

# GIS Users Meeting November 1, 2018 Minutes

Welcome by Everett Root, Office of Technology Partnerships, Center for Shared Solutions.

## Federal

**USGS** – Charley Hickman- There are no new counties for 3D LiDAR and Elevation. Data has been accepted but is on hold due to lack of approval from Tribal Area. USGS is in the process of contacting these groups.

**USDA Farm Services** – Sarah AcMoody – NAIP Imagery was flown in 2018. 100% of Michigan was flown. The lower half was good quality, but the upper half looks washed out. There are no dates set when the imagery will be available. 60 cm 4 band imagery will be available for NRCS federal partners.

**National Forest Service** – Trevor Hobbs – Huron Manistee National Forest is considering doing another QL1 LiDAR Collection for vegetation management. Will partner with other counties. Very interested in NHD updates. Updating roads within the National Forests is a challenge. Some roads may be opened to ORV use. QL2 LiDAR is coming for the whole state.

## Associations

**MiCAMP** – Nathan Fazer – The Fall Conference had 150 attendees. Next years Conference is being planned for September 18th – 20th. Post Conference survey is in progress, so far only 30 responses. The General Membership survey is coming up. It will be going out in email and also be on the web page.

**IMAGIN** – Hosting a workshop November 28th at MSU for Arc GIS Online, Survey 123 and Collector. \$55 for IMAGIN Members, \$75 Non-Members and \$45 for student members.

## **State**

**DNR** – Paige Gebhardt– Working on Story Maps and getting them out on the Open Data Portal. 100 Years of State Parks and Prescribed Burn Areas. Also, lots of Drone activity going on.

**CSS** – Mark Holmes - Working on Census Bureau Programs: Redistricting, School District Boundaries, and Annexations. Most of the State is moving to ArcGIS Portal Services.

**MDOT Survey Support**– Lisa Martin – Finishing up culvert collections, now starting QA of the culvert information. 54 Counties were collected. Database for data and alignment will be publicly available. MDOT is using ZENA Collectors to support the data collection.

**MDEQ** – Leni Steiner-Zehender – Working on brownfield assessments. Geological support sections are making maps showing site features for Super Fund areas.

**DNR** – Jeff Schmidt – Doing web GIS work, and working on the ESRI Enterprise Advantage Program.

**CSS** – Ulrika Zay – Working with Everett on outreach for the MiSAIL Program. Went to the IMAGIN Meet Up in September, it was well attended. Attending Regional GIS Meetings.

**MPSCS** – Matt McCormick – Working on Computer aided Dispatch for Conservation Officers and Police Communications. Learning how to incorporate GIS with Communications. Updating Motorola’s CAD 1 System, and how to display Asset Management with GIS.

**MDOT**– Karina Vasquez – Doing work with MDEQ on PFOS using story maps. Also working with the Department of State on Drivers License fraud.

**MDOT**– Todd Lassen – TAMS went live October 10<sup>th</sup>. Roads and Highways database has been stood up in production. It will be a new LRS resource for the State. Still working the kinks out and working on LRS backlog. Doing culvert and guardrail collection. Creating a repository in ArcGIS Online. Working on Survey 123 Unit request form.

**CSS** – Everett Root – Can find information on the Data Exchange Partnership in the new application in the Interactive Maps Online. Doing contours for LiDAR for counties and the state will get a copy of that data. Contours will be loaded into an SDE so that State Employees can use the data. This data may be put into a vector tile cache later.

**MDEQ** – John Esch – Evaluating EAP’s for ESRI. Building applications, specifically one for PFAS.

## **Regional**

Ann Burns – SEMCOG- 2045 Forecast Interactive Map down to the TAV Level. School District and Terrain 360 Imagery has been incorporated into the Park Finder Application along with water, hiking and biking trails. Doing mapping of underground utilities for MIC and WAMC. NearMap Licensed imagery was contracted for Fall of 2018 and Fall of 2019, will be back with MiSAIL in 2020.

Laura Tschirhart – Tri County Regional Planning Commission – Working on Transportation Improvement Projects. Moving projects into Arc GIS Online. Doing Job Net Projects and collecting PASER. The Agency is getting a facelift for the Web site and LOGO.

## **Local**

Nathan Fazer – Midland County – Partnering with CSS on parcels for imagery program. 2019 plan for implementing new server infrastructure. Updating County GIS Plan. Doing mosquito control work. Getting Drone certification to be able to do projects.

Shane Pavlak - Ottawa County- EOC has found some high PFAS levels at an elementary school in the county. Have released an application for the County Clerks office that shows people where they can vote, and who are the officials. New soil erosion and control project for Water Resources.

Trevor Floyd – St. Clair County – 2 Positions are open. Discovered a “bug” on ESRI servers. Issue with deployment of version 9 that had a version of Desktop 10.6 on it and Pro cannot access that data. The fix is to create a new database. Installed new web adaptors. It is difficult to rearrange services thru the new web adaptor.

Sam Quon – City of Lansing – Updating Zoning code to form based code. Completed neighborhood maps for Arc GIS online. Doing Arc trainings and Business Intelligence Analytics. Hired a new Business Analyst. Can map out ambulance and fire calls and share data throughout the department. License for the Geo Events server, this now allows city to map what streets have been plowed. Upgraded Server to 10.6.

Emily St. Clair – City of Lansing- Moved from a single department application to enterprise applications department wide. Tracking EMS Supplies, Parking meters. Using bar codes scans. Moved from Samsung to Apple IOS products. People can apply online for permits now. Working on application for Snow Plows. Using City Works for SAW Grants.

## **Other**

Oscar Castaneda – MSU/MISIN- Arc GIS Enterprise Working on getting assets into an Enterprise GIS. MSU is getting serious about security on websites and are going thru upgrades, sites need to be upgraded every 2 to 3 months.

Bob Goodwin – RS&GIS/MSU- Open House for RS&GIS at the Nesbit Building on November 13<sup>th</sup>. Free ESRI workshop on November 14<sup>th</sup> as part of GIS Awareness week, please rsvp. There are 2 new classes being offered in 2019, Arc GIS Online and Drone Classes. RS&GIS will be offering MDOT custom classes. Working on the Iosco County parcel fabric for buildings. LiDAR project for NHD focus group, using LiDAR to realign the drain networks. Vinifera Wine grapes projects. The grapes do not like cold, so finding where is suitable climate to grow these grapes, by combining LiDAR Data with climate data to establish growing areas.

Nicole Smith – MSU, Department of Fisheries and Wildlife – Mapping properties of lakes across the State. Doing a database for lake water quality sampling at sites. Working to make sure the samples are associated with the correct lake. Working on how lakes are represented in the NHD, and on watershed projects focused on lakes.

Emily Smith – Americorp Build Albion – Working on rebuilding the GIS System for Albion. It hasn't been active since 2008. Using GIS to do SAW Grants.

## **Morning Special Topic**

Morning session Special Topic: **Current status of the Michigan Geographic Framework (MGF) Technology Update Project**

Presented by: **Mark Holmes**, Center for Shared Solutions, Geospatial Services Manager

## **Afternoon Educational Topics**

Afternoon Educational Topic #1: **Using QL1 LiDAR for Forest Management Applications – A Case Study on the Huron-Manistee National Forests**

This presentation will highlight a variety of applications of QL1 LiDAR data for forest management including workflows and examples of terrain-related data products, forest vegetation inventories, and habitat models for a small project area on the Huron-Manistee National Forests. Considerations for project planning, implementation, modeling, and data management strategies will be discussed, as well as some brief comparisons to QL2 data for the same project area.

Presented by: **Trevor Hobbs**, Huron-Manistee National Forest

Afternoon Educational Topic #2: **Advancements with UAVs for analyzing transportation infrastructure and mapping invasive aquatic plants**

The capabilities of unmanned aerial vehicles (UAVs) and the sensors that can be carried by them have been advancing rapidly in recent years. Colin will describe his recent research for the Michigan DOT that focused on using multiple UAV platforms with 3D optical, thermal, and LiDAR sensors to assess transportation infrastructure condition and corridors. Results show that UAVs can provide useful, high-resolution data for bridge inspections, construction sites, and road corridors. In US EPA research, Colin has demonstrated how multi-spectral, UAV-carried sensors can help identify the invasive aquatic plant Eurasian watermilfoil (EWM). With the right resolution and indices, multispectral UAV sensing can be used to monitor the effectiveness of EWM treatment methods, providing another tool for invasive plant management.

Presented by: **Colin Brooks**, Michigan Tech Research Institute (MTRI)

