MnGeo Statewide Geospatial Advisory Council
June 18, 2014 Meeting Minutes
Ladyslipper Room, Centennial Office Building, 658 Cedar St., St. Paul, MN 55155

Attendees

Members: Jeff Bloomquist, Farm Service Agency; David Brandt, Washington County; Will Craig, University of Minnesota; Kari Geurts, Dept. of Natural Resources; Andrew King-Scribbins, Hennepin County; Mark Kotz, Metropolitan Council; John Mackiewicz, WSB & Associates; Chad Martini, Stearns County; Trisha Stefanski, Dept. of Transportation; Victoria Reinhardt, Ramsey County; Ben Richason, St. Cloud State University; Cory Richter, City of St. Paul; Dan Ross, MnGeo; Gerry Sjerven, Minnesota Power; Kody Thurnau, Minnesota Center for Environmental Advocacy; Michelle Trager, Rice County; Tim Wotzka, Itasca County.

Non-Members: Norm Anderson, MnGeo; Chris Buse, MN.IT; Brad Henry, University of Minnesota; Joe Knight, University of Minnesota; Nancy Rader, MnGeo; Ron Wencl, U.S. Geological Survey

Welcome

Ross called the meeting to order. Participants introduced themselves.

Minutes of March 12, 2014 Meeting

The March 12, 2014 council meeting minutes were approved with no changes.

ArcGIS Online Minnesota Storefront (slides 5-18)

Norm Anderson introduced the "Minnesota Maps" Storefront (homepage) for finding Minnesota resources via Esri's ArcGIS Online (AGOL). AGOL is an online mapping platform upon which organizations can create interactive maps and applications-on-demand and share them within their agency, among organizations, or to the public. The storefront was created by a workgroup of Enterprise License Agreement (ELA) participants tasked with evaluating AGOL.

The image slider on the Storefront features new or popular content and will be updated as more resources are added. Resources on the AGOL site can be shared openly to the public, or can be restricted to more specific audiences (just within an organization, or just within a group). The site currently distinguishes between web maps and web apps, but this may prove to not be important. The workgroup is considering changing the standard Minnesota icon to an image that is specific to the map.

Anderson then illustrated how using AGOL greatly facilitated with a complex project to update statewide telephone exchange service area boundaries. Numerous utility staff with varying degrees of GIS expertise needed to update boundary information and resolve discrepancies between adjoining utilities; with AGOL, the work could all be done using a browser and the changes could be tracked and finalized in a streamlined process.

A governance whitepaper provides an initial understanding of governance issues for State of Minnesota ELA participants. Many free training materials are provided on Esri's website; some guidance is needed to point people to the most useful ones.

Questions for members: As we create the state's AGOL storefront, how are you creating your own, for example, how are you managing users and credits? How can we use this tool to provide content of use

to you? Are there things we can do to make AGOL resources easier to find (e.g., always including a "Minnesota" tag)? Maybe not important to distinguish between Webmap and Webapp? Image relate to the info. Example for you to use; learn from one another.

Member discussion:
- Delivery via cloud or services
    - Currently, the MN.IT security team has not approved delivering AGOL resources via the cloud since Esri is not yet compliant with FISMA security standards. If and when they are certified compliant, this policy will be reviewed.
    - Agencies that can't create their own web services are waiting for the cloud to make it easier to distribute their data.
    - Large datasets won't work in the cloud due to size limits.
    - WSB & Associates uses all services, not the cloud due to use of credits. They reserve their credits for more advanced features, mainly geocoding.
    - Using services can incur lots of overhead.
- Relationship with the Minnesota Geospatial Commons project
    - The AGOL and Commons projects complement each other and will begin to collaborate more closely. Agencies can post resources to either or both sites; if they are posted on both sites, it should be easy to get from one to the other. AGOL maps often are combinations of layers; the individual layers could be distributed via the Commons.
    - metadata needs to mesh well with the Commons
- Relationship with the educational community? Several options were mentioned:
    - K-12 workshops: Series of free workshops being offered as 21 events this summer all over the state to promote use of AGOL since Esri is now providing all K-12 schools with open access to AGOL. For more information see the [Minnesota Department of Education's GIS in K-12 webpage](#)
    - [U-Spatial's Training webpage](#) at the University of Minnesota provides a free online workshop, "Web Mapping 101: Creating Online Maps" which introduces participants to creating online maps using AGOL, as well as an AGOL Tutorial (also see "GIS 101: Analyzing Data and Creating Maps").
    - [Minnesota Alliance for Geographic Education (MAGE) webpage](#) describes further geographic education 8resources and teacher training opportunities.

Member Sector Report ([slides](#) 20-31)
Cory Richter reported on selected projects from several departments in the City of St. Paul, including Regional Water Services, Public Works, Public and Economic Development, Central GIS, Parks and Recreation, and mobile applications. She described their decentralized approach to publishing: the maps and data are the data owners' responsibility; Central GIS staff approve each application and if it is not kept up-to-date, the application is removed. Some projects have to be developed very quickly, for example, a winter parking ban map needed to be done in 5 hours; typically, they use Open Layers for these type of projects. See the slides for screenshots of a variety of applications.

Updates to Minnesota's Land Cover Data ([slides](#) 32-49)
Dr. Joe Knight provided an overview of the [Mapping Landscapes for Better Land and Water Management](#) project that he and Dr. Marv Bauer are leading at the Remote Sensing and Geospatial Analysis Laboratory, University of Minnesota. The project is funded by the LCCMR (Legislative-Citizen Committee on Minnesota Resources) and runs for two years, ending June 30, 2016. The project will

create an updated land cover layer for the state based on 2012-2014 image data with statewide LiDAR. The statewide product will be 30 meter (~100 ft) resolution, with 2 - 4 meter (~7 - 13 feet) resolution available for the Twin Cities metropolitan area and selected areas such as Duluth and Rochester. Products and statistics will be freely available online.

The slides show examples of recent land cover projects in the Twin Cities: 2011 30-meter for the 7 counties, funded by the Metropolitan Council, and high resolution land cover for Mineapolis, St. Paul and Woodbury, funded by those cities. These projects have used an object-based approach to classifying the imagery into land cover classes; this approach takes account of each pixel's context, rather than classifying each pixel independently. This helps to reduce the "salt-and-pepper" effect in the results. The method also uses LiDAR elevation data to help distinguish between classes.

He then reviewed land cover data products that are currently available for Minnesota, concluding that we need more frequent, high quality, Minnesota-specific land cover data, and listed a number of uses for the data.

He ended with a discussion question: **Can we create a partnership between UMN and Minnesota stakeholders (agencies and others) to provide regular funding for maps and change products?** This is likely the last time that LCCMR will fund this type of work, and the University of Minnesota cannot fund this effort on its own. He provided an example of what a three-year update cycle at $120k per year could yield:
Year 1: Statewide land cover
Year 2: High resolution land cover for selected areas
Year 3: Statewide lake clarity maps

Having a steady source of funding would mean the Remote Sensing lab could be much more efficient since they wouldn't have to "reinvent the wheel" every time an update is needed: funding, personnel, data, methods, delivery would all be established.

Member discussion:
- Who is the steward for land cover data? Everybody uses it, but it's not in anyone's mission statement.
- Need to document compelling business uses for this data to communicate to potential funders and people who will lobby in support of the funding. Two examples were mentioned:
  - Correlation between land cover and agricultural runoff for locating where to site best management practices.
  - Monitoring mining activity, including stockpile areas that are being removed.
- State and local governments have many pressing demands for their budgets; policy makers need to know why this data is needed more than other competing uses. Very difficult to get small line item appropriations through the legislature.
- Other possible sources of funding: the Blandin Foundation and the Minnesota Sea Grant program (for Lake Superior/Duluth area).

Legislative Update
Members continued discussing a proposal introduced at the March 12 meeting that could be submitted as an initiative in the 2015 legislative session: Redirect a portion of the Recorders Fee that the **State** receives (not the portion that the counties receive) from the general fund to a state fund set up for the

advancement of geospatial data, technology, and activities to improve services to the broader geospatial community. See the March 12, 2014 minutes (pp. 1-4) for the initial proposal and discussion.

Brandt and Ross reported that the group of volunteers (Brandt, Geurts, King-Scribbins, Kotz, Martini, Sjerven, Thurnau, Wotzka) had met to discuss next steps and would meet again in mid-July.

Member discussion:
- Put the highest priority on data that is most related to land parcel registration (addresses and address ranges) since this is the source of the funds.
- This will be an uphill effort. The value is spread over so many users and uses.
- Emphasize the business needs behind it – we need good stories to show why we are creating data.
- Reinhardt described an example of lessons learned from an effort that worked in the past: counties successfully advocated to receive a greater share of SCORE program revenue collected from a garbage bill tax to be used for recycling programs; the money is appropriated by the legislature and part goes to the counties and part to the Minnesota Pollution Control Agency. The counties' approach was to:
  - Emphasize that citizens are paying the tax to protect the environment and that they expect certain outcomes.
  - Describe the current picture, and then detail what additional specific outcomes the counties could accomplish with additional funds ("what's happening and what isn't?").
  - Emphasize that the funds would supplement, not supplant, existing funding.
  - Quantified any additional resources the counties were leveraging.
  - Establish partnerships with all the counties beforehand.
  - Not give up. The odds are that an effort like this will not be successful the first time, so you need to keep making the case.
- The more targeted the outcomes, the easier they will be to measure.
- Tap into what counties are doing already.
- Consider delivering a statewide layer first to prove it can be done, and then request funds to continue.
- Describe what will happen if the funding is received and what will happen if it isn't.
- Consider engaging the energy sector.
- What is the first layer? MetroGIS uses a matrix tool to help set priorities.
- Once data is available, there are many many uses that were never thought of initially (e.g., the uses that are being found for the new statewide LiDAR data).
- Association of Minnesota Counties legislative platform: If this issue is adopted in the platform, elected officials would present it to the legislature, using talking points from GIS staff and from those who would benefit from the data. AMC adopts its legislative platform in December.
- A concise description of this proposal is needed.

ACTION ITEM: Ross and the volunteer group will continue to develop this proposal.

MnGeo Priority Projects and Initiatives (slides 52-64)
See slides and handout for descriptions and status of each of MnGeo's main priority projects (all projects are done in partnership with other organizations): Addresses; Air Photos; ArcGIS Online; Geospatial Commons; LiDAR; Hydrography; Parcels; Street Centerlines.

Ross also described recent organizational and personnel changes at MnGeo:
- Five GIS staff from the Minnesota Department of Health (Mike Baker, Al Epp, Kitty Hurley, Brian Johnson and Philippe Le Grand) are being brought into MnGeo; they will continue to work on Dept. of Health projects.
- Mike Dolbow has moved to MnGeo from the Minnesota Department of Agriculture. He will oversee MnGeo's data coordination functions and will supervise Susanne Maeder and Nancy Rader (both MnGeo) in addition to the five Dept. of Health staff noted above.
- Chris Cialek will manage the second phase of the Minnesota Geospatial Commons project during which state agencies will migrate their geospatial data from existing agency data delivery sites to the Commons. After that phase, he will continue to work closely with state agencies and other partners to assess their geospatial needs and further the goals of enterprise managed hosting.

Data Sharing Initiatives (slides 65-67)
Free and Open Data Initiative update: Geoff Maas, MetroGIS Coordinator, submitted an updated map showing that in the Twin Cities metro area, Anoka and Carver counties have joined Dakota, Hennepin and Ramsey counties in adopting policies for free and open data, and that Scott County is reviewing such a policy. For more information on the initiative, see Maas' presentation from the January 10, 2014 council meeting as well as the MetroGIS Free & Open Data Resource Page.

Data sharing agreements: Ross then announced that the goal is being achieved to have one state agency obtain geospatial data from local partners, instead of the partners dealing with many individual state agencies. MnGeo will now establish the agreement with local partners, will obtain the data and aggregate it if necessary, and then will share it with other state agencies. MN.IT Central will handle making the actual agreements with individual agencies.

A next step will be to try to develop a common data sharing license to use with local governments.

Committee and Workgroup Update
No new information was reported.

Governor's Commendation Award Committee
The Governor's Geospatial Commendation award is given for activities that exemplify a commitment to coordinated, affordable, reliable and effective use of GIS to improve services within Minnesota. Details and past winners are listed on the award webpage. This year's deadline for nominations is June 30, 2014.

Future Meetings
The council's next meeting will be Wednesday September 24, 2014 in the Blazing Star Room, Ground Floor, Centennial Office Building, 658 Cedar St., St. Paul, MN 55155

ACTION ITEM: Rader will schedule the council's winter quarterly meeting.

Meeting adjourned. Minutes by Nancy Rader.