

MetroGIS Policy Board

Wednesday, April 26, 2017, 7:00 – 9:00 pm

Metro Counties Government Center, 2099 University Avenue, St Paul



Meeting Minutes (Draft)

Policy Board Members Present:

Debbie Goettel, Chair, Hennepin County

Mary Texer, Vice Chair; Metro Chapter – Minnesota Association of Watershed Districts

Victoria Reinhardt, Ramsey County

Jim Kordiak, Anoka County

Steve Elkins, Metropolitan Council

Pete Henschel, Carver County

Renee Heinbuch, Washington County

Barbara Weckman Brekke, Scott County

Guests:

Matt Koukol, Ramsey County

David Brandt, Washington County

Gary Swenson, Hennepin County

Steve Groen, Hennepin County

Eric Hansen, Hennepin County

Mark Kotz, Metropolitan Council

Nancy Read, Metro Mosquito Control District

Staff:

Geoff Maas, MetroGIS Coordinator

1) Call to Order

Chair Goettel called the meeting to order at 7:03 pm

2) Approve Today's Meeting Agenda

Motion: Texer

Second: Heinbuch

Vote: Unanimous, passed;

3) Approve Meeting Summary from 2016 Annual Meeting

Motion: Elkins

Second: Texer

Vote: Unanimous, passed;

4) Brief Welcome to New Policy Board Members – Introduction

Coordinator Maas welcomed the group and welcomed new members Renee Heinbuch, Washington County IT Director and Scott County Commissioner Barbara Weckman Brekke to the Policy Board. The group congratulated Commissioner Goettel on her election to the Hennepin County Board of Commissioners, Mary Texer on her recent election as Chair of the Metro Chapter of the Minnesota Association of Watershed Districts and Pete Henschel on his recent promotion to the position of Chief Information Officer at Carver County.

5) Hennepin County – Utility Infrastructure Integration

Hennepin County staff, including Right of Way Manager Steve Groen, GIS Manager Gary Swenson and GIS Specialist Eric Hansen, provided an overview of the need for, and development of, the UI2 application for coordinating the work of utility and road repair work.

Groen introduced the project and its origins as it was inspired by the desire of Hennepin County to reduce duplicative effort in utility and infrastructure projects, avoid repeated ‘rip ups’ of the same road year after year to accommodate new projects, to save money, and get all the various interests (city, county, regional, state, private utility and telecommunications) communicating in a consistent way relative to infrastructure deployment.

Hansen provided an overview and demonstration of the features of the forthcoming Utility Infrastructure Integration (UI2) application and he indicated it is presently scheduled to go live in late May of this year.

The UI2 is a web-mapping application which displays the locations and details of infrastructure and utility projects within Hennepin County. Participating agencies and interests can load their project information and view the information of other agency’s projects.

Projects contain core attributes such as status (planning, design, construction) and the application contains the ability to filter by status, type, owner and data and provides other information such as key contacts, duration, project description, if a moratorium is present or planned.

Additional features include automated notification when a new project is entered within 1000 feet of an existing project and the ability to track changes to projects and send out notices accordingly.

The UI2 is not publicly-facing; it is a secure application for the use of participating agencies and interests. Those qualifying interests that wish to use it can contact Hennepin County to sign up and participate.

Swenson went on to indicate that Hennepin County has been working with major utility providers (Center Point, Xcel Energy, etc.), several cities in Hennepin County, MnDOT and the Metropolitan Council for the development of the first version of the UI2. Additionally, conversations have begun with other counties about the value of the project and there is an opportunity to share with, and longer term to include, other counties to leverage the benefits of the application. Swenson indicated that the UI2 project sponsor Chris Segsveen, Hennepin County Director of Transportation Operation, is interested in how to open this up to be a regional solution.

Groen indicated that once the project is ready for launch, Hennepin County will sponsor another Utility Summit event, inviting representatives from stakeholder groups who are, and potentially will be, using the UI2 to demonstrate the full capacity of the application.

Texer: There would be permitting professionals with the watershed districts that would be very interested in this. Was this developed in house?

Swenson: Yes, we looked at some vendor solutions, but found them not be as competitive as our ability to create it ourselves and host it internally.

Kordiak: How user friendly is the application?

Hansen: We've heard very good things from our partners using and testing it so far. One example is a user who could load in 25 projects in about a half an hour. We stress the ease of use and usability of the app and want it to be user-friendly.

Swenson: As this is not a publicly-facing tool, a user would need to have some knowledge of the business of utility work to know how to use the tool, but can very quickly get into loading their information into the system and seeing the projects of other agencies.

Texer: This is very impressive. Thank you for sharing this with us.

Swenson: You can thank Eric, he is our is our lead designer on it.

Hansen went on to demonstrate how a new project is added, how the subscription notification worked and how to select projects by type and track changes. He also demonstrated the filtering capability and the exporting capabilities of the application. Data can be easily exported as an Excel table or into PDF maps of project site areas. He also showed how the application contains aerial imagery all the way back to 2000 and how it will be responsive and useful in numerous platforms including mobile devices.

Goettel: The ability to track project schedule changes would be very useful if there are changes or delays, would that be included in the notification? Also, while being able view other agencies projects, can anyone edit them.

Hansen: Yes, that would be part of the updates as soon as the new information was entered, and, no, each agency can only modify their own data in the system. As (an employee of) Hennepin County, I would not be able to edit information entered by Xcel Energy or one of the cities.

Texer: Is there any ability to determine the size of the area of disturbance for a project?

Groen: We can identify the location site of the project, and give you the segment length of road, but not by acreage or size impact at this time.

Goettel: How soon are you anticipating the completion and launch?

Swenson: We anticipate going live at the end of May. Once we do, we will invite more cities and other participants to get on board. At our last utility summit in January we invited cities to view the demo and from what we've heard, they are excited to put their projects in and begin using it. We've had solid participation this far with other agencies with big projects such as the utilities we've mentioned, the Metropolitan Council and MnDOT.

Goettel: This kind of tool will really help me get my arms around my district, even just as a viewer for understanding what is happening and for planning.

Groen: Also in generating reports for staff, being able to pull the data out on specific sites is something we want users to do.

Heinbuch: Has there been any thought about this being extended as a DR (Disaster Recovery) solution?

Groen: That was not our first intent, but as the tool gets more use it could be used that way.

Swenson: Right now, most of the value to us is to publish the county's full set of projects; where our value gets most fully realized is the eventual participation with all other users and other possible uses of the tool. We feel we've made something that other partners will want to be a part of to help their own internal business needs.

Groen: I remember a time when it used to quite difficult in not being able to work in a direct way with the utilities, this tool really enables us to be able to work together and see what we're all doing.

Heinbuch: You mentioned another Utility Summit event, when is this planned?

Groen: As soon as we're given the green light to launch the UI2, we will schedule an event, sometime late spring or early summer.

Goettel: Thank you all for your work on this, I see this as being a tremendously valuable tool.

6) Ramsey County – Open Data Initiative and Portal

Ramsey County GIS Manager Matt Koukol provided an overview of the forthcoming Ramsey County Open Data Portal. Building upon the success of the open geospatial data effort and the adoption of an open public geospatial data resolution on February 11, 2014 by the County Board, Ramsey County is now realizing the benefit of making all its data (within its legal ability) freely open to the public.

On February 7, 2017, the Ramsey County Board of Commissioners passed its 'Open and Accessible Public Data' resolution. With this resolution, all public data that can be released within applicable legal parameters will be made available without a fee or a license agreement.

Koukol indicated many of the justifications for this action including increasing internal efficiencies, transparency of government operations, better serving the cities and open data availability is an engine and resource for economic activity and growth. He went on to discuss the forthcoming Ramsey Open Data Portal, which is currently scheduled to go live in the third quarter of 2017, this site will be open to everyone, with the intention of being easy to use, accessible, allowing full access to the data and a means to visualize it, download it and incorporate it in their own applications. The data will be searchable by metadata tags with APIs to be able use the data in other platforms.

When we report on various indicators at the county level, an example might be crime rates, we want to be able to show the data behind the indicators as well as just the report itself and linking the data and programs in place to outcomes.

Goettel: This will be great, getting back to the example on the dashboard with serious crime going down, is there another page or resource to be available on your site to see the initiatives that are helping make this happen?

Koukol: At this point, we have a series of goals and we link to key indicators which link to the goals, the series of strategies and departmental measures which support those goals. The full interface once complete will enable users to drill into those more deeply.

Reinhardt: In Ramsey County, we also have our budget cycle set up to reflect this with funding to special projects, projects and programs.

Heinbuch: How large an effort has the data collection been to support this effort?

Koukol: We are already collecting this data as part of our on-going business anyway, so that part was not a large amount of extra effort. As part of our two-year process, we've been focusing on linking those with the performance measures. We would go back to the departments and determine ways of how can we work together better, merge existing strategies and determine where can we tweak existing work to be more data driven.

Reinhardt: This is all very new, we are reorganizing into new services teams; each service team has a manager with the recognition that each goal affects every department. As an example, reducing recidivism is not just specific to the Department of Corrections, we see the value in the role played by Education, or even the Library system, or other county departments. We are working to eliminate the “silos of excellence” and to understand the roles each agency plays in each goal area and to work together on appropriate parts of each department on the larger issue. Previously, we had county-wide goals, but each department only took to the goals it felt directly related to them, now all goals are all department’s responsibility. We are in our second budget cycle with this practice right now and we will continue to tweak this as it develops.

Koukol: I would mention that the County is also beginning a community engagement outreach to accompany the open data effort, this includes outreach to the open data community and interest groups such as Open Twin Cities, Blacks in Technology and others and working through existing citizen advisory groups as well as meeting with the general population. We want to have a strong tie in back to the public to assess what their needs might be and how to satisfy them.

Heinbuch: Are you using an in-house solution for the data delivery and viewer?

Koukol: No, we are using a vendor solution. This will be hosted off site to relieve stress on our infrastructure; with all the visualization, crunching hundreds of thousands of records we simply didn’t want to carry that much activity on our system.

Goettel: This looks to be a very solid, understandable and useful resources for residents and citizens that they can easily use and understand community input and feedback, the public outreach aspect of this is to be commended as well.

Heinbuch: How long has this taken [Ramsey County] to develop this effort?

Koukol: We signed our contract with the vendor in January 2017 and have been able to move very quickly, however, we have had a solid year prior to the contract of county staff working on the data, on internal processes, on data governance and putting things in place so we could be ready to go when the vendor was chosen. Again, our goal is to be launched by the third quarter of 2017.

7) Completed projects in 2016

Coordinator Maas provided a summary of the projects completed in the 2016 Work Plan cycle, these included the 2016 Aerial Imagery Collection Effort and the Historical Aerial Imagery Archiving Project.

For the 2016 aerial imagery collection, four metro counties [Anoka, Carver, Dakota and Scott] and the Metropolitan Council made use of the state’s Master Services Contract program for a buy-up of imagery in April 2016. The data was captured in mid/late April 2016, ortho-corrected (rectified) during 2016 and made available via the state’s Imager Server in October 2016.

For the Historical Aerial Imagery Archiving Project, the Metropolitan Council contracted with the Borchert Map Library to scan, geo-rectify, archive and publish a series of metro-wide aerial imagers captured in 1956 and 1966. These images have a number

Maas also cited that the Borchert Map Library is emerging as a ‘solution of choice’ for archiving geospatial data. As all our agencies continually produce more new data, having a reliable repository where archival data can be professionally organized and curated is valuable from the standpoint of storage and public availability.

8) Brief MetroGIS Project Updates

8a – MetroGIS 2017 Work Plan and Budget

At its fall meeting the MetroGIS Coordinating Committee produces and adopts a work plan for the coming year and programs its budget to align with work plan priorities. Coordinator Maas listed the eight projects identified for the 2017 Work Plan cycle and the current proposed budget to support those efforts. MetroGIS received \$86,000 from the Metropolitan Council Information Services department for projects with regional significance.

MetroGIS 2017 Project Budget (Current as of May 1, 2017)

2017 Work Plan Project or Initiative	2017 Budget Allotment
Contract with Metro Counties	\$28,000
Metrogis.org website CMS update	\$2,000
Earmarked for Stormwater Data project	\$8,000 (Earmarked, not contractually committed)

8b – Support for the Minnesota Geospatial Commons. The Geospatial Commons, a state-maintained geospatial data clearinghouse and portal was originally launched in the summer of 2014 and its availability and function remain a priority to the not just the metro interest but the entire statewide geospatial professional community. The Commons presently provides access to 646 individual resources produced by 25 different agencies and is maintained at MnGeo with assistance from state partner agencies. The Commons is accessed at <https://gisdata.mn.gov>

8c – Free and Open Data Initiative. Coordinator Maas indicated the free and open data effort has transitioned to an effort of on-going research, outreach and communication to partners in Greater Minnesota. He displayed the map of Minnesota counties now making their data available as of April 14, 2017; 25 of 87 counties are making their data open. Maas is maintaining a second ‘white paper’ resource (*Free + Open Public Geospatial Data in Minnesota: Questions, Answers, Concepts and Resources for Practitioners*) that is updated periodically and published on the MetroGIS website as a guide for geospatial around the state. This document is updated periodically in response to questions posted from geospatial professionals or changes to laws and administrative rules governing data availability.

8d – Address Points Aggregation Effort

Development and aggregation of address points has remained a high priority of the metro level geospatial community in the past several work planning cycles. Address points are a vital data resource for emergency services dispatch, delivery systems, geocoding, density analysis, applications development, tracking development and permits among many other uses. The metro counties have taken on the role of ‘trusted aggregator’ of their various cities data and the Metropolitan Council aggregates this data (twice per year) and publishes it as a regional dataset on the Geospatial Commons. As of April 2017, five of the seven metropolitan counties are participating in the creation and aggregation of address point data with over 989,000 points in the current dataset. Washington County is working with the Metro Emergency Services Board on a grant to fund their creation of address point data later in 2017.

Metro partners are also involved in the development of the forthcoming statewide Address Point Standard. Metro partners began working on an address point specification in 2004, and adopted their first formal version of the standard in 2010. The State-911 interests began working on a data specification to meet their needs in 2015 with an outreach effort to Greater Minnesota. Partners in both the Metro and State efforts saw the opportunity

8e – Metro Regional Centerlines Collaboration (MRCC) Road Data project

The metro partners have been working together since May 2014 to develop a road centerline data model and dataset to meet their collective needs. On April 21, 2017, the first version of this dataset was published for full public consumption on the Geospatial Commons. This represents an important milestone in the development and availability of geospatial data from public sources in Minnesota. Next steps include working toward monthly upgrades of the dataset and finalization of an agreement between the Counties and Metropolitan Council to establish a data portal for collection and aggregation. In working with the Metro Emergency Services Board, it is anticipated that the counties of Isanti and Chisago (which border the metro to the north) will also be included in a future version of this dataset.

8f – Metro Regional Park and Trail Dataset

Building on the success and working model of the MRCC effort, metro partners have embarked on a similar effort in developing a data specification and dataset representing the park, recreational land and trail network of the metropolitan region. Partners convened in two sessions during Fall 2016 (one specifically for parks [Oct], another for trails [Nov]) to fully list out all the business needs to be satisfied by this dataset. The group has chosen the National Recreation and Park Association (NRPA) data model as its basis for its dataset. The working group is working to having the first version of the geometry ready by May 31, 2017 with further project plans to be made after that time.

8g – Metro Regional Stormwater Dataset and Data Standard

The development of an inter-jurisdictional stormwater data network was initially begun in 2008, made progress until 2010 but has been largely shelved during that time. MetroGIS has been informally collecting information on the need for this dataset since 2013 and has elevated the project to its seventh (7th) priority in the 2017 work cycle. The goal of the project will be a sustainable, stakeholder-supported method for the on-going collection, standardization, aggregation and availability of geospatial stormwater system data in the Twin Cities Metropolitan Region. The initial focus will be on documenting the various use cases and business needs for a dataset like this, a meeting of stakeholders to confirm that list of needs and a pilot project where data can be collected, standardized and disseminated for use and testing by the stakeholder group.

9) Signed Memorandum of Agreement between Metro Counties and Metropolitan Council

On December 12, 2016, the Seven Metropolitan Counties and Metropolitan Council signed a new Memorandum of Agreement to continue working together through the MetroGIS collaborative and a contract for the continuation of data standardization efforts in the metro region. Under this contract each metro county agrees to convert their geospatial data into standards for aggregation and publishing to the public and the Metropolitan Council agrees to pay each county \$4000/year to convert their data into agreed upon standards. This contract is valid through December 31, 2018 with the potential of two 1-year extensions through December 31, 2020. This enabled the county and regional partners to maintain their existing activity of data development, aggregation and publishing uninterrupted.

10) The Role of GIS in Government

Coordinator Maas gave a short presentation about key uses of GIS and geospatial analysis and its potential to assist policy makers to program funds and resources to solve the specific issues they face. Maas provided quick illustrations of topics such as crime, infrastructure project tracking and the issue of lead contamination in Flint, Michigan and how GIS is potentially able to help document, analyze and solve these pressing problems. Maas made the case that we, as technical specialists are adept in the creation, availability, maintenance, stewardship, standardization, deployment and communication of geospatial data, and we wish to more meaningfully link that expertise with the real of policy and problems solving at the leadership level.

Chair Goettel encouraged the groups on engaging in a discussion on the increasing and expanding role of GIS in government and how leadership can better leverage this technology for decision making.

Reinhardt: Many of the issues we face in Ramsey County—be they crime or poverty or public services—have data coming from many different sources. Our ability to pull these together with income and economic data, educational attainment and other demographic indicators help us paint a complete picture and tell a story with the data. Ramsey County is the most densely populated county in the state, having these facts and being able to over lay them helps us to fully understand the issues and the needs and then to engage the public.

Even when we don't have a clear answer or we have a complex problem on our hands, having the data available in this way enables us to identify partners we need, examine issues of equity, and spend less time wringing our hands and better able to start working. We may not be able to solve something right away by we can start to frame the questions.

Kordiak: What do we do at the county in many ways is looking for economic opportunities amid the reality of things like parking, transportation networks and specifics like availability of day care. Knowing things like vacant land and unbuilt or underserved areas enables us to find opportunities. Having this data enables us to establish a baseline for our actions.

Goettel: When you have a good idea or a concept, having a reliable model to predict outcomes and what the results might be is essential. Things such as the examining the potential impacts of putting in a transit line on tax base or demographics. With the range of activities from comprehensive planning, long-term budget issues, road and trail networks and the influence of city, county, regional and state projects on one another we need to be able to model and view potential impacts. Many of these issues link to budgeting as well, we need to connect our commissioners and leadership to these tools and this technology.

Texer: From the watershed point of view, we are interested in topics such as shared green infrastructure and the impacts of activity on water quality. Being able to anticipate those impacts would be valuable.

Goettel: Are there other related issues the group would like to explore? Things like where to target low interest loans for septic systems, ages of buildings for lead paint removal, public health, using this technology to tick a few things off the list.

Brandt: We are looking at some of the ethical issues around GIS data availability as well, the one that comes to mind would be radon testing, while not a 'publicly available' data set it is essential for making good decisions in a home purchase, this data has the power to impact the sale of houses. We are looking at our responsibilities to make certain data public and what that means in terms of impact.

Reinhardt: In Ramsey County, uncapped wells remain an issue for us.

Goettel: Water management issues are a big one for all of us, the challenge being getting good data; specifically understanding direction and flow and being able to model that out would be so powerful. Finding this data and being able to use it at a local level would enables us to perform other kinds of analysis; thinking of things as a complete system

Brandt: We looked at the example of index cards earlier in Flint, Michigan; we actually had our entire inventory of culverts in the county [Washington] on index cards, how many other datasets are like that and what issues could we better work on if we had the data.

Texer: With the upcoming wave of retirements, we risk losing a level of institutional knowledge as well.

Reinhardt: I've been involved with GIS for a long time, with MetroGIS with the Governor's Council and now on the Geospatial Advisory Council, and as some of you know, the people doing this work are quiet. As a policy maker, we ask for things and they just get things done for us, in some ways it's like magic. we can help you with that.

Elkins: Something I have been wanting from some time is to the highway geometry with needs analysis information and crash data superimposed on it. MnDOT with needs this analysis super imposed and added to crash data, handle road geometry. State Aid is required to submit this on their needs assessment forms. Their funding is based on those needs along with the attributes of the roadway. Cities, counties and municipal state aid recipients have to submit their needs report to justify their 'slice of the pie'. There is very detailed information being submitted to MnDOT that very likely just sits in file cabinets.

Maas: Indeed, there are likely other examples like this. We as technical staff are really looking for these kinds of examples and specific problems, and how to connect with leadership to use GIS to gather data to analyze and help solve these issues.

Swenson: In Hennepin County, we have GIS people throughout the county and our central GIS office; we work with each line of business and find a lot of value in helping them build capacity to perform their own work and make their own decisions. We've had staff go back through county board agendas and discover opportunities in what is discussed in those meetings and from front line staff on what the hot topics are. Connecting the 'know-how' with the opportunity and filling the gap between the technology and the delivery of the service is what we're interested in.

Goettel: When you think about utilities to be tracked or think about major redevelopment projects, we need to ask what is the cost for infrastructure capacity and for long term planning. When I was with Richfield, we learned we don't have a pipe big enough, we can't meet fire code and subsequently couldn't do the redevelopment project we had hoped for, there was just not enough capacity for water supply and fire protection. This at least lets us plan long term to upgrade but that intermediate step got us to understand what we needed to do. I think about other possibilities as well, social impacts of development, tracking the condition of the housing stock, poverty, performing analysis around the region such as where the activities are linking to outcomes.

Henschel: Looking at tax impacts and market value and asking those questions such as 'why isn't one area growing as fast as other area' are useful as well. When we are asked for something more specific, we can perform it and continue to do it over time and track changes and understand the patterns we're seeing.

Swenson: Another general comment which likely applies to all the counties, there is a good chance that folks at the County Board level are not seeing everything at all levels in the county, just as the frontline staff are not able to see or anticipate everything that is needed at the Board level. We all know we have a lot going on and there are always some opportunities that are missed.

Goettel: There is a potential opportunity to leverage director-level reports—perhaps in both directions—to Board and staff. I think we’ve started to explore some good ideas tonight and can continue this conversation within our counties.

11) Other Business

Participants and attendees were encouraged by Chair Goettel to advance any thoughts or ideas they may have relevant to the current or future work of MetroGIS (No additional topics were raised or offered)

12) 2018 Annual Policy Board Meeting:

The 2018 Annual Policy Board meeting is scheduled for:

Wednesday, April 25, 2018, 7:00 pm

Metro County Government Center

2099 University Avenue

St. Paul, Minnesota 55104

13) Adjournment

Chair Goettel adjourned the meeting at 8:54 pm

Coordinator Maas thanked the participants for their time, attention and on-going support of the MetroGIS collaborative effort.