kne, University of Minnesota
 - Cory Richter, City of Blaine
 - Alex Steele, Minnehaha Creek Watershed District
- 1 Chief Geospatial Information Officer (ex-officio)
 - Dan Ross, MnGeo

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

3D Geomatics Committee

Report Date:

May 13, 2021

Chair and Vice Chair:

Sean Vaughn, Co-Chair
Minnesota IT Services@DNR
763-689-7100 x226
sean.vaughn@state.mn.us

Gerry Sjerven, Co-Chair
Minnesota Power
218-355-3990
gsjerven@mnpower.com

Link to Committee Charter:

The 3DGeomatics Charter (https://www.mngeo.state.mn.us/committee/3dgeo/3dgeo_committee_charter.pdf)

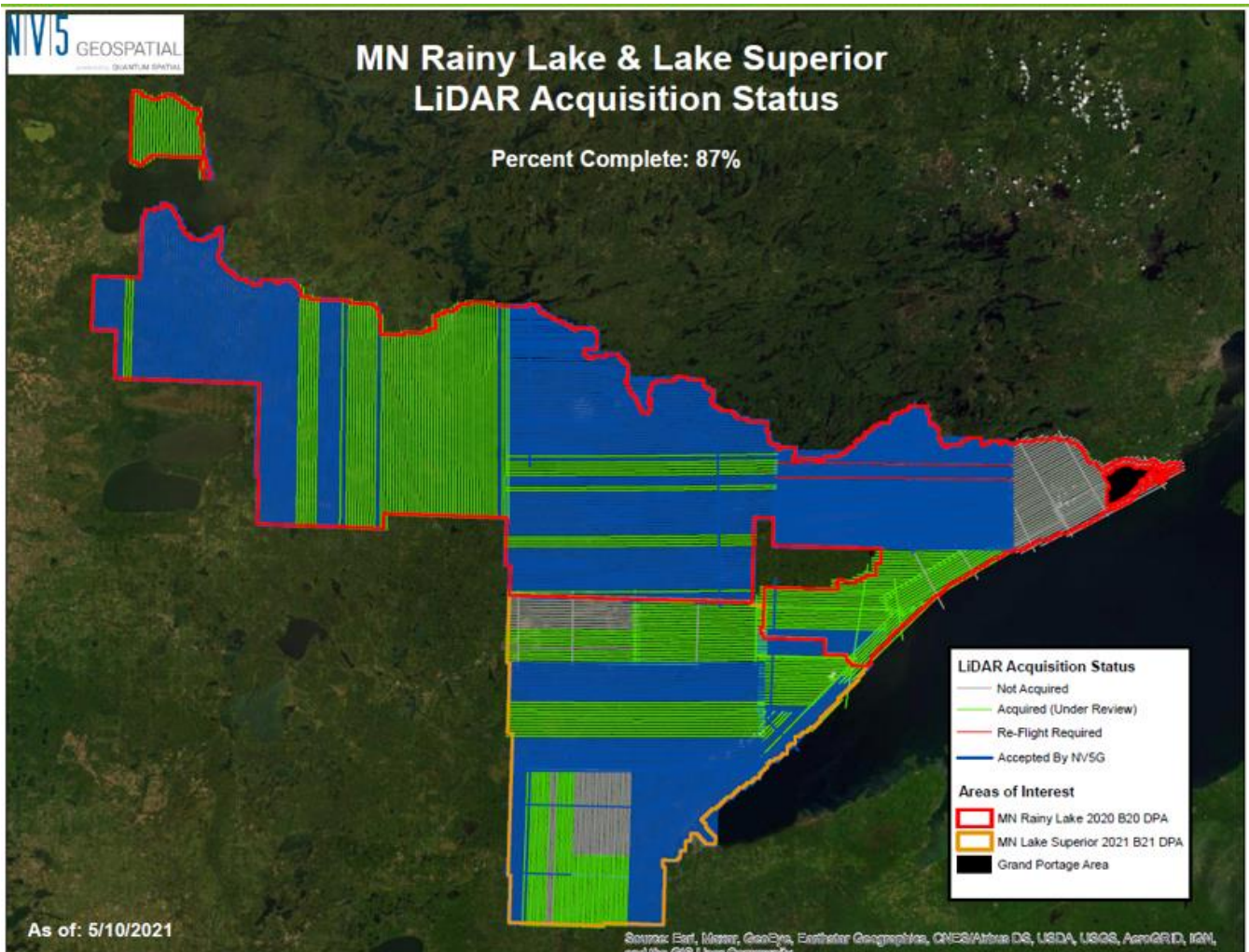
Executive Steering Team

Meetings: 01/19/2021, 02/16/2021, 04/20/2021

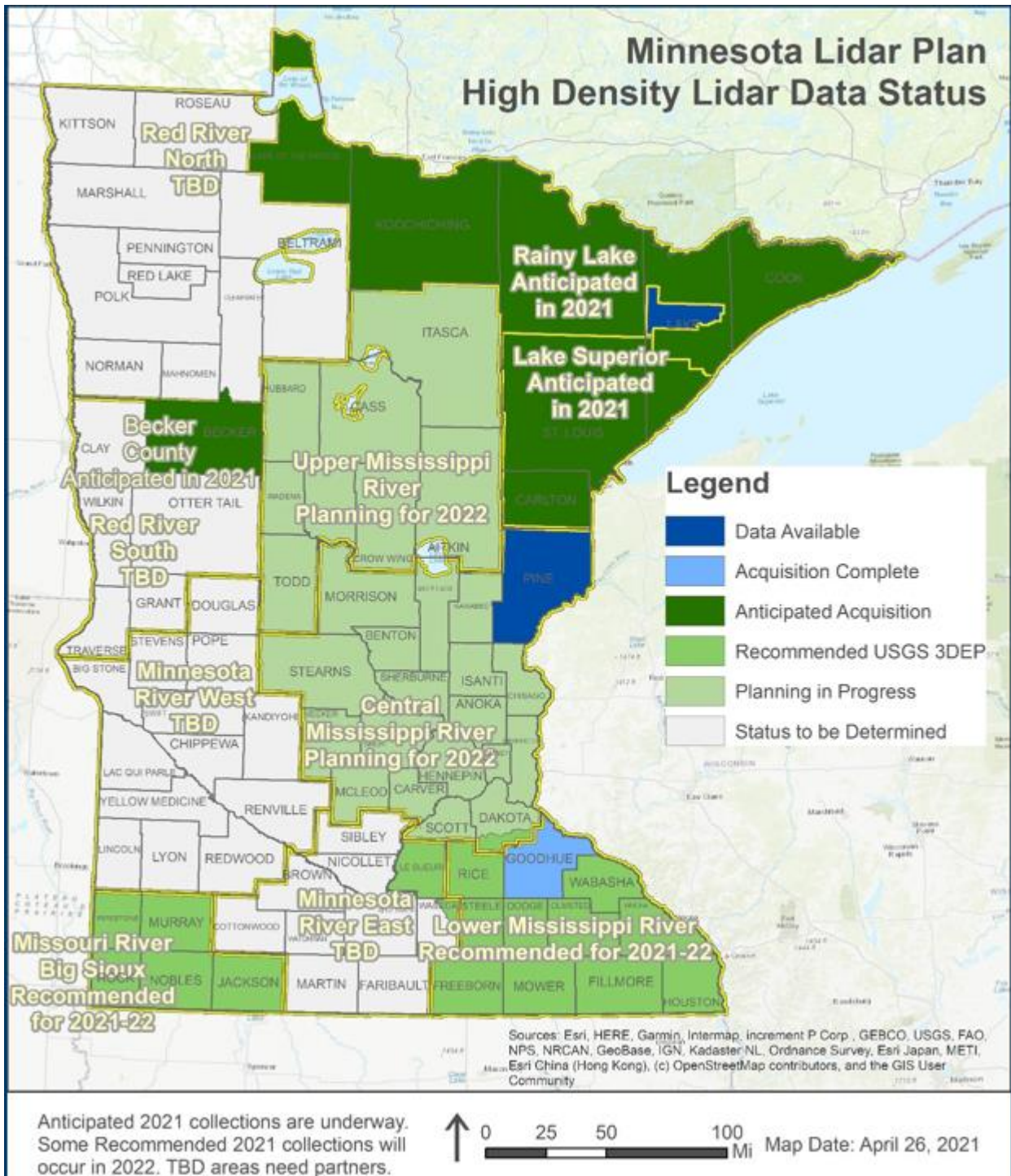
- Continued to meet monthly
- Continued to work with Workgroups on progress and updating each group's website presence.

Data Acquisition Workgroup

- Acquisitions for the Rainy Lake and Lake Superior Block are almost complete



- Meet weekly to manage lidar data acquisition and outreach in support of the Minnesota Lidar Plan
- Continued with significant Lidar acquisition outreach, meetings, emails and communications with stakeholder and partners from State agencies, Counties, Non-Profits, private companies and other partners.
- Representatives attended monthly 3DGeo Steering Team meetings
- Hosted an online MN Lidar Plan Overview webinar on April 27 as an introduction to the plan. This session was recorded and will be made available as reference materials.
- Hosted an online outreach meeting with the Upper Mississippi LAA on May 11th to introduce the Minnesota Lidar plan.
- We have online outreach meetings scheduled for the Central Mississippi River LAA on May 20th and the Minnesota River East and West LAA on May 25th.
- Additional meetings are being planned for the Red River North & South LAB



Infrastructure Workgroup

- Workgroup continues to support the Acquisition Workgroup
- Representatives attended monthly 3DGeo Steering Team meetings

Vegetation Workgroup

- Workgroup continues to support the Acquisition Workgroup
- Representatives attended monthly 3DGeo Steering Team meetings

Hydrogeomorphology Workgroup

Prepared by: Andrea Bergman, Jamie Schulz, Rick Moore, Sean Vaughn

Workgroup meetings: 3/9/2021, 4/13/2021, 5/11/2021:

- March workshop meeting focused on outreach documents, lidar updates
- April and May meetings focused on presentation series on lidar background and lidar-derived hydrography
- Foundational Hydrography Data Stewards held quarterly meeting 4/26/2021
- DEM Hydro-modification Subgroup continues to meet monthly

Progress on work plan:

- Updated and posted 2-page [fact sheet](#)
- Created 1-page document on workgroup success and future plans
- Maintained workgroup SharePoint site, and worked with MnGeo to maintain the workgroup web page
- Presentation series on lidar-derived hydrography that will be key to developing needs statement to guide lidar-derived hydrography products
- Foundational data stewards have begun validating attributes in preparations for conflation to new lidar-derived hydro datasets
- DEM Hydro-modification subgroup
- Continued improvements to web app
- Presentation from Michigan Tech Research Institute on hydro-modification to determine wetland connectivity

Education Workgroup

- Workgroup continues to support the Acquisition Workgroup
- Representatives attended monthly 3DGeo Steering Team meetings

Archiving Pilot Workgroup

Report date:

May 12, 2021

Prepared by:

Ryan Mattke, Workgroup Chair, matt0089@umn.edu

Meetings:

The workgroup plans to start meeting in June.

Meeting minutes will be available here: <https://www.mngeo.state.mn.us/workgroup/archiving/>

Progress on work plan:

- Next steps
 - Draft outline of presentation for GIS/LIS (October 2021)
 - To be submitted in May 2021
 - Evaluate and test potential archive technologies
 - Work to take place June-October 2021
 - Create a proof of concept with pilot data sets in a repository
 - To be completed by October 2021
 - Engage with data creators at various levels of government, academic institutions, and relevant stakeholders
 - Begin sending communications by July 2021

Additional comments:

Awards Committee

Report date:

May 1, 2021

Prepared by:

Len Kne and Phil Nagel (committee co-chairs)

lenkne@umn.edu and Phil.Nagel@bolton-menk.com

Meetings:

February 16, 2021

Progress on work plan:

1. The committee met and developed a communications plan for encouraging submissions. Multiple notices were sent via GovDelivery and the MN GIS/LIS Announcements.
2. The deadline for nominations is June 30, 2021. After that date, the committee will convene to consider all complete applications.

Additional comments:

Next meeting TBD

Emergency Preparedness Committee

Report date: May 12, 2021

Prepared by:

- Chair: Stephen Swazee, Executive Director, SharedGeo, chair@mgacepc.org, 651-456-5411
 - Vice Chair: Randy Knippel, GIS Manager, Dakota County, vchair@mgacepc.org, 952-891-7080
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Full Committee/Leadership Team

Meetings:

- Full committee: March 10, 1st CY Quarterly Meeting, online
- Leadership Team: January 20 and April 14, online

Progress on work plan:

- Conduct at least three meetings of the full committee during 2021
 - One meeting to date, June 17th next
- Conduct at least four meetings of the leadership team (Chair, Co-chair, and Project Team chairs)
 - Two meetings to date, June 8th next
- Continue efforts to cleanup committee's online presence and bring efficiency to its IT infrastructure
 - Ongoing
- 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:

- Meetings of the EPC and some Project Teams going back to October 2020 are now available on a dedicated MGAC EPC YouTube channel. https://www.youtube.com/channel/UC3hwp5_9t3BkiTt-hyALArg. 25 videos are publicly hosted with 600 channel views to date.
 - March meeting attendance was 65, including several individuals from Illinois GIS community interested in developing a similar effort in that state.
 - The June EPC meeting will include a presentation by [One Concern](#) featuring former FEMA Administrator Craig Fugate. We expect exceptionally strong interest in this event.
 - The informal EPC Volunteer Team led by Cory Richter has initiated efforts to review and update the Geospatial Emergency Management Specialist (GEMS) curriculum previously created by Joella Givens.
-

Critical Infrastructure Assessment (CIA) Project Team – GAC PRIORITY
Stacey Stark, Associate Director, U Spatial, slstark@d.umn.edu, 218-726-7438

Meetings: March 16, April 9 and May 9

Progress on work plan:

- Conduct at least three meetings of the Project Team during 2021
 - Three meetings to date – monthly meetings scheduled May through end of year. Next is May 21st.

- Develop updated data model (prioritizing fire and police) based on the previous standards identified in Minnesota Structures Collaborative project
 - In progress
- Publish comprehensive statewide dataset of fire and police to the Minnesota Geospatial Commons
 - In progress
- Present on this project at the Association of MN Emergency Managers in September 2021
 - Scheduled

Additional comments:

- None.

Geospatial Assistance (GA) Project Team (Forming)

Brian Huberty, SharedGeo, bhuberty@sharedgeo.org, 651-706-6426

Meetings: February 10

Progress on work plan:

- Conduct at least three meetings of the Project Team during 2021
 - One meeting to date – next meeting not scheduled at this time
- Complete charter and work plan and receive approval from the EPC Leadership Team
 - In progress
- Develop first draft of procedures to help emergency managers understand steps for requesting aerial imagery and/or GIS support from federal, state and private assets
 - No progress

Additional comments:

- This Project Team will work to formalize procedures by which emergency managers can request aerial imagery and/or GIS support. Items developed for flooding in the Red River Valley in 2009 coming forward will be used as the starting point.

Situational Awareness Sharing Initiative (SASI) Project Team (Forming)

Nicole Helgeson, SharedGeo, (651) 285-5015

Meetings: No formal meetings, coordination activities only this period

Progress on work plan:

- Conduct at least three meetings of the Project Team during 2021
 - Exploring potential for holding meetings as part of the Critical Infrastructure Assessment (CIA) Project Team effort near term
- Complete rework of previous SASI charter and work plan and receive approval from EPC Leadership Team
 - In progress
- Assume responsibility for continued development and maintenance of the Minnesota Situational Awareness Viewer (MNSAV – see: <https://www.mnsav.org>)
 - Coordinating efforts with the Critical Infrastructure Assessment Project Team
- Begin close coordination with the Critical Infrastructure Assessment Project Team to plan for eventual hosting of that Project Team’s data efforts on MNSAV.
 - In progress

Underground Utilities Mapping (UUM) Project Team – GAC PRIORITY

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

Stephen Swazee, MGAC EPC, Chair, chair@mgacepc.org, 651-456-5411

Meetings:

- January 20: Leadership team
- January 26: Large group
- February 19: Leadership team
- February 25: Large group
- March 18: Leadership team
- March 25: Large group
- April 23: Leadership team
- April 29: Large group
- May 21: Leadership team
- May 27: Large group

Progress on work plan:

- Conduct at least eight monthly meetings of the Project Team during 2021
 - One meeting per month to date, May 27th next
- Complete at least one “low hanging fruit” action item by each of the Project Team’s four sub-groups
 - Project Team subgroups have begun developing Item/Discussion/Recommendation discussions for incorporation into the Project Team Improvement Plan
- Deliver at least one presentation about overall team efforts at an established community appropriate conference (or webinar)
 - Project Team has been invited and accepted a featured presentation slot at the [2021 Common Ground Alliance Conference & Expo](#), October 12-15, 2021, Orlando, Florida
- Publish at least one article about the Project Team in a publication of importance to the industry
 - Project Team featured in a Damage Prevention-Pro article and MN Government e-bulletin: <https://dp-pro.com/minnesota-underground-utilities-mapping-project-team/>

Additional comments:

- Commissioner Reinhardt arranged for Project Team Chair Cederberg and Vice Chair Swazee to present to the Policy Committee of the [Minnesota Clean Water Council](#) on February 26th. Presentation recording (starts at 26:00): <https://bit.ly/3w4L1Is>. Vice Chair Swazee currently working with Paul Gardner, Clean Water Council Administrator, on a draft of potential policy statement in support of UUM effort by entire Clean Water Council.
- Project Team receiving briefs and documents from organizations across the U.S. and Europe to determine steps other entities have taken to address various problems due to the lack of geospatial awareness about underground infrastructure. Most recently working with the [Scottish Road Works Commissioner](#) of the UK.

U.S. National Grid (USNG) Project Team – GAC PRIORITY

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

Meetings:

- January 27: National event - USNG Implementation Working Group online meeting
- April 28: National event - USNG Implementation Working Group online meeting

Progress on work plan:

- Conduct at least quarterly meetings of the USNG Implementation Working Group during 2021
 - Two to date, next July 28th
- Develop documentation for production of 10K maps
 - In progress
- Refine, update, and publish Minnesota statewide 1K maps
 - Techniques developed for production of 10K maps will be used in this project
- Work with SharedGeo to complete a new USNG mapbook publishing application on USNG Center (www.usngcenter.org)
 - Prototype in testing and refinement
- Develop an introductory USNG video
 - Zoom recording from presentations given at the Wisconsin Land Information Association Conference (WLIAC) now available on the [MGAC EPC YouTube channel](#).
 - Presentation given at EPC meeting of March 11th, The Art of Making USNG Maps, also available on the MGAC EPC YouTube channel.
 - Training plan for standardized presentations currently in development
- Conduct workshops and presentations where appropriate
 - Three-hour online workshop given at WLIAC, February 15th, by Randy Knippel and BJ Kohlstedt
 - 45-minute “Introduction to USNG” online presentation given at WLIAC, February 18th, by Randy Knippel
 - 45-minute “U.S. National Grid Emergency Location Markers, Reducing Response Times and Saving Lives” online presentation given at WLIAC, February 18th, by Steve Swazee

Additional comments:

- On January 14th, EPC collaborative partner SharedGeo released a dynamic magnetic declination diagram north arrow service which facilitates automated USNG map production. See: <https://mdd.sharedgeo.org/>
- As a result of the WLIAC, Randy Knippel has created 10K maps for all of Wisconsin. They can be found here: <https://arcg.is/19vu5K>. Randy has also initiated a similar project for Georgia.
- A special working group has been formed from the national USNG Implementation Working Group to develop a governance model and documents for formal creation of the USNG Institute which will work to promote adoption and use of the USNG.

Image Service Sustainability

Image Service Sustainability Committee

Report date: 05/14/2021

Prepared by:

Matt McGuire

Metropolitan Council

matt.mcguire@metc.state.mn.us

651.602.1964

Meetings:

No meetings since the last status report

Progress on work plan:

Drafted Technical Enhancement Recommendation for MnGeo Imagery Service.

Additional comments:

Outreach Committee

Report date: May 12, 2021

Prepared by: Nick Meyers, GISP (nmeyers@esri.com)

Meetings:

- **4/30/21** – Focused on Hub Premium and Success Stories
 - o MnGeo may be taking lead on Hub Premium
 - o Will Craig discussed the article he finished for AMC
 - o Victoria shared items with National Association of Counties and ideas on share success stories with other associations.

- **2/3/2021** – Focused discussion on GIS/LIS & GAC Hub.
 - o Action items:
 - Finalizing the proof of concept
 - Presenting to the GAC Board (Kyle Wikstrom will present)
 - Updating Success Stories

Progress on work plan:

- o *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.
 - Working with GIS/LIS Consortium on shared content for Hub Site.
- o *Accomplishments:*
 - Committee reviewed and approved 2021 work plan.
 - Discussed a joint effort with GIS/LIS consortium to share all GAC communication.
 - LMC article published spring 2020 on value of open data and online engagement.
 - AMC article has been written around the importance open data played with restrictive covenants within Hennepin County.
- o *Progress toward achieving proposed goals:*
 - Identified writing local success stories with Open Data from Moorhead, Blaine, Minneapolis, Rice County, Dakota County, Bemidji and a few small cities.
 - Plan to work with Cory to provide updates on committee progress
 - Working with GIS/LIS on a proof of concept on the Hub Site
 - **MNGeo might be moving to have Hub Premium and manage engagement/collaboration.**
- o *Problems or impediments:*
 - The committee is down to 3-4 active members and is missing a co-chair. This has made moving on tasks difficult with not as many members to share and delegate tasks
- o *Required assistance:* None

Additional comments:

None

Parcels and Land Records Committee

Report date:

05/11/2021

Prepared by:

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

Meetings:

February 19, 2021 (PLRC)

April 15, 2021 (Open Data subcommittee)

April 6 and April 21, 2021 (Remonumentation subcommittee)

Progress on work plan:

On February 19, 2021 the PLRC met to determine goals for the year and how to begin to achieve them. We developed 3 subcommittees (Open Data Parcel Subcommittee, Boundary Alignment Subcommittee, Remonumentation Subcommittee). Most of the work will be completed through the subcommittees in the future.

Open Data Parcel Subcommittee met for the first time on April 15. The first part of this meeting was spent on introductions and sharing some history about previous work on open parcel data efforts. The team then reviewed and discussed a list of potential goals to pursue. The next meeting will focus on prioritization of the goals and creation of working teams to move each goal forward.

The Remonumentation Subcommittee met on April 6 and April 21. The meetings focused on discussing the options for remonumentation in Minnesota. The committee researched different states and their approach to remonumentation. The committee has started to work on a timeline and business case for remonumentation legislation.

The Boundary Alignment Subcommittee plans on meeting on May 17th. The PLRC has identified a potential pilot project in the Arrowhead region. The counties are willing to work towards aligned county boundaries and the subcommittee plans on documenting and facilitating that process.

Additional comments:

Standards Committee

Report date:

May 12, 2021

Prepared by:

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

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

Meetings in 2021:

1/20/21 Bikeways Standards subgroup

1/26/21 Standards Committee

2/3/21 Bikeways Standards subgroup

2/11/21 Bikeways Standards subgroup

2/22/21 Bikeways Standards subgroup

3/1/21 Bikeways Standards subgroup

3/17/21 Standards Committee

5/17/21 Bikeways Standards subgroup

[Meeting minutes available here](#)

Progress on work plan:

- Work with stakeholder groups to modify remaining original Governor's Council on Geographic Information (GCGI) standards to the GAC format and have adopted by the GAC. This will involve review and possibly changes to these standards.
 - Minnesota Geographic Metadata Guidelines: A subgroup has formed to finalize a draft of version 2 of the Minnesota Geographic Metadata Standard
 - Codes for Identifying Reaches and Watercourses: no progress
 - Codes for Identifying Watersheds: no progress
 - Codes for Identifying Lakes and Wetland Basins: no progress
- Complete the Bikeways Data Standard for approval by the GAC
 - Many changes were made to the standard based on the comments from the first public review period in 2020.
 - The second public review period for the revised draft ends on May 15.
- Facilitate the creation of usage guides for key GAC standards.
 - No progress
- If ready in 2021, work with stakeholders on an emergency service provider boundary standard
 - No work by the Standards Committee
- If ready in 2021, work with stakeholders on a stormwater data standard
 - MetroGIS is working on this. No formal work by the GAC Standards Committee.

Agenda Item 4. GAC Leadership Transition

- Process is very similar to 2019
- Mark Kotz stepping down from GAC
- Vice Chair Cory Richter assumes Acting Chair role for first meeting (September) of new GAC
- Reappointed members of Leadership Team remain in place through 1st meeting
- At 2nd meeting (December), new GAC Chair and Vice Chair are elected and leadership team members selected.

Agenda Item 10. GAC Priority Projects and Initiatives

Rank	Project or Initiative Name	Status	Priority Owner	Champ
1	Statewide publicly available parcel data	Active	Alison Slaats	Kotz
2	Updated and aligned boundary data from authoritative sources	Active	Preston Dowell	Ross
3	Statewide publicly available road centerline data	Active	MnGeo	Ross
4	Statewide publicly available address points data	Active	MnGeo	Ross
5	A project team to develop geospatial data sharing methodologies to support the state's underground utilities community	Active	Steve Swazee	Cederberg
6	Establish a workflow for developing, sharing and maintaining statewide, publicly available, authoritative geospatial data for primary critical infrastructure themes	Active	Stacey Stark	Swazee
7	New lidar data acquisition across Minnesota for use in developing new derived products guided by committee developed standards	Active	Gerry Sjerven	Ross
8	Improvements to the MnGeo Image 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
9	The implementation of an archive for Minnesota geospatial data	Active	Ryan Mattke	many
10	Development of a culvert data standard for data sharing across the geospatial and infrastructure asset management communities and to support development of a future statewide culvert inventory	Active	Rick Moore	Lord
11	Maps, procedures, templates and other materials to help all levels of government implement the U.S. National Grid	Active	Randy Knippel	Knippel
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	Many
13	Remonumentation of all section corners in the state	Active	Pat Veraguth	Ross
14	A trails data standard	Active	Sandra Yassin	
15	Outreach and education to show success stories for geospatial technology	Active		
16	A Geospatial Commons advisory group to provide advice, guidance and strategic direction for the Commons from the broad perspective of the MN geospatial data stakeholder community			
17	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			

18	Statewide and regional (e.g. Twin Cities metro) publicly available basemap services			
19	A parks data standard			
20	A project team to develop a long-term, statewide strategy for optical, lidar, radar, aerial and satellite imagery			
21	Dynamical Downscaled Climate Information (high resolution climate projection data)			
22	Best practices based on Criminal Justice Information Services (CJIS)/Bureau of Criminal Apprehension (BCA) guidance for connecting law enforcement data to GIS systems for analysis and sharing			
23	Statewide, publicly available, authoritative geospatial data for businesses with state-required licenses, permits or registrations			
24	Best practices/guidelines for sharing snow emergency parking restrictions between cities			
25	An inventory and assessment of Minnesota's geospatial data assets			
26	Summary data by region for property crimes in an accessible GIS format			
27	Data standard for street parking restrictions			