

# Minnesota Geospatial Advisory Council Meeting

December 14, 2022

10:00AM – 12:00PM

Online Only: Via Microsoft Teams<sup>1</sup>

## Agenda

1. Call to Order (Chair)	10:00	10 min
a. Introductions		
b. Approval of Agenda		
c. Approval of <a href="#">Meeting Minutes from September 28</a>		
2. Review and Accept Committee Summaries (All)	10:10	10 min
3. <a href="#">Stream ID Standard</a> approval (Codes Identifying Stream Reaches and Watercourses) (Carlson, Kotz)	10:20	5 min
4. <a href="#">Criminal Justice Information Best Practices</a> update (Maddox)	10:25	5 min
5. 2023 Priority Project Survey Scores (Brandt)	10:30	25 min
6. Legislative Updates	10:55	10 min
7. Break & Networking	11:05	10 min
8. <a href="#">Archiving</a> Update (Majewicz/Kernik)	11:15	10 min
9. Updates on MN GAC Priority Projects and Initiatives (Brandt)	11:35	20 min
10. Announcements or Other Business	11:55	5 min
11. Adjourn	Noon	

---

<sup>1</sup> Contact MnGeo: [gisinfo.mngeo@state.mn.us](mailto:gisinfo.mngeo@state.mn.us) in advance for connection information

# 3D Geomatics Committee

## Hydrogeomorphology Workgroup Report

**Report date: 12/09/2022**

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

Meetings:

- Workgroup Meets Monthly
  - meeting Key Topics
    - Feb – Lidar Updates, Geomorphons Intro
    - March – 3DNTM and 3DHP updates, Guest Introduction - National Map liaison Mitch Bergeson
    - April – 3DNTM/3DHP discussion, TopoBathy
    - May – Guest Presentation: PA Hydrography Dataset presentation, Geomorphons
    - June – Lidar updates, Geomorphons discussion
    - August – Guest Presentation: USGS “Using Geomorphons to Identify Small Scale Hydrologic Features”
    - Sept – Lidar Update, Guest Presentation: Met Council Priority Waters Project presentation
    - Oct – Lidar Update, 3D Geo DEM Hydro-modification Subgroup – “Standards, Breachlines and Pilot Projects”
    - Nov – no meeting
    - Dec – Lidar Update, Guest Presentation: USGS 3DHP Update
- Foundational Hydrography Data Stewards meets quarterly
- DEM Hydro-modification Subgroup continues to meet monthly

### **Progress on work plan:**

- Maintained workgroup SharePoint site, and worked with MnGeo to maintain the workgroup web page
- Developed roadmap for NXG-Hydro development
  - Started discussion on communication and outreach plan to inform decision-makers and data users about the process of going from lidar data to usable hydrography products
  - Attended several presentations on 3DHP, 3DNTM to be more informed and engaged with national hydrography programs
- Foundational data stewards
  - GAC Stream ID Standard being presented for approval at December GAC meeting
  - Working with DNR Data Governance Administrator on a project to capture knowledge and data management practices from streams Data Stewards in anticipation of lidar- derived hydrography
  - Partnering with LCCMR funded Lake Inventory Update project to inform and guide data definition and development, also in anticipation of integration with lidar-derived hydrography

- Stewards attending NSGIC 3DHP meetings
- DEM Hydro-modification subgroup
  - Goodhue County High Resolution DEM - Breachline pilot project: Pilot project to inform future efforts of using existing breachlines with the high-resolution DEMs from the current Lidar collect. Lessons learned and best practices from the research will help inform future DEM hydro-modification projects. A research paper detailing the study area, data, methods and conclusions is in process and will be available in first quarter of 2023. Four members of the subgroup presented on the findings at the MN GIS LIS Conference.
  - Updating breachline dataset with more recent datasets that are being completed by Subgroup members – Exploring database structure for breachlines. Developing a formal process to integrate new breachline datasets as well as updated datasets from previous work. Six new datasets have been added to the master dataset. Work has begun identifying which breachlines are identical across datasets and removing them in the merged datasets to truly reflect the breachlines contained in the dataset.
  - Continued improvements to MN DEM Hydro-modification Review Web Application detailing locations and completeness of breachline datasets within Minnesota. Define project boundaries for each dataset to assist with versioning of older and newer data in the same area.
  - Ongoing discussions of standards and best practices in DEM hydro-modification. The Subgroup is also researching new techniques and tools for identifying culvert locations and developing new hydrography from DEMs derived from Minnesota’s new high-density lidar
- Culvert Data Standard Subgroup – kick-off meeting 12/12/22
  - The Culvert Data Standard Workgroup will hold a kick-off meeting to launch the team followed by regular monthly meetings to develop a foundation for Minnesota’s culvert standard. The Culvert Data Standard will help facilitate Clean Water and hydrologic modeling initiatives. The initial meeting will be focus on introductions and logistics followed by review of datasets and determination by the group which attributes will best represent a culvert database.
  - This new workgroup is comprised of members from counties, SWCD offices, and state agencies who work closely with culvert data. Collaboration and cooperation amongst members to create a Community of Practice.

## Awards Committee

**Report date:**

December 2, 2022

**Prepared by:**

Len Kne and Phil Nagel (committee co-chairs)

[lenkne@umn.edu](mailto:lenkne@umn.edu) and [Phil.Nagel@bolton-menk.com](mailto:Phil.Nagel@bolton-menk.com)

**Meetings:**

The Committee has not met since the last quarterly report was submitted.

**Progress on work plan:**

1. Completed the nomination process for the 2022 Governor's Certificate Awards.
2. 2022 Governor's Certificate Awards were added to the MnGeo website awards section.
3. Continue to work on content for new Hub site to encourage more applications to the Governor's Award. Thanks to Andra Mathews for leading this work.

**Additional comments:**

None.

# Archiving Imagery Workgroup

**Report date:** December 9, 2022

**Prepared by:** Karen Majewicz (majew030@umn.edu), Melinda Kernik (kerni016@umn.edu)

The workgroup's final report is published:

[https://www.mngeo.state.mn.us/workgroup/archiving/Archiving\\_Imagery\\_Workgroup\\_Final\\_Report.pdf](https://www.mngeo.state.mn.us/workgroup/archiving/Archiving_Imagery_Workgroup_Final_Report.pdf)

# CJIS Best Practices and Data Standards Guide for GIS

**Report date: December 14, 2022**

**Prepared by: Britta Maddox**

## **Meetings:**

Second meeting – June 22<sup>nd</sup>, 2022

Third meeting – August 10<sup>th</sup>, 2022

Fourth meeting – September 21<sup>st</sup>, 2022

Fifth meeting – October 25<sup>th</sup>, 2022

Sixth meeting – November 2<sup>nd</sup>, 2022

Chair: Britta Maddox, Public Safety Data System (PSDS) Fire Records Management System (RMS) Administrator, MNGAC Member at-large

Co-Chair: Cory Richter, Ramsey County general Supervisor – Highway Maintenance and Construction, MN GAC Chair

Other team members attended as availability permitted

## **Progress on work plan:**

Discussed scope and developed action items

Assigned action items to teammates and gathered initial information (May)

Assigned further action items and developed draft layout (June)

Reviewed initial draft layout and identified gaps (August)

Reviewed draft for presentation at GAC Meeting (September)

Additional meeting held between BCA and chairs of CJIS committee regarding purpose and scope of this document. Olivia Anderson from the BCA will be representing their interests on this committee moving forward and reviewing our documentation.

Reviewed draft for finalization (October, November, and December) – including consulting with the MN GAC Standards Committee

## **Additional comments:**

See Meeting Minutes for June 2022, August 2022, September 2022, October 2022, November 2022 as well as the October and November DRAFT copies of CJIS Best Practices Guide

See also the [CJIS Best Practices Guide FINAL](#) – to be presented at December 14<sup>th</sup> GAC meeting for acceptance as best practices guide and to determine best publication location

# Emergency Preparedness Committee

Report date: December 8, 2022

**Prepared by:**

- Chair: Stephen Swazee, Executive Director, SharedGeo, [chair@mgacepc.org](mailto:chair@mgacepc.org), 651-456-5411
  - Vice Chair: Randy Knippel, GIS Manager, Dakota County, [vchair@mgacepc.org](mailto:vchair@mgacepc.org), 952-891-7080
- 

**Full Committee/Leadership Team  
(no change this quarter)**

**Meetings:**

- Full committee: None this quarter
- Leadership Team: None this quarter

**Progress on work plan:**

- Conduct at least three meetings of the full committee during 2022
  - No meetings to date due to Chair personal circumstances
- Conduct at least four meetings of the leadership team (Chair, Co-chair, and Project Team chairs)
  - No meetings to date due to Chair personal circumstances
- Continue efforts to cleanup committee's online presence and bring efficiency to its IT infrastructure
  - Ongoing – Gained Hub access and will be working to bring in current EPC website and expand functionality
- 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:**

- Since inception in December 2020, MGAC EPC YouTube channel as had over 4,213 views with 38 subscribers: [https://www.youtube.com/channel/UC3hwp5\\_9t3BkiTt-hyALArg/](https://www.youtube.com/channel/UC3hwp5_9t3BkiTt-hyALArg/)
- 

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

**Meetings:**

- Full Committee Meetings 1/14/22, 2/25/22, 3/16/22, 4/8/22, 7/1/22, 8/12/22, 9/23/22 (none 4th quarter)
- Law Enforcement dataset meeting: 3/15/22
- Related Partner Meetings: 2/4/22, 4/7/22, 10/3
- Resource Site Meetings: 2/4/22

**Progress on work plan:**

- Conduct at least three meetings of the Project Team during 2022
  - Complete
- Develop updated data model (prioritizing fire and police) based on the previous standards identified in Minnesota Structures Collaborative project

- Complete
- Publish comprehensive statewide dataset of police to the Minnesota Geospatial Commons
  - Complete: <https://gisdata.mn.gov/dataset/struc-law-enforce-mn>
- Pursue a long-term workflow to keep fire, law enforcement updated annually
  - In progress
- Request validation for 9 counties U-Spatial has projects with and remaining metro counties
  - In progress
- Maintain Esri online app for counties to validate their data (counties U-Spatial has other projects with, as a prototype for workflow)
  - complete (moved maintenance to U-Spatial)
- Develop workflow coordination with HSEM for fire, police, hospitals, schools.
  - On-going
- Continue to validate workflow with other partners
  - On-going
- Catalog available authoritative data sources
  - complete
- Publish “C.I. resource site” on either MnGeo website or GAC Hub
  - Complete: <https://www.mngeo.state.mn.us/chouse/criticalinfrastructure.html>
- Develop strategy for outreach /promotion of work (use of GAC Hub)
  - Participation in GAC Hub subcommittee

**Additional comments:** Presentation at ESRI UC 7/14/22, working on updating the MN Correctional Facilities dataset on the MN GeoCommons

**Geospatial Assistance (GA) Project Team (Forming)**

Brian Huberty, SharedGeo, [bhuberty@sharedgeo.org](mailto:bhuberty@sharedgeo.org), 651-706-6426

**Meetings:** None this quarter

**Progress on work plan:**

- Conduct at three meetings of the Project Team during 2022
  - No progress this quarter
- First draft charter and work plan created
  - No progress this quarter
- 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 this quarter

**Additional comments:** None



**Underground Utilities Mapping (UUM) Project Team – GAC PRIORITY**

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

Stephen Swazee, MGAC EPC, Chair, [chair@mgacepc.org](mailto:chair@mgacepc.org), 651-456-5411

**Meetings:**

- Leadership team: 1/21/22, 2/18/22, 3/25/22, 4/22/22, 5/20/22, 6/24/22, 7/22/22, 8/19/22, 9/23/22, 10/14/22
- Large Group: 1/27/22, 2/24/22, 3/31/22, 4/28/22, 6/30/22, 10/27/22, next 12/15/22

**Progress on work plan:**

- Conduct at least eight monthly meetings of the Project Team during 2022
  - Complete
- Produce a “Way Forward” blueprint document
  - On-going
- Complete development of a prototype system which can aggregate diverse utility geospatial data and make available for other project identified needs
  - Prototype functionally complete. GSOC preparing to contract for development of Open Source product to leverage concepts and approaches used during development of prototype.
- Deliver at least one presentation about overall team efforts at an established community appropriate conference (or webinar)
  - Complete – Multiple events this year to date, including at MN GIS/LIS October 13-14.
- Publish at least one article about the Project Team in a publication of importance to the industry
  - Complete - Article featuring UUMPT Leadership Team member Geoff Zeiss of Ottawa, Canada was published in July issue of Damage Prevention-Pro.
- Continue efforts to develop project champions in the underground utility and regulatory communities
  - Statements of support: At their recent annual meeting, September 16, 2022, the Association of Minnesota Counties gave consideration to placing the UUMPT effort on their 2023 Platform.
  - Outreach Plan: During September 2022, initial promotional flyer was created and now in review. Dedicated support website ([www.fuzionview.org](http://www.fuzionview.org)) and outreach to the Minnesota utility community will commence in October.

**Additional comments:**

- Gopher State One Call COO Barbara Cederberg now working closely with the Common Ground Alliance GIS Working Group. The Minnesota project is seen as leading the nation and is receiving community wide support.
-

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

Randy Knippel, GIS Manager, Dakota County, [Randy.Knippel@co.dakota.mn.us](mailto:Randy.Knippel@co.dakota.mn.us), 952-891-7080

### Meetings:

- USNG Implementation Work Group: 3/16/22, 4/19/22, 5/17/22, 6/15/22, next 9/28/22

### Progress on work plan:

- Conduct at least quarterly meetings of the USNG Implementation Working Group during 2022
  - 3/16/22, 4/19/22, 5/17/22, 6/15/22, 9/28/22, next is 1/18/2023
  - USNG IWG has formalized as a non-profit under SharedGeo sponsorship
  - USNG IWG Board of Directors established
    - Board of Directors meets separately from large group
    - 9/27/2022, 11/15/2022, next 1/17/2023
- Develop documentation for production of 10K maps
  - Procedure migrated to ArcGIS Pro
- As appropriate, publish or assist other government entities with publication of USNG maps for their areas of responsibility
  - No activity this quarter
- Refine, update, and publish Minnesota statewide 1K maps
  - No progress this quarter
- Work with SharedGeo to complete a new USNG mapbook publishing application on USNG Center ([www.usngcenter.org](http://www.usngcenter.org))
  - Development complete. Anticipate release before end of year.
- Continue development of USNG training videos focused on USNG map production
  - This effort to be developed going forward in conjunction with other members of the national USNG Implementation Work Group
- Conduct workshops and presentations where appropriate
  - Presented at MN GIS/LIS Conference, October 13-14
    - Full session and lightning presentation

### Additional comments:

- USNGI has its own tax-deductible webpage at: <https://www.givemn.org/story/Usngi>
  - Created proof of concept interactive map linking to all USGS US Topo maps, which are USNG compliant: <https://www.arcgis.com/apps/webappviewer/index.html?id=126687ab78c247b9b5f21b2ffa367410>
  - Current development application for displaying USNG maps that are available anywhere in the United States: <https://usng-form.herokuapp.com/map>.
-

## **Outreach Committee**

## **Parcels and Land Records Committee**

# Standards Committee

**Report date:**

December 14, 2022

**Prepared by:**

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

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

**Meetings in 2022:**

1/19/22 Stream ID standard subgroup

2/8/22 Standards Committee

2/14/22 Emergency Service Zone standard subgroup

2/22/22 Stream ID standard subgroup

4/1/22 Standards Committee meeting

9/13/22 eVote for ESZ Data Standard

10/19/22 Standards Committee

Full committee [Meeting minutes available here](#)

**Progress on work plan:**

1. Review draft Emergency Service Zone Data Standard for adoption by the GAC
  - a. Initial draft of standard was presented to committee 2/8/22
  - b. SME subgroup reviewed comments from Standards Committee and made revisions 2/14/22. Revised draft submitted back to Standards Committee
  - c. Draft approved by standards committee 4/1/22 and published for public review period ending 7/31/22
  - d. SME subgroup created draft responses to all public review comments and recommended minor changes to the standard 9/2/22.
  - e. Committee eVote concluded to approve responses to comments and changes to standard 9/14/22
  - f. Presenting revised standard to GAC for approval 9/28/22.
2. Review draft Stream ID standard for adoption by the GAC (this is a revision of a former GCGI standard)
  - a. SME group reviewed and modified standard at meetings on 1/19 and 2/22. Revised standard to be submitted to Standards Committee
  - b. Draft approved by standards committee 4/1/22 and published for public review period ending 7/31/22
  - c. SME subgroup created draft responses to all public review comments and recommended minor changes to the standard 8/22/22.
  - d. Revised standard and responses presented to the Standards Committee for approval 10/19/22.
  - e. Presenting revised standard to GAC for approval 12/14/22.

3. Review Stormwater Data Standard for adoption or endorsement by the GAC
  - a. MetroGIS Stormwater standard presented to Standards Committee 2/8/22
4. Updating standards workflow to more deliberately announce/promote newly approved standards
5. 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.
  - a. Minnesota Geographic Metadata Guidelines
  - b. Codes for Identifying Watersheds
  - c. Codes for Identifying Lakes and Wetland Basins
6. Facilitate the creation of usage guides for key GAC standards as time and resources permit.