

Minnesota Geospatial Advisory Council Meeting

December 9, 2020

Webex. See meeting invite for details.

11:00 a.m. – 1:10 p.m.

Agenda

1. Call to order (Chair)	11:00	15 min
a. Introductions		
b. Approval of agenda		
c. Approval of meeting minutes from 9/9/2020		
2. Review and accept committee summaries (All) – <i>page 2</i>	11:15	5 min
3. Archiving Implementation Workgroup update (Mattke, Majewicz)	11:20	15 min
4. Approval of changes to address and road standards (Kotz) – <i>page 16</i>	11:35	10 min
5. 3D Geomatics Committee update (Vaughn, Moore)	11:45	15 min
6. Break	12:00	10 min
7. Statewide parcel map discussion (Veraguth)	12:10	15 min
8. Updates on MN GAC priority projects and initiatives (Richter) – <i>page 17</i>	12:25	20 min
9. Timing of future online GAC meetings	12:45	10 min
10. Announcements or other business	12:55	15 min
11. Adjourn	1:10	

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

3D Geomatics Committee

Steering Committee

Report date: 11/23/2020

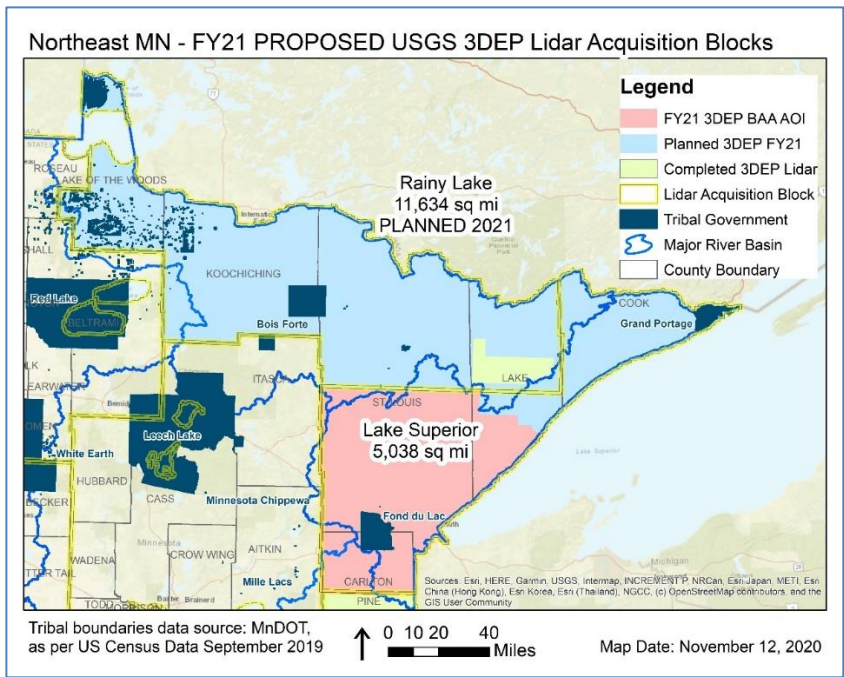
Prepared by: Committee Co-Chairs: [Sean Vaughn](#), [Gerry Sjerven](#)

Meetings:

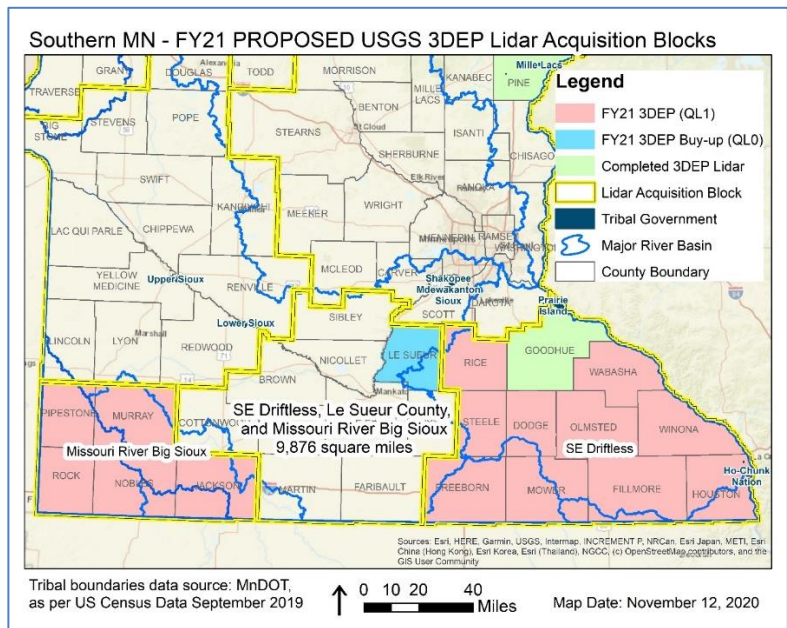
- Steering Team
 - 1/21/2020, 2/18/2020, 4/21/2020, 5/19/2020, 7/21/2020, 8/18/2020, 10/20/2020, 11/17/2020
- Data Acquisition Workgroup
- Infrastructure Workgroup
- Vegetation Workgroup
- Education Workgroup
- Hydrogeomorphology Workgroup

Progress on work plan & Next Steps:

- Committee Steering Team and Workgroups are on track for meeting objectives for the year.
- Working with Workgroups to update Website design and content and expand membership
- **Data Acquisition Workgroup**
 - 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.
 - Met weekly to manage lidar data acquisition and outreach in support of the Minnesota Lidar Plan
 - Representatives attended monthly 3DGeo Steering Team meetings
 - Representative attended monthly National States Geographic Information Council (NSGIC) 3DEP Group Meetings
 - Hosted an outreach/update online meeting with Southern Minnesota geospatial and local partners on October 7 to discuss possible USGS grant submission for lidar acquisition in 2021. Meeting had over 90 participants.
 - Hosted an online outreach meeting on November 17 with members of the Central Mississippi (Metro) area to discuss a 2022 lidar acquisition. Meeting had over 60 participants.
 - Submitted two USGS 3DEP Broad Agency Announcement (BAA) grant request for Spring 2021 lidar acquisition.



- If this BAA grant proposal is successful it will complete the Northeast Lidar Acquisition Area (LAA) illustrated with peach shading in the image above.



- The Southern Minnesota BAA proposal is comprised of two full 3D Geomatics Committee - Lidar Plan Lidar Acquisition Blocks. The peach-shaded regions of the map above illustrate the Southeast Driftless LAB covering the entire southeast corner of Minnesota and the Missouri River Big Sioux LAB covering watersheds and counties in the southwest

- **Infrastructure Workgroup**

- The Infrastructure Workgroup has established a Cultural Resources subgroup within its organization. A full membership meeting was held on November 12, 2020
- Working on developing membership list

- Develop 2021 workplans for the Infrastructure Workgroup and Cultural Resources Subgroup
- Representatives attended monthly 3DGeo Steering Team meetings
- **Vegetation Workgroup**
 - Vegetation Workgroup continues to meet on the second Tuesday, every other month.
 - Representatives attended monthly 3DGeo Steering Team meetings
 - Continue to work on the workplan.
- **Education Workgroup**
 - Education Workgroup continues to meet each first Tuesday of the month
 - Education Workgroup continues to find agency liaisons and education partners throughout the state
 - Education Workgroup continues to catalog and inventory existing Lidar education resources
 - Representatives attended monthly 3DGeo Steering Team meetings
 - Education Workgroup continues to update workplan for 2021

3D Geomatics Committee - Hydrogeomorphology Committee

Report date: 11/13/2020

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

- **Hydrogeomorphology Workgroup** (34 members)
 - Hosted monthly meetings
 - Representatives attended monthly 3DGeo Steering Team meetings
 - Reformatted monthly meeting format to include presentation meetings (4) and workshop meetings (6) in 2021
 - Maintain workgroup SharePoint site
 - Calendar of relevant upcoming events, conference, training opportunities
 - Foundational Hydrography Data Stewards Subgroup met in Jan, July, October and January
 - Added Nancy Rader as the MNGEO representative for 2021
 - DEM Hydro-modification subgroup (formerly Breachline Database) continued to meet monthly
 - DEM Hydro-modification Subgroup (formerly Breachline Database Subgroup)
 - Built a foundation for statewide standardized breachline database
 - The next phase required to move this foundation from plan to implementation of the functional database will require additional commitment of time, labor and funding.
 - Created a centralized authoritative map of current breachline datasets
 - Will be published on Breachline Subgroup webpage in December
 - Identified non-member breachline datasets for inclusion in authoritative database
 - Continued to promote the need for a Digital Dam Breachline (burn line) QA/QC Project
 - Funding for this effort is yet to be established
 - Explored the role of the DNR Culvert Inventory App in digital dam breachline mapping and dissemination
 - Gathered member consensus on requirements for standalone App in future

Archiving Implementation Workgroup

Report date:

November 24, 2020

Prepared by:

Ryan Mattke, Workgroup Chair, matt0089@umn.edu

Meetings:

The workgroup met on September 18, October 16, and November 20.

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

Workgroup will meet on December 18 for the final time.

Progress on work plan:

- Overall
 - Subgroups are drafting sections of what will be an overall Summary Report
- Outreach
 - Sent out one communication, plus communications in the works for December and January
- Funding
 - Devising a plan for a funding ask
- Pilot Project
 - Will be experimenting with MN Geospatial Commons data
- Program Design
 - Leaning toward a program focused on the MN Geospatial Commons; recommending an opt-out program
 - Working on governance options
- Technology Plan
 - Working with Pilot and Program group to make recommendations

Additional comments:

- Original plan was to wrap up in October 2020 and devise a legislative ask for the next session
- Given delays related to the pandemic (and budget issues related to the pandemic), the plan is now to wrap up and submit subgroup reports by December 2020, noting that the ask may need to be delayed
- Final Summary Report expected by February 2021 (for review at GAC meeting in March)

Awards Committee

Report date:

November 25, 2020

Prepared by:

Len Kne (committee co-chair)
lenkne@umn.edu

Meetings:

none

Progress on work plan:

1. The final quarter of the year is a quiet time for this committee. The Committee will start it's work again in January with goals of (1) creating a marketing plan and (2) consider other opportunities for acknowledging outstanding initiatives in the geospatial community

Additional comments:

Next meeting TBD

Emergency Preparedness Committee

Report date: November 23, 2020

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
-

Full Committee/Leadership Team

Meetings:

- Full committee: October 1, 3rd CY Quarterly Meeting, online
- Leadership Team: September 30 - Review of EPC developments, upcoming efforts and IT changes

Progress on work plan:

- Conduct at least 3 meetings of the full committee:
 - First two meetings of year cancelled due to COVID-19
 - Next EPC full committee meeting planned for December 10, online
- Conduct at least one meeting of the leadership team (Chair, Co-chair, and Project Team chairs):
 - To date, six meetings this CY
- 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:

- Rework of the EPC back office IT infrastructure is complete: www.mgacepc.net.
 - Database of GIS personnel willing to volunteer their services during disasters stands at 20. Cory Richter is serving as "Den Mom".
 - Substantial and significant activity during quarter continues with the Underground Utilities Mapping Project Team – see dedicated section below.
-

Critical Infrastructure Assessment (CIA) Project Team – GAC PRIORITY
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:
 - Meeting with HSEM about collaborations 11/7/20 and 11/29/20
- Create ArcGIS online map for counties to validate their data:
 - Complete here: <http://z.umn.edu/MNCI>
 - 7 counties have validated data, 6 more in progress
- Present at Association of MN Emergency Managers, September 2020:
 - Accepted, but event canceled due to COVID-19
- Publish comprehensive statewide dataset of fire and police to [Minnesota Geospatial Commons](#):
 - Developmental efforts underway

Additional comments:

- None.
-

Damage Assessment Data Standard (DADS) Project Team – GAC PRIORITY

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:

- Draft Standard approved by the GAC Standards Committee 9/2/2020
- Standard approved by the GAC unanimously 9/9/2020

Additional comments:

- Project completed. Group sunsetted.
-

Geospatial Assistance (GA) Project Team (Forming)

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

Meetings: No formal meetings, coordination activities only this period

Progress on work plan: Work on Charter and Work Plan continues.

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, City of St. Paul, nicole.helgeson@ci.stpaul.mn.us, (651) 266-6565

Meetings: No formal meetings, coordination activities only this period

Progress on work plan: Work on Charter and Work Plan continues. Coordination as started with the Critical Infrastructure Assessment Project Team.

Additional comments: This Project Team has taken over ownership and maintenance of the recently donated Minnesota Situational Awareness Viewer (MNSAV – see: <https://www.mnsav.org>). It is anticipated EPC data developmental projects will be eventually hosted on MNSAV.

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:

- September 11: Leadership team
- September 17: Large group – Formalization of team, and team first reports
- October 23: Leadership team
- October 29: Large group – Presentation by Rob Martindale of Colorado DOT
- December 11 (next): Leadership team
- December 17 (next): Large group

Progress on work plan:

- Charter and Work Plan were approved during the September 17 meeting and signed out on September 20.

Additional comments:

- The four small group teams have formalized leadership as follows:
 - Facility Operator Utility Mapping - Travis Beran (travis@subsurfacesolutions.com)
 - Locate Data Flows & Mgt. - Brad Anderson (brad.anderson@ci.moorhead.mn.us)
 - Outreach - Karin Strub (Karin@emailir.com)
 - Regulations/Security - Dean Parker (dparker@hinshawlaw.com)
- Developments:
 - Facility Operator Utility Mapping and Locate Data Flows & Mgt. teams met to develop initial accuracy standards for locate and data sharing efforts
 - Outreach is ongoing to offer companies the opportunity to submit information which will be used to determine if their product approach is worth review by the large group.

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:

- October 28: National event - USNG Implementation Work Group online meeting

Progress on work plan:

- Create/update USNG statewide maps:
 - Complete - [Dakota County is hosting these 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 October 28 meeting noted above and through ongoing assigned USNGIWG activities.
 - Next USNGIWG meeting to be held January 27, 2021:
<https://sites.google.com/a/sharedgeo.org/usng-iwg/next-meeting-info>
- Engage in training opportunities and presentations as they arise:
 - USNG Emergency Location Marker System presentations given:
 - American Trails webinar on September 24, and
 - Illinois GIS Association annual conference on October 5

- Tentative: 3-hour USNG online workshop for WLIA in February 2021.
- Work with Minnesota 501(c)3 geospatial research nonprofit SharedGeo to:
 - Develop a mechanism to allow any USNG maps and mapbooks to be added to the USNGcenter.org map interface:
 - No progress this period
 - Deploy and document dynamic magnetic declination diagram north arrow for use with USNG map production:
 - Webpage setup complete, news release ready with plans to formally release during first week of December
 - 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 – No progress this period
 - USNG Emergency Location Marker (ELM) program – outreach as noted above.

Additional comments:

- Worked with MN DNR to integrate USNG 10K ESRI REST services/OGC WFS services into their products, and made same available through MNSAV:
 - See bottom of this web page: <https://mgacepc.org/mnsav/>

Image Service Sustainability

Report date: 11/25/2020

Prepared by:

Matt McGuire

Metropolitan Council

matt.mcguire@metc.state.mn.us

Meetings:

No meetings since the last status report

Progress on work plan:

We are waiting on a couple of major imagery sets delivery including NAIP 2019 and 7-county 2020.

MnGeo's added FSA for the 2019 NAIP into the Image Service a couple of weeks ago.

MNGeo expects to add Met Council 2020 Spring Aerial Photography imagery in early December.

Additional comments:

Planning on a meeting to incorporate these two datasets in January.

Outreach Committee

Report date: November 25, 2020

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

Meetings:

- **11/25/2020** – The Committee discussed the need to rebrand the purpose of the outreach committee and will be working in 2021 to identify what that means.
- **8/14/2020** – Kari informed the Committee that she must step down from the Committee
 - o Committee Discussed goals
 - GAC One MN workgroup
 - Update website content
 - Collaboration with GIS/LIS to post shared content and success stories on Hub Site.

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 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.
 - LMC article published spring 2020 on value of open data and online engagement.
 - 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.
- 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
- o *Problems or impediments:*
 - Need to work through the logistics with GAC and GIS/LIS consortium to find a way to share/distribute all communication.
 - 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

Standards Committee

Report date:

November 24, 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 – standards logistics subgroup

April 1

May 18

June 16

July 22

September 2

November 4

[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 Point and Road Centerline Standards proposed
 - Discussed at multiple Committee meetings with some changes approved by the committee and made available for a 60-day public review to end October 12.
 - Public review completed with additional minor changes.
 - Requesting GAC approval of revised standards at December 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 through August 19.
 - Committee reviewing public comments and suggested changes at September 2 meeting.
 - Standard approved by GAC at September meeting.
- Continue work on streamlining the logistics for developing and maintaining standards
 - Postponed 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
 - MetroGIS is working on this for a preliminary review. No formal work by the GAC Standards Committee.

- If ready in 2020, work with stakeholders on a parks and trails data standard
 - Working with stakeholder group to finish a draft trails and bikeways standard to submit to the committee
 - Committee reviewed the standard and made changes at July and September meetings.
 - Standard is out for public review until December 23.

Agenda Item 4. Approval of changes to address and road standards

Background:

The Standards Committee, working with MnGeo staff, completed a process to compare existing GAC standards with NENA standards that are used to support NextGen 9-1-1. Based on this analysis, the Committee proposed modest changes to two GAC standards.

- Address Point Data Standard
- Road Centerline Data Standard

The revised draft standards completed a 60 day public review period. The Committee reviewed and prepared responses to all comments received during the public review. Additional minor changes were made to the standards based on these comments.

Action:

The Standards Committee is requesting GAC approval of:

- Draft version 1.3 of the Address Point Data Standard
- Draft version 1.1 of the Road Centerline Data Standard

Summary of changes to the standards:

- Minor wording edits to increase clarity
- Removal of If Available inclusion category
- Addition of 4 elements in each standard to include legacy street name information. This provides backward compatibility with legacy map displays and Computer Aided Dispatch (CAD) systems.
 - Legacy Street Name Pre Directional
 - Legacy Street Name
 - Legacy Street Name Type
 - Legacy Street Name Post Directional
- Addition of Road Cartographic Class element to Road Centerline Data Standard. It is an optional element used for cartographic symbology purposes.
- Removal of the XML formatting template in the Address Point Data Standard. No other GAC standard has an XML formatting template.

Agenda Item 8. 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	Active	Steve Swazee	
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	Active	Stacey Stark	
19	A culvert data standard	Active	Rick Moore	