

Meeting Summary
MetroGIS Technical Advisory Team
Minnesota Counties Insurance Trust Building, St. Paul, MN
10:00-12:00, Room 205
September 16, 2009

1. CALL TO ORDER, WELCOME, INTRODUCTIONS

Chair David Brandt called the meeting to order.

Present:

Dave Brandt (Chair), Washington County
Matt McGuire, Jessica Deegan, Rick Gelbmann, Metropolitan Council
Bob Moulder, Hennepin County
Kent Tupper, Joe Sapletal, Dakota County
Alison Slaats, 1000 Friends of MN
Jim Maxwell, NCompass Technologies
Chad Riley, Carver County
Nancy Read, Mosquito Control District
Brian Fisher, Houston Engineering
Charlie Teff, Anoka County
Chris Ulrich, Carla Coates, David Wilford; Ramsey County
Josh Gumm, Scott County

Support Staff: Mark Kotz, Metropolitan Council; Randy Johnson, Metropolitan Council/MetroGIS

2. APPROVE AGENDA

The agenda was accepted, removing the Parks Editing presentation because the presenter was unable to attend.

3. APPROVE MEETING SUMMARY

The summary of the previous meeting was approved with no changes.

4. ITEMS REQUIRING ACTION OR DISCUSSION

None.

5. PROJECT AND WORKGROUP REPORTS

a) Address Workgroup

Kotz reported several items from the Address Workgroup

- The Met. Council has offered to be the regional custodian of the dataset. If approved by MetroGIS, this could be long term, or short term with the possibility of MnGeo taking over as a state custodian.
- The online editing application contract with Applied Geographics is still awaiting review in the Met. Council legal department. Ugh!
- The workgroup is adding a new element to the database specifications that would indicate if the address is for a residence. This is an optional element.
- Next steps are:
 - Define liability disclaimer language that cities will like. We plan to work with the LMC Insurance Trust on this.
 - Counties and cities work together to resolve issues of county ownership of some aspects of some cities' address points data (from parcel points).
 - Provide policy statement with roles and responsibilities to Policy Board in January.

- Begin distributing an open access version of the dataset via FTP for those cities and counties that wish to begin.
- In 2010 move to full implementation with synchronizer and web editing application.

Brian Fisher mentioned that new ESRI editing tools will be coming out in version 9.4 and may provide good tools for address point editing. He suggested that MetroGIS might consider waiting for that.

b) Application and Services Projects

The Policy Board approved three projects, as recommended by the Technical Leadership Workgroup and the Coordinating Committee

- Best Image Service status: Interagency agreement with MnGeo being developed.
- Proximity Finder status: Will go out for bids later in September.
- Geocoder Tweaks status: Funding approved and sent to Mosquito Control

c) Other Technical Items from Coordinating Committee Meeting

Brandt mentioned Will Craig's efforts to update the Socioeconomic Indicators part of DataFinder. See Coordinating Committee packet here for details

http://www.metrogis.org/teams/cc/meetings/09_0910/index.shtml

Alison Slaats explained the concept for the **applications and services contest** that is being discussed within MetroGIS. The purpose is to increase the number of geo services available within the community and advertise them. The contest idea comes from a contest held in Washington DC. We hope it will result in a number of new applications that would be in the public domain.

The idea was liked by the Policy Board, but no funding was approved. A workgroup was created by the Coordinating Committee to move the idea forward. Slaats invited anyone to be part of the workgroup. Nancy Read said this would be a wonderful and exciting opportunity.

Slaats said that the workgroup is at the stage of building a coalition to support the contest. Then perhaps a consultant would be hired to run the contest. Randy Johnson suggested that the workgroup should submit a proposal to the Coordinating Committee in December.

Maxwell and Sapletel suggested having recognition as a prize and that monetary prizes might not be needed. Slaats said that those decision have not been made and encouraged people to be part of the workgroup to help provide ideas and make decisions.

Maxwell agreed to be part of the workgroup.

6. TECHNICAL PRESENTATIONS & DEMONSTRATIONS

b) Metropolitan Council Base Map Service

Deegan explained that the Met. Council is now putting out a base map service in two projections, UTM and Web Mercator. They services are deployed from ESRI's ArcGIS Server.

The base map was created to meet internal business need for good cartography on a standard base map for many purposes. They also wanted a standard look and feel for all of their mapping applications.

The Council considered just using Google maps, but did not for two reasons.

1. Council believes that local metro data is better (e.g. Google never remove I35W bridge when it was down)

2. Google does not allow the use of their service for non-public applications and the Council wanted to use it on some internal sites.

Why a service? It is much more flexible to use in many applications built in different programming environments.

One specific business need was to use it for the MetroTransit NexTrip application that shows live bus route data.

Development:

Cartography was created with ArcGIS desktop. Many decisions were made to make things similar to other existing, common web base maps like Google. For example, tile size and scale levels are the same. A lot of work went into the cartography, taking the best from various existing services including Google, Microsoft and Yahoo maps. The MetroTransit graphic designers also provided excellent input.

Matt McGuire talked about server resources:

- Expect 3000 hits per hour on peek use with Metro Transit
- The cache is about 5 GB on disk and 3 million files in 2700 folders.
- It takes at least two days to process the cache on the server. It takes a week to do it on the desktop.
- It also take a long time (days) to move the cache into a different network environment in the DMZ
- Serving the cache consumes relatively little resources because they are just PNG files.

Now what?

- Council need requires a very fast base map to serve multiple applications
- Best performance is realized from a public base map because there are no aspects to slow it down
- Council doesn't know how much others will use it or exactly what issues that might raise
- Council will track up time and the number of tile requests to assess use
- Council requests that you cite NCompass technology for the roads data if you use the service
- Will continue to work on streamlining the process
- Additional services planned for the future are a hybrid service that will include the future Best Image Service and a separate transit specific cache

Lessons Learned so far

- Labels are unpredictable. Annotation would solve this, but is much more work to maintain.
- Copying a large number of files is a challenge
- Graphic designers have very valuable input to a public cartographic product
- Understand projections
- Use monitoring tools

Questions:

Fischer: will styles be made available? McGuire: Sure.

Deegan is working on documenting developer resources, e.g. How to use the service, etc.

c) Carver, Dakota Scott, Washington Counties Base Map Effort

Joe Sapletal described some of the background and purpose of the multi-county collaboration.

- It will be valuable to collaborate because we each know some things that others don't know.

- In January Carver, Dakota and Scott Counties decided to do some collaboration with the Java Script API. They created a development team and basic goals and requirements. Washington County is attending meetings and Anoka County has just become involved too.
- New parcel search application was the driving force that got things started. The goal is a user friendly interface and quick rendering, with similar look and feel in each county.
- The key to this work is parameterizing the code so each county can easily turn things on or off for a particular application. Developers are approaching it this way.
- Counties are using SharePoint very effectively as a collaboration tool.

Chad Riley described some of the technical aspects.

- Used Carver's effort as a starting point
- Wiki created for detailed layer descriptions
- Counties have many agreed upon base map layers
- Counties used Google, Yahoo, etc. as examples for developing base map
- Counties did not attempt to line up cache with Google tile sizes. Purpose was to make it work well with parcel mapping application.
- As more counties are added, may want to revisit tiling scheme.
- Started with JPEG, which worked well in many ways, but does not support transparency
- Changed to PNG32

Slaats: What projection are you using? Riley: Each county is currently using county coordinates, but that may be revisited so all use the same projection.

- Riley demoed some applications that used the base map showing different levels of detail.
- The counties use the same tools on the screen to give each county the same look and feel in the apps.
- Joe said that their planners are very interested in using the basemap for their work.
- Additional base maps that have been created are:
 - Orthophotos
 - Terrain (contours)
 - USNG (infant stages)

Read: Are these available to the public? Riley: Yes, but they are not advertised. Sapletal: And they are still being worked on, so may change at any time.

McGuire: Are counties sharing the same caches or implementing independently? Sapletal: We are implementing independently due to differing business needs and deadlines.

Sapletal said they plan to advertise on GeoService Finder once the services are in production mode. They are still under development now even though they are externally accessible.

d) General discussion of MetroGIS's role with respect to base map services

Brandt: What is the role of MetroGIS related to base maps, etc. For example, could MetroGIS be a source of a failover option?

McGuire: The Council has space and may be willing to allow more caches on their server if it doesn't take a lot of Council resources.

Gelbmann: Goal for MetroGIS should be defining what the common needs are for the region and trying to provide that. For example, cities and counties may not have the same needs as Met. Council.

Brandt: People are now used to seeing high quality cartography. How does that translate to parcel mapping.

Johnson: MetroGIS can perhaps set some standards to help everyone work together.

McGuire: Sharing of the cartographic definitions is a great idea and will be helpful.

Johnson: Any reason there should not be multiple services?

Sapletal: That would be OK, but there may be ways to get more current data and it would be nice to have all serving the most current data.

Deegan: Getting data published on DataFinder will help everyone have the most current data.

Maxwell observed that Council is planning to update quarterly, but counties will update more frequently.

Slaats: It would be great to have one best base map for the region instead of having to go to multiple sources depending which county the community is in.

Brandt: Perhaps we need to define core base map cartography needs of the community like we did many years ago with data needs for MetroGIS. The audience is different than what we had for data needs. It is a more general level of users. So we may get a different response from those who are not technical people.

Much discussion occurred about to what degree we should standardize cartography or combine services. There was some general agreement that there is a need for multiple services for each organization's business need, but also that there are opportunities to coordinate with look and feel through standard cartographic parameters.

There was general consensus that the role of MetroGIS would be to facilitate defining common needs and providing a mechanism to more easily publish and share the cartographic specifications.

McGuire: Council has been asked where is WMS for this since MetroGIS advocates open standards. Council has no need for it. Role for MetroGIS could be to provide guidance on documenting and publishing cartographic standards.

Kotz: Hearing that MetroGIS role could be provide a web place or mechanism for collaboration, posting documentation and specifications for sharing, as well as defining community needs.

McGuire also maybe a place to host or mirror services.

7. INFORMATION SHARING

a) Round Table Information Sharing

Brandt: County is changing from maintaining parcels in AutoCAD to a Geodatabase instead. New tax system, Manatron, is also providing some challenges for Washington and other counties that use the same system to be able to retrieve a parcel data extract.

Tupper: Dakota is looking at ArcIMS application and moving that to ArcGIS Server. Also, plat checking is being done in coverage format and want to move that to an SDE geodatabase.

Maxwell: Talking with Nancy Read about getting weekly updates of street centerlines to the MetroGIS geocoder.

Read: Programmer is working on the landmarks addition to the geocoder.

Gelbmann: MnGeo TAT is moving along with filling the state wide advisory council. Many positions on the council have applicants. Still need state agencies and a tribal representative.

8. ADJOURN

Brandt adjourned the meeting at 12:03

Prepared by,
Mark Kotz