Beyond Government Users: Future Directions for MetroGIS

November 15, 2005 Forum

Final
Turn-Around Document
December 23, 2005

Compiled by
Randall Johnson, MetroGIS Staff Coordinator
Steve Fester, MetroGIS Staff Support

Metro 94 Meeting Facility
I-94 and Highway 61
St. Paul, Minnesota

Excerpt
MetroGIS Policy Board Meeting Summary
January 18, 2006

d) Non-Government Forum Results & Partnering Guidelines

Member Schneider provided an overview of the November 15, 2005 forum hosted by MetroGIS to identify potential collaboration opportunities with the non-profit and for-profit sectors. He noted that the results of the November forum, together with the Geospatial Technology Possibilities Forum proposed for this spring by the Coordinating Committee, should provide a strong foundation for dialogue at the pending Strategic Directions Forum.

Member Schneider commented that he was very pleased with the enthusiasm offered by the participants and the number of ideas offered. He also shared that he believes a key to moving forward on these opportunities will involve the attendees organizing themselves to communicate as a collective voice with MetroGIS leadership and that he had encouraged those in attendance to begin thinking about how they might do such. He was encouraged that those in attendance understood that an exchange of value ethic would be central to achieving the ideas set forth.

Finally, four proposed principles listed in the agenda report were offered for comment. Their purpose is to provide a framework to guide talks toward achieving ideas offered by the forum attendees. Other than a suggestion from Alternate Member Harper to expand the options identified in Principle # 3 by adding "but not be limited" after "of", Board members were comfortable with the principles, as proposed.

Motion: Member Schneider moved and Member Fiskness seconded that the Policy Board:

1) Support the Coordinating Committee's recommendation to host a "Geospatial Technology Possibilities" forum this coming spring in preparation for the pending Strategic Directions Forum.
2) Approve the following principles to guide pending talks with non-government interests who wish to further investigate collaborative opportunities with government interests in addressing common geospatial needs:
    a) Value-added to public sector assets is encouraged provided it does not detract from the public sector objective.
    b) Contribution of assets to a collaborative solution assumes all parties view the transaction as equitable and relevant to their needs.
    c) Contributions can be comprised of, but not be limited to, funds, data, equipment and/or people.
    d) Equity is defined on an organization-by-organization basis and exists if the collaborative solution is more efficient than pursuing the solution on one's own.

Motion carried, ayes all.

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ACKNOWLEDGEMENTS

This document summarizes a forum, which culminates a six-month process to achieve a directive of the MetroGIS Policy Board – explore non-profit and for-profit interest in working with the government community to address needs of the government community that it has not been able to effectively deal with on its own.

Successful achievement of this directive would not have been possible without the efforts of the Forum Planning Workgroup, whose members were as follows:

Terry Schneider, City of Minnetonka Council member and MetroGIS Policy Board member who championed the forum idea.
Nancy Read, Metropolitan Mosquito Control District – Chair MetroGIS Coordinating Committee
Will Craig, University of Minnesota (CURA) - MetroGIS Coordinating Committee
Chet Harrison, CB Richard Ellis - MetroGIS Coordinating Committee
Brad Henry, URS Corporation – MetroGIS Coordinating Committee
Al Laumeyer, CenterPoint Energy - MetroGIS Coordinating Committee
Jim Maxwell, The Lawrence Group – MetroGIS Technical Advisory Committee
Terese Rowekamp, Rowekamp and Associates - MetroGIS Coordinating Committee

Their advice and feedback were invaluable to the maturing of specific objectives and methods capable of successfully achieving the Board's general directive.

Staff Support Team:
Randall Johnson, MetroGIS Staff Coordinator
Trudy Richter, Richardson, Richter & Associates
Rich Cornell, Metropolitan Council, Learning and Development Consultant
Steve Fester, Administrative Technical Assistant

EXECUTIVE SUMMARY

Nearly 10 years have passed since participants in MetroGIS began to build a successful geospatial data-sharing collaboration among government agencies in the seven-county Twin Cities area. While MetroGIS has successfully implemented several regional solutions to common information needs, solutions for several others have yet to be identified.

MetroGIS leadership also recognizes that MetroGIS is at a decision crossroads. The question is, should MetroGIS's focus be on maintaining what has been built or embrace new challenges, such as, seeking out partnerships with non-government entities to deal with needs not yet addressed? The Policy Board has recognized that the "tent" may need to be larger to effectively address the remaining needs and to meet emerging challenges. While some nonprofit and private sector interests are already involved in MetroGIS, the Board wanted to hear from a broader constituency of representatives of these communities to identify potential areas of mutual interests.

In response, MetroGIS hosted a forum on November 15, 2005, entitled "Beyond Government Users: Future Directions for MetroGIS", which is the subject of this report. The purpose was to identify viable opportunities for leveraging resources of both government and non-government interests that use geospatial technology to support their day-to-day business functions. The results are expected to play a substantive role in discussions planned to set direction for MetroGIS for 2006 and beyond.

29 individuals participated, representing 22 for-profit and 2 non-profit organizations. They included GIS data producers, consultants, and software vendors; nonprofits; utilities; planning and engineering consultants; chambers of commerce; real estate and land developers, and the news media. All together, 79 ideas were generated in 9 thematic areas. Three of these thematic areas, comprising 45 of the 79 ideas, were identified as the most important to the most number of participants. They were:

- How can we work together to reduce costs?
- What innovations can we work together to develop?
- How to promote a statewide cooperative effort?

Specific recommendations were offered for each of the top three thematic areas. These recommendations will be shared with MetroGIS leadership as part of their strategic planning efforts for 2006 and beyond.

From both the 'participants' and the 'sponsors' perspectives, the event was a success, although attendance by non-profit interests was much lower than had been hoped for. Many of the participants stated that they would like to participate in follow-up activities. They also gave a composite score of 3.11, on a scale of 1 to 4, to five effectiveness-rated aspects of the forum. The sponsors believe this forum was a success because of the number and diversity of participants who volunteered their time and ability. The diversity of participants is seen a major catalyst for idea generation, several of which, if pursued, could greatly expand the MetroGIS "tent" to more meaningfully include non-profit and for-profit interests.

WELCOME

At 1:00 p.m. Randall Johnson, MetroGIS Staff Coordinator, introduced Victoria Reinhardt, Ramsey County Commissioner and Chair of the MetroGIS Policy Board, who welcomed the participants (Appendix B) and thanked them for accepting the invitation to participate in this important event.

In her welcoming comments, Chairperson Reinhardt acknowledged that although MetroGIS has built a successful geospatial data-sharing collaboration environment among government agencies serving the seven-county Twin Cities area, the MetroGIS Policy Board recognizes that the "tent" may need to be larger to effectively address identified needs that have not been met as well as emerging challenges.

She noted that in response to this recognition, the Policy Board decided to host this forum to begin a process to investigate broadening the "tent". Chairperson Reinhardt emphasized the Policy Board's hope is that a few viable ideas will emerge for leveraging resources of both government and non-government interests to address common needs; ideas that will help MetroGIS leadership set a compelling course for MetroGIS in 2006 and beyond.

Chairperson Reinhardt concluded her remarks by stating that the staff and Board officials in attendance will be learning from the participant discussions and listening for ideas that hopefully will set the stage for ongoing, longer-term dialogue on topics of mutual interest.

SETTING THE STAGE

Note the reader: In an attempt to ensure each of the participants possessed a similar common understanding of information important to the outcome of the forum, a packet of information was provided to each participant prior to the forum (Appendix H). The presentation slides used for the entire forum are also presented in Appendix C.

Nancy Read, Chairperson of the MetroGIS Coordinating Committee and Technology Lead for the Metropolitan Mosquito Control District, took a few moments to talk about the overall purpose of forum, "discover Geographic Information Systems (GIS)-related needs and opportunities of the Twin Cities private and non-profit communities that are common to needs of the Twin Cities public sector community" and each of the specific forum objectives:

1. Improve understanding of mutual government and non-government sector needs
2. Identify cross-sector opportunities to address mutual needs
3. Identify value-added opportunities to address needs
4. Proactively seek out partnerships

Following her overview of forum objectives, Ms. Read called attention to the Policy Board's recognition that a major challenge to addressing common needs is to reach agreement on ways that multiple organizations – government and non-government alike - can effectively work together to share resources toward the same end. She also noted that MetroGIS leadership called for this forum to achieve a better understanding about how expectations are changing as well as their expectation that through hosting this forum a few specific opportunities for cross-sector collaboration would be identified.

Ms. Read then summarized MetroGIS's accomplishments, which was provided in the pre-forum packet, and the results of the pre-forum web-based interest survey that the participants were asked to complete prior to the forum to assist staff with the forum preparations. The top five needs identified in the pre-forum survey were as follows:

1. Expand solutions to commonly needed data
2. Expand web-based mechanisms to distribute data
3. Expand standards and best practices
4. Expand common applications to support business needs
5. Expand forum to promote knowledge sharing and collaboration

Following an opportunity for questions, Ms. Read introduced Rich Cornell, Learning and Development Consultant with the Metropolitan Council, to facilitate the remainder of the forum.

GROUP EXERCISE - IDEA GENERATION AND GROUPING

Mr. Cornell introduced himself, noting that prior to working for the Metropolitan Council he had had acquired substantial experience facilitating business and strategic planning for private technology firms, Rand Corporation being among them. He commented that he expected that experience would serve him well in during this forum.

He began this segment of the forum reiterating the forum purpose by taping a poster to the front wall that contained the following statement - *to discover Geographic Information Systems (GIS)-related needs and opportunities of the Twin Cities private and non-profit communities that are common to needs of the Twin Cities public sector community*. He then explained that over the next couple of hours he would be facilitating a series of brainstorming exercises that hopefully would accomplish the desired outcome. It was then revealed that participant seats had been assigned to intentionally create small groups of 6-7 individuals from diverse organizations who, hopefully, do not interact with one another on a regular basis. The participants were also informed that a prearranged volunteer "recorder" would be working with each of their small groups. (See Appendix B for each of these individuals.)

Three questions were provided to guide the participants in the first braining storming exercise, which were left up on the projection screen during the entire exercise. They were as follows:

1. What is changing?
2. What are non-government interests looking for (source data, Web-based queries, etc.)?
3. What can non-government interest offer to add value to solutions sought by government?

The participants were asked to reflect for several minutes on their personal responses to the following statement: **looking into the future and identify new opportunities to collaboratively address geospatial needs common to both the government and non-government communities.** The participants were given a stack of 4 x 6-inch post-it notes and instructed to capture each of their ideas on a separate note.

Following the personal brainstorming exercise, the participants were asked to interact with the other individuals in their respective small groups to offer their ideas for clarification, but no debate, and then make an attempt to group their collective ideas by theme. The groups were given about 30 minutes to accomplish this task.

Mr. Cornell then invited each of the seven small groups, table by table, to post their groupings of ideas on a single wall, adding to the idea groupings created by other groups or establishing their own idea groups. Once the small groups had finished posting their ideas on the wall, they were free to take a break but asked to think about the grouping of ideas that they, from their personal perspective, believed to be most important to their work.

BREAK

During the break, the volunteer facilitator from each small group, Mr. Cornell, and the Staff Coordinator reviewed the grouping of ideas created by the participants. The facilitators recognized that a few higher-level groupings presented themselves, so a decision was made to facilitate a short discussion to settle on these higher-level themes as a large group.

GROUP EXERCISE - IDENTIFY TOP PROSPECT IDEAS

As agreed upon during the break, Mr. Cornell led a short exercise to collectively define theme groupings for the many ideas that had been generated by the small groups. Table A lists the nine higher-level themes that were collectively identified by the large group.

The large group then collectively decided that Themes 1, 3, and 9 were the most broadly supported for future consideration. The participants then self-organized into each of three new theme groups and collected the ideas from the wall that applied to their respective group's theme.

Table A: Idea Themes Collectively Identified

1	How can we work together to reduce costs?
2	How can non-government interests support government with technology?
3	What innovations can we work together to develop?
4	How can we work together to improve quality of data?
5	How do we know data are accurate and up to date?
6	Who is currently developing what data?
7	How does government get a (non-government?) group with passion together to move (ideas?) forward?
8	How to work together – parcel data and utility data?
9	How to promote a statewide organization?

In Table B, below, a listing of the ideas that each group felt were best associated with their respective theme (1, 3, and 9 identified in Table A) is presented. The ideas that were not associated with the three top themes are presented in Appendix E. (Note to reader: The number associated with each idea is provided only as a way to distinguish one idea from another; no ranking is intended.)

Table B: Ideas by Theme

Theme 1: How can we work together to reduce costs?	
Ideas	
1	Establish open-source model. Everyone uses data and contributes updates back to model.
2	Lower cost by eliminating duplicate effort between government and non-government.
3	Licensing I/S purchasing
4	Less restrictive access (cost and process)
5	Software costs can prevent collaboration.
6	Consumers expand
7	Expand parcel base to collar counties / Increase regional value

8	Sharing data and accessibility between
9	"For the public good" partnerships (Gov't, NGO, Media → Data Sharing)
10	Need better cost-sharing for high priced projects
11	General public access to data (democracy)
12	Private entities collaborating to share data (cost-sharing)
13	Reasonable cost: Parcel layer, Traffic counts
14	GIS county mapping layer / software: Aerial imagery, Parcels
15	New data distribution price
16	Want MetroGIS data – in our format, aggregation (able to print large)
17	Data conversion costs between systems is limiting
18	Wider access by groups to inform public policy discussion
Theme 3: What innovations can we work together to develop?	
Ideas	
1	Looking for datasets – sewer and water location; reasonable cost
2	Non-decennial census data (ACS, CPS)
3	Sharing info for non-GIS users (or less experienced)
4	Difficulty for private company or non-profits in accessing data even when doing contract work for government (data rights)
5	Web-based services for parcels and imagery
6	Take advantage of new technology
7	Variability in how county data is accessed (licensed cost and process)
8	Partnerships to allow data access <u>if</u> partner provides value-added service
9	Real-time traffic data
10	Internet-based applications for data load/store and mapmaking (i.e., Google Earth)
11	Portals – all levels of government
12	Far more robust Internet presentation of data visually
13	Tracking school performance (early education, NCLB, disparity prevention)
14	Variability in what data is available <u>by county</u>
15	Predictive modeling (non-traditional forecasting variables)
16	Ability to search based on information in metadata (e.g., source, accuracy)
17	Online mapping engine
18	Applications to handle common needs without having to download entire datasets
19	Need private and public expansion of future data
Theme 9: How can we promote a statewide GIS cooperative effort?	
Ideas	
1	Organize/help fund a statewide DEM
2	Expand collaboration to western Wisconsin and outstate Minnesota
3	Online data clearinghouse including private data
4	Drive MetroGIS concepts to all counties in the state **(additional illegible comment)**
5	Private entities collaborate
6	Clearinghouse of expertise (cross-sector partnerships)
7	Changes: Interface between GIS and other programs / models becoming more seamless
8	Non-government contribution of geodata (for sharing? or for sale?)

Once the three new groups had collected all of the various ideas associated with each of their respective themes, Mr. Cornell asked them to identify those ideas with the strongest across-the-

board support within their group. For the idea(s) with the broadest support, he asked each group to collectively address the following questions, to the extent that time permitted (Appendix D):

- Clarify public value that would be created if the idea is achieved,
- Identify organizational interests that must buy into the idea for it to be realized,
- What entity(ies) is the best candidate to provide operational capacity needed to achieve the desired outcome.

Each of the three groups was given 45 minutes (until 3:30 p.m.) to accomplish this task. Each group was then asked to report their conclusions to the large group. The summary, as submitted, by each of the three theme groups is provided in Table C, below.

Table C: Top Prospect Ideas by Theme

Theme 1: How can we work together to reduce costs?	
Conclusions	
The key point raised was the idea that expanding the base of data users will help reduce the cost of developing and maintaining the data. It could also help promote a more informed, data-driven discussion of public policy issues in metro communities because analysis and other products resulting from the data would be more widely disseminated. And finally, expanding the base of users into the private sector could also help make the Metro Area more competitive nationally and ultimately counties would gain from that subsequent economic development.	
We had several ideas for how this could be achieved: **1. Reducing the cost** of particular datasets would attract more users who currently can't afford it. **2. Establishing an open source model** where non-government users would get access to the data in return for their contribution of updates or improvements. We talked about how many current users find missing information in the datasets, which they add to their copy of the data, or other users who add enhancements to the data that might be useful to others. This would ultimately reduce the maintenance costs for the counties and provide better data quality for everyone. Related to this idea: establishing a review group or subcommittee made up of non-government users who could help with data quality issues. **3. Make access to the data less restrictive** (in addition to reducing cost) by easing the process for obtaining data. One idea was to have licensing rather than purchasing. For example, someone could get a chunk of data that could be used for multiple projects, rather than having to take the time to go through the labor-intensive purchasing process again.	
Theme Group Members:	
MaryJo Sylwester	St. Paul Pioneer Press
Hongyi Duan	DSU, Inc.
John Carpenter	Excensus, LLC
John Stefany	Star Tribune
Mary Gute	CH2M Hill
Ginny Lee	ECM Inc.
Scott Bundy	Xcel Energy

Theme 3: What innovations can we work together to develop?

Conclusions

1. **Provide a way for organizations to provide applications to MetroGIS website.**
   Provide a means for organizations to share or provide applications that would allow users to access commonly requested information without having to repeatedly download data. Private sector folks want to build applications that would turn MetroGIS data into solutions for users. Let those companies build the things they think will sell. They want to collect a fee for each use, but this would be minimal with profit coming from large volume of usage. A potential barrier to this solution is access to licensed data:
   a) Are counties willing to let derived data be distributed to unlicensed users? Under what circumstances?
   b) Does the private vendor need to buy the entire raw dataset before selling product? Maybe the application simply runs on the MetroGIS site, so the vendor doesn't need to own the data. Maybe some profit sharing could be devised?
2. **Provide a way for people to access the type of data they need in terms of quality and price.**
   Explanation: For a given datafile, people may require different levels of quality, depending on how they plan to use the data. Similarly, people may only need free or inexpensive data for some uses, but may require higher priced data for other jobs. This means including for-sale data (and services?) on DataFinder. Free data is great, but sometimes better data is needed and people are willing to pay the price.
   Example: Most of the discussion was around air photos. Aerial photos -- for some jobs, people may only need low quality resolution; others uses may require higher quality images.
3. **Provide various ways of querying data.**
   Example: People looking for socioeconomic data might not know the names of all the available datasets or layers that provide economic information. This suggestion entails providing users a way to query GIS data in a way that captures the breadth of information that a piece of data provides.
4. **Provide a way for users to interact with data; specifically, provide a way for users to update or revise data to correct errors.**
   Example: Someone who uses MetroGIS data might notice something out of date while conducting field work. This suggestion involves offering that user with a way to provide updated data to MetroGIS. One point was to simplify reporting – e.g., more interactive with less typing.

Theme Group Members:

Chris Moore	Greater Mpls. Day Care Assoc.
Ed Siebenaler	Dakota Electric
Stephanie Carleton	Welsh Companies
Rozanne Nohre	Bonestroo & Assoc.
Brad Muller	Martinez Corp.
Mike Rowekamp	Rowekamp Associates
Dennis Farmer	Parsons Brinckerhoff Quade
Brad Henry	URS Corp.
Jim Maxwell	The Lawrence Group
Scott Zeimetz	Svoboda Ecological Resources
Jessica Horning	Greater Mpls. Day Care Assoc.
Charles Skelton	Facet Technologies

Theme 9: How can we promote a statewide GIS cooperative effort?

Conclusions

1. **Idea:** The idea was to simply expand MetroGIS to MNGIS, or use MetroGIS as a model for MNGIS development.
   a. Data sharing - Enables efficient spatial data sharing across the State.
      i. Counties/organizations can hook into for cross-county data needs, i.e. Emergency Management.
      ii. Commercial industry can add value to data…proprietary data roadblock – see #3
   b. State sponsored - Needs to be a State-level initiative in order to be prolific and set standards for data quality and sharing
   c. Data collection bottom-up - Tackles data collection bit by bit from bottom-to-top approach so each county/entity's data is gathered
2. **Promotion:** To promote, we and the State need to highlight the benefits for public and private use of public data, in addition to the following elements
   a. Set up clear mission statement
   b. Testimonials – ensures communication on the return on investment, encourages data development
   c. Forum – gathers a local government user group that would meet at MN GIS/LIS conference, for example.
   d. Security – communicate to the private sector how their data/resources would be protected.
   e. Publicize – Publicize to counties, regional units of government, commercial entities serving the public, using the aforementioned elements via the Metro GIS web page, MN GIS/LIS list-serve, State website, State CIO messages of support**.**
3. **Roadblocks:**
   a. Counties/entities often see their data as proprietary. The group thought that if the data is not publicly shared, it would be helpful to at least indicate that the particular data exists but is proprietary. If the occasion arose where that data was needed for emergency purposes, for example, it could be located and purchased if needed.
   b. Getting the message to the State

Theme Group Members:

Dan Cook	Independent technology consultant
Jonathan Hoekenga	Emmons and Oliver Resources
Jason Johnson	Welsh Companies
Doug Von Koenig	TeleAtlas
Jeff Grussing	Great River Energy
David Patterson	CH2M Hill
Sally Wakefield	1000 Friends of Minnesota
Alan Laumeyer	CenterPoint Energy
Andy Schmidt	Great River Energy
Nikki Paripovich	ESRI

CLOSING

Terry Schneider, MetroGIS Policy Board member and Minnetonka City Councilmember, led the closing by stating that he was very pleased with what he had heard during the afternoon and excited about the potential for working with the non-profit and for-profit communities to address common needs. He asked for a show of hands in response to the question – was it beneficial to you to spend the afternoon at this event? Most acknowledged that their time was well spent and expressed interest in participating next steps.

Board member Schneider cautioned that the path will take time, as it took 5-6 years of effort to overcome initial hesitancies among government sector stakeholders that collaborative geospatial solutions can in fact improve organizational efficiencies and effectiveness. This forum, in effect,

is starting the process over again, addressing proprietary concerns that will need to be resolved to partner cross-sector.

It was noted that MetroGIS has been successful at achieving collaboration among government interests but is now at a decision crossroads. The question is, should MetroGIS's focus be on maintaining what has been built or embrace new challenges, such as, seeking out partnerships with non-government entities to deal with needs not yet addressed? If the latter, Board member Schneider stated that an understanding will be needed among non-government interests that government cannot give away value without getting value in return. That said, he also commented that government policy makers need to recognize they will be short sighted if they do not consider the expansion option.

He challenged the nonprofit and for-profit sectors to better coordinate with MetroGIS leadership and to state their case more articulately. For instance, he challenged the non-profit and for-profit sectors to collectively create a linkage with the Coordinating Committee through which to develop a strategy to move forward together over the next few years. He emphasized that passionate individuals must be involved on an ongoing basis on the private side, noting that MetroGIS's resources are limited but that a collaborative effort can work if there is sufficient passion on both sides.

The forum adjourned at 3:50 p.m. with staff agreeing to prepare a forum summary document and to share it with the participants for comment within 2-3 weeks. Board member Schneider encouraged each participant to expand upon the draft text to clarify and expand upon the ideas captured, noting that if MetroGIS's leadership sees substantive ideas and strong support to pursue them it is more likely that something will happen.

Appendix A

MetroGIS

Cooperation, Coordination, Sharing Geographic Data

Beyond Government Users Forum: Future Directions for MetroGIS

Tuesday, November 15, 2005
(Metro 94 Meeting Facility)
1:00 to 4:00 p.m.

Program

Welcome:
Victoria Reinhardt, Chairperson, MetroGIS Policy Board and
Ramsey County Commissioner

Setting the Stage:
Nancy Read, Chairperson, MetroGIS Coordinating Committee and
Technical Services, Metropolitan Mosquito Control District

Identify Collaboration Opportunities: Phase 1
Lead Facilitator, Rich Cornell, Learning and Development Consultant
Metropolitan Council

BREAK

Identify Collaboration Opportunities: Phase 2
Lead Facilitator - Rich Cornell

Closing:
-Participant Reflections
-Terry Schneider, Member of MetroGIS Policy Board, representing the
Association of Metropolitan Municipalities (AMM) and
Minnetonka City Council Member

Appendix B

Forum Participants

Name	Organization	Organizational Interest Type
Boyer, Liz	1000 Friends of Minnesota	Non-Profit
Bundy, Scott	Xcel Energy	Utility
Carleton, Stephanie	Welsh Companies	Real Estate
Carpenter, John	Excensus, LLC	GIS Consultant
Cook, Dan	independent technology consultant	Technology Consultant
Duan, Hongyi	DSU, Inc. (Dahlgren, Shardlow, Uban)	Planning/Engineering Consultant
Farmer, Dennis	Parsons Brinckerhoff Quade	Planning/Engineering Consultant
Grussing, Jeff	Great River Energy	Utility
Gute, Mary	CH2M Hill	Planning/Engineering Consultant
Hackett, Blaine	GIS Rangers	GIS Consultant
Henry, Brad	URS Corp.	Planning/Engineering Consultant
Hoekenga, Jonathan	Emmons & Oliver Resources	Planning/Engineering Consultant
Horning, Jessica	Greater Mpls. Day Care Association	Non-Profit
Johnson, Jason	Welsh Companies	Real Estate
Laumeyer, Al	CenterPoint Energy	Utility
Lee, Ginny	ECM Publishers, Inc.	Chamber of Commerce
Maxwell, Jim	The Lawrence Group	GIS Data Producer
Moore, Chris	Greater Mpls. Day Care Association	Non-Profit
Muller, Brad	Martinez Corp.	GIS Consultant
Nohre, Rozanne	Bonestroo and Associates	Planning/Engineering Consultant
Paripovich, Nikki	ESRI	GIS Software Vendor
Patterson, Dave	CH2M Hill	Planning/Engineering Consultant
Remme, Jeff	ECM Publishers, Inc.	Chamber of Commerce
Rowekamp, Mike	Rowekamp Associates	GIS Consultant
Schmidt, Andy	Great River Energy	Utility
Siebenaler, Ed	Dakota Electric	Utility
Skelton, Charles	Facet Technologies	GIS Data Producer
Stefany, John	Star Tribune	News Media
Sylwester, MaryJo	Pioneer Press	News Media
VonKoenig, Doug	TeleAtlas	GIS Data Producer
Wakefield, Sally	1000 Friends of Minnesota	Non-Profit
Wanberg, Dave	Sanders Wacker Bergly Inc.	Planning/Engineering Consultant
Zeimetz, Scott	Svoboda Ecological Resources	GIS Consultant

Co-Facilitators

Bergo, Chad	City of Maplewood
Cornell, Rich	Metropolitan Council
Craig, Will	University of Minnesota - CURA
Gelbmann, Rick	Metropolitan Council
Graham, Todd	Metropolitan Council
Knippel, Randy	Dakota County
Read, Nancy	Metropolitan Mosquito Control District
Schneider, Terry	Association of Metropolitan Municipalities

MetroGIS Staff

Johnson, Randall

Fester, Steve

Attachment C

Presentation Slides

Beyond Government Users: Future Directions for MetroGIS

-- Seeking Partnership Ideas from the Private and Non-Profit Sectors --

MetroGIS Hosted Forum

Tuesday, November 15, 2005

2002 Recipient of URISA's Exemplary Systems in Government (ESIG) Award

Welcome

Victoria Reinhardt

Chair, MetroGIS Policy Board
and
Ramsey County Commissioner

Setting the Stage

Nancy Read

Chair, MetroGIS Coordinating Committee
and
Technical Services Manager, Metropolitan Mosquito Control District

Setting the Stage

- **Introductions**
- **Purpose of Forum**
- **Questions - Major MetroGIS Accomplishments**
- **Results of Pre-Forum Survey**

Setting the Stage

Forum Purposes (*in a geospatial needs context*):

1. **Improve understanding of mutual government and non-government sector needs**
2. **Identify cross-sector opportunities to address mutual needs**
3. **Identify value-added opportunities to address needs**
4. **Proactively seek out partnerships to address mutual needs**
5. **Initiate on-going cross-sector dialogue**

Setting the Stage

Overview

Major MetroGIS Accomplishments

Regional Data Solutions

MetroGIS created a process to collaboratively establish regional solutions to common information needs.

***Now available*:**

1. **Census geography (1990 & 2000)**
2. **Land cover**
3. **MCD/county jurisdictional boundaries**
4. **Parcels**
5. **Planned land use**
6. **Street centerlines and address ranges**
7. **Socioeconomic characteristics of areas (*Phase I complete*)**

***In progress*:**

1. **Address points (*all occupiable units*)**
2. **Emergency preparedness (*testing interim solution)***
3. **Existing land use**
4. **Highway and road networks (*E911 compatible*)**
5. **Lakes, wetlands, rivers**
6. **School and watershed district jurisdictional boundaries**

Regional Applications

An Identified Growth Area

Data Discovery and Access

- **MetroGIS DataFinder**
- **MetroGIS Socioeconomic Web Resources Page**
- **MetroGIS Emergency Preparedness Website**

Use for a Specified Business Need

- **MetroGIS Mailing Label Application**

DataFinder: Internet Data Discovery and Retrieval Tool

Suite of Functions

DataFinder Catalog
Metadata grouped by the 19 ISO Data Theme Categories

DataFinder Search
Node of National GeoSpatial Data Clearinghouse

DataFinder Café
Bundles & downloads selected data for specified geographic extent, in multiple formats

- 864 downloads Sept. 2005
- 1xx datafiles available

(***www.datafinder.org***)

Endorsed Regional Best Practices

- **Metadata Guidelines**
- **Municipal Boundary Mapping Guidelines**
- **Metro-Wide Coordinate System**
- **National Standard for Spatial Data Accuracy (NSSDA)**
- **Thematic Data Categories (DataFinder)**

Endorsed Regional Data Content Standards

- **Address Guidelines**
- **County and Minor Civil Division Coding Exchange Std.**
- **Minnesota Land Cover Classification System (MLCCS)**
- **Regional Planned Land Use Coding Scheme and Dataset**
- **Unique Parcel ID Guidelines**

Questions?

Pre-Forum Survey Results

(Geospatial Needs of Non-Government Respondents)

The top 5 needs identified were:

1. Expand solutions to commonly needed data
2. Expand web-based mechanisms to distribute data
3. Expand standards and best practices
4. Expand common applications to support business needs
5. Expand forum to promote knowledge sharing and collaboration

Identify Collaborative Opportunities

Rich Cornell

Forum Facilitator

Learning and Development Consultant
Metropolitan Council

Identify Collaborative Opportunities

Agenda for the rest of the afternoon:

1. Agree on Facilitation Questions

2. Large Group - Identify Candidate Opportunities

Break

3. Theme-based Small Groups - Top Opportunities

4. Observer Comments - Heard, Learned ...

Identify Collaborative Opportunities

Agree on Facilitation Questions...

1. What is changing?

2. What are non-government interests looking for (source data, Web-based queries, etc.)?

3. What can non-government interest offer to add value to solutions sought by government?

4. Any others?

Large Group Exercise

Break

(15 minutes)

Small Group Exercise

Closing

Terry Schneider

Member, MetroGIS Policy Board (Representing AMM)
and
City Council Member, City of Minnetonka

Closing

- **Evaluation Forms - *Please Fill Out Before Leaving***
- **Meeting Summary - *Distribute for Comment***
- **Follow-up Forum / Focus Groups?**
- **Ideas For Upcoming Strategic Planning Effort**

THANK YOU FOR PARTICIPATING

More Information

***Staff*:**
Randall Johnson, MetroGIS Staff Coordinator
Email: randy.johnson@metc.state.mn.us
Phone: 651-602-1638

Policy Board:
Commissioner Victoria Reinhardt, Chair
Email: victoria.reinhardt@co.ramsey.mn.us
Phone: 651-266-8363

***MetroGIS General Website*: www.metrogis.org**

Attachment D

Group Discussion Guide

**(Beyond Government Users Forum -
Future Directions for MetroGIS)**

1. Goals

- Generate public/private partnership ideas to accomplish geospatial-related needs.
- Identify idea themes (groupings of similar ideas).
- Discuss implementation needs for the top candidate(s) in each theme.

2. Idea Generation

A) Agree on facilitation questions as a group. Are the following sufficient? (10 minutes)
- What is changing?
- What are non-government users looking for (e.g., data, access, relationships, etc.)?
- What can non-government interests offer to add value to the government solutions?

B) Individual Reflection—**look into the future and identify new opportunities to collaboratively address geospatial needs common to both the government and non-government communities** - and write your ideas on "Post Its". (5 minutes)

C) Round Table Brainstorming—Individuals share ideas one at a time. No discussion. No limit on the number of ideas that can be offered. Place "Post Its" on a flip chart or white board. (30 minutes)

D) Arrange Ideas By Similar Content/Theme (on a wall). All participants will be invited to offer thoughts about how ideas relate to one another as the individual workgroups report their ideas to the larger group. (20 minutes)

3. BREAK *Please use this time to meet other people and review the themes for the one that is of most interest to your situation***.**

4. Theme Selection—Each participant will self-select into a group of 6-10 individuals, based upon the idea theme that is of most importance to them/their organization.

5. Identify Top Collaboration Prospects (See separate discussion guide)

A) As a group, identify the idea or ideas, which represent needs shared by all or most of persons at your table. (10 minutes)

B) What is required to realize the top ranked idea?
- Clarify public value that would be created if the idea is achieved,
- Identify organizational interests that must buy into the idea for it to be realized,
- What entity(ies) is the best candidate to provide operational capacity needed to achieve the desired outcome. (35 minutes)

C) Each theme group will be asked to give a brief presentation of the high points of their discussion. (15 minutes)

Attachment E

Ideas Not Associated with a Top Ranked Theme

Ideas defined by during the small group process prior the break that are not associated with one of the three top themes selected for consideration are listed in the following table.

No Theme Defined	
1	Gopher State OneCall – have all utility and infrastructure data, public and private
2	Better way to describe land: Green Space, Wetlands, Water, Zoning, Sewer/water
3	LBS of companies/services
4	Ways to interact or update data
5	Public's need for access to information generated by tax dollars
6	Accurate parcel addressing
7	Methods of having input in updating data, but maintain standards
8	Public awareness of data
9	Connections to citizenry ("front line") – community informatics
10	Adding data to the mix
11	Tying together detailed development data for other use
12	New technologies available to GIS community to help answer questions for decision-makers
13	Improve data quality by working together (parcels, housing, and assessor)
14	External and internal customers' need for accurate answers and info. (spatial and attribute info)
15	Time spent fixing data
16	Increasing all. of geocoding address
17	Remote data access: Delivery, Display, Analysis
18	Make data available to both public and private parties
19	Speed up dissemination of data (more up-to-date data)
20	Close loop on data updates
21	Keep existing data up-to-date
22	Availability of accurate, up-to-date boundary data
23	Confusion exists over multiple similar datasets
24	More business/government interaction (i.e., not every 8 years)
25	Government and non-government both have uses for building structures inventory (and data associated with structures)
26	Data quality is improving fast at both private and public levels. Result: different datasets can be integrated more easily.
27	Lack of metadata (relatively rare)
28	Usage of www.mnpro.com
29	Wetlands – detailed beyond NWI
30	Easements – rights to land data (not just ownership)
31	More data sources, easier access by more people (not excluding anyone)
32	Need expanded network of localized data to connect similar datasets
33	Need file naming standards
34	Best practices for data privacy

Appendix F

Forum Evaluation Results

Outstanding …4
Good ……3
Average ……...2
Poor……..1

Was this Forum…

1. A valuable use of your time / relevant to your job responsibilities?…….3.38

2. Useful in providing new and valuable information and ideas?...…….....3.38

Your Understanding of MetroGIS's Objectives

1. Prior to the Forum…….....3.00
2. After the Forum…….3.31

Effectiveness of Support Team

1. Ability to Encourage Diverse Viewpoints…….....3.31
2. Ability to Obtain Consensus …….3.00
3. Ability to Manage Time…….2.92
4. Ability to Understand Your Viewpoint(s)…….3.23
5. Adequacy of Facilities……...3.08

Effectiveness Composite Score: 3.11

Please identify one thing that, if achieved, would make this forum a major success.

- Bring public and private data together
- Getting together and sharing ideas that are not government-focused
- Formation of a coordinating group to move this idea forward
- Drive statewide sponsorship
- Adopting open source model concept
- Meeting others who use GIS data
- Continued discussion or forums

Additional Comments

- This was good for brainstorming. Specific ideas need to be hammered out and implemented.
- Consideration of wider data availability and inventory
- Thanks for the opportunity to discuss GIS and the private sector.
- The room was a little small considering the amount of people, tables, and moving around the room.
- I thought the meeting was very good. It was an interesting and diverse group of people -- private sector GIS types with interests in the regional data sets. For me a light came on when we started talking about developing an adapted, OpenSource model for building, sharing and maintaining regional data sets and applications. In exchange for long term access to these data sets, data users agree to return a copy of the data sets (or applications) in better shape than when we got them - no more no less. We set up a collaborative review committee to coordinate the process and help set up quality expectations. There would be no judgment made as to the worthiness of the submissions; just an appraisal of whether they can be or should be added into the regional data sets. I see particular value in data quality improvements and new application development. Counties get a return that can be used to justify true data sharing, and private sector firms get the chance to build on a base that they have been effectively blocked from using.

Appendix G

Forum Invitation

October 7, 2005

[Name]: [email]:
[Organization]:

Beyond Government Users: Future Directions for MetroGIS

Dear [Name]:

It is my pleasure to personally invite you to participate in a forum to be hosted by MetroGIS on **November 15, 2005**, 1:00-3:30 p.m. You and your firm are among 90 parties from 17 interest categories invited to participate in this forum. We believe you have a business interest and expertise that align well with the intended purpose of the proposed forum. The forum's purpose is to discover Geographic Information Systems (GIS)-related needs and opportunities of the Twin Cities private and non-profit communities that are common to needs of the Twin Cities public sector community. Participants will also have an opportunity to identify other topics they believe MetroGIS should consider. Ideas generated at this forum will be used by MetroGIS's leadership to define strategic initiatives for 2006 and beyond.

MetroGIS was created in 1996 to pursue collaborative solutions to common geospatial information needs of the 300-plus local and regional government interests serving the seven-county, Minneapolis St. Paul Metropolitan Area. MetroGIS's efforts have been focused on three core functions: a) foster a collaborative environment, b) implement regional solutions to priority common information needs [parcels, streets, jurisdictional boundaries, planned land use, etc.] and, c) implement an Internet-based portal (DataFinder) to improve efficiencies associated with discovering and accessing data produced by others. For more information about MetroGIS's accomplishments, current projects, and a host of other topics see www.metrogis.org.

MetroGIS's leadership recognizes that MetroGIS's next generation of objectives should have a stronger focus on commonly needed geospatial applications (which use geospatial data to address a variety of internal business needs) and working with non-government interests more than in the past to address common needs. Our hope is that we will come away from the November forum with a list of viable opportunities to leverage resources of both government and non-government interests that use geospatial technology to support day-to-day business functions.

Again, MetroGIS's leadership would be very appreciative if you are able to attend this forum, as your input is important to setting the next-generation of objectives for MetroGIS's efforts. Please **RSVP by October 28th** by contacting Steve Fester at 651-602-1363 or at steve.fester@metc.state.mn.us .

In addition, **whether or not you plan to attend** this forum, we would appreciate if you could **respond** by October 28th to a short **pre-forum survey.** ***Click here*** to open the survey. The results will help us ensure that we make the best possible use of everyone's time. If there is any information that you would like to review before attending, please contact Randall Johnson, MetroGIS Staff Coordinator at 651-602-1638 or at randy.johnson@metc.state.mn.us . Also, please pass this invitation along to anyone else who you believe might have an interest.

Sincerely,

Victoria Reinhardt, Chair
MetroGIS Policy Board *and*
Ramsey County Commissioner

Appendix H

Pre-Forum Information Packet

(will attach when made into a PDF)

Date: November 2005

To: Participants,
MetroGIS's November 15, 2005 Forum:
"*Beyond Government Users: Future Directions for MetroGIS*"

From: Forum Planning Committee

Subject: Background Information about MetroGIS

Thank you for agreeing to participate in this important forum. The following materials are enclosed so that each participant can start with a common basic understanding of policies, regional data solutions, and applications that have been established thus far through MetroGIS's efforts. **The purpose of this forum is to look into the future and identify new opportunities to collaboratively address geospatial needs common to both the government and non-government communities.**

The following summary materials are enclosed to help you prepare for the November 15th Forum:

a) Current Purpose and Functions
b) Endorsed Regional Datasets and Solutions in Progress
c) Endorsed Regional Geospatial Applications
d) Endorsed Best Practices to Improve Ease of Sharing Commonly Needed Data

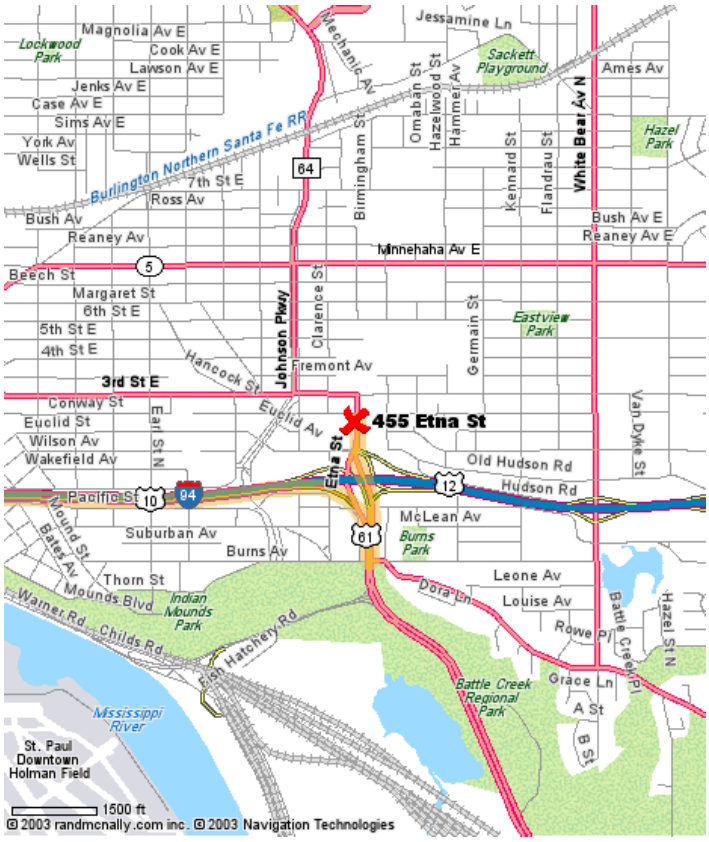
In addition to these attached materials, you are encouraged to review MetroGIS's promotional brochure and MetroGIS's 2004 Annual Report.

Again, thank you for your interest in participating in this important forum. We look forward to hearing your thoughts about initiatives that MetroGIS should consider undertaking in 2006 and beyond.

If you have any questions, please contact Randall Johnson, MetroGIS Staff Coordinator at 651-602-1638 or visit the MetroGIS informational website at www.metrogis.org.

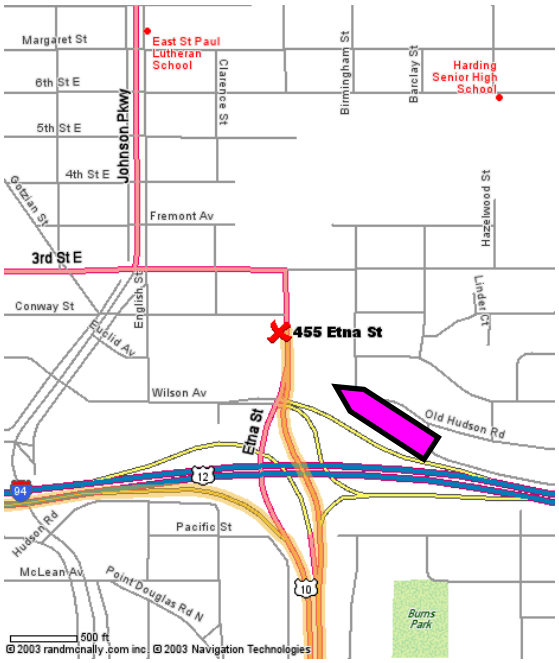
Getting to the Metro 94 Facility

East of downtown St. Paul adjacent to I-94 / 455 Etna St., Suite 32 / 612.462.2202 *OR* 651.602.4703



Coming from the west on I-94, take the EXIT 244 to US-10/US-61 South exit. Stay in the left lane. At the first stoplight (Burns Ave.), make a U-turn so you are heading north (under I-94). Turn left again after you cross under the freeway, and Metro 94 will be on your left (455 Etna Street.) Enter through Suite 32.

Coming from the east on I-94, see the map below.



MetroGIS

Cooperation, Coordination, Sharing Geographic Data

SUMMARY STATEMENT
METROGIS'S PURPOSE AND FUNCTIONS

Introduction

MetroGIS is an award-winning, regional geographic information systems initiative. Its core stakeholders are the more than 300 local and regional government organizations that serve the seven county Minneapolis-St. Paul Metropolitan Area, with partners in state and federal government, academic institutions, nonprofit organizations and businesses. Through MetroGIS's efforts, regional solutions to common geospatial program needs are identified and resources are leveraged to implement widely supported solutions, which promote and facilitate widespread sharing of geospatial data.

Mission

The mission statement for MetroGIS is "to provide an ongoing, stakeholder-governed, metro-wide mechanism through which participants easily and equitably share geographically referenced data that are accurate, current, secure, of common benefit and readily usable". The desired outcomes of MetroGIS's efforts include:

- Improved participant operations
- Reduced costs
- Improved support of cross-jurisdictional decision-making

Through these outcomes, the ultimate goal of the MetroGIS initiative is to sustain GIS collaboration within the Minneapolis - St. Paul Metropolitan Area to measurably improve effectiveness in achieving livable community goals, enhance the quality of life of the area's residents, and improve the region's economic competitiveness.

Major Functions

- Support a "forum" to foster coordination through *knowledge sharing* and use of *best practices.*
- Facilitate effective long-term solutions to priority common information needs - *regional datasets.*
- Support an efficient mechanism for Internet-based data discovery and retrieval - *MetroGIS DataFinder.*

Distinguishing Characteristics

- Forum to foster collaboration on a breadth of common geospatial program needs - *more than just data.*
- Unincorporated organization - *no mandate or legal standing.*
- Cannot own data, receive, or spend funds- *rely on stakeholders.*
- Elected officials comprise the Policy Board - *unprecedented.*
- Consensus-based decisions on matters fundamental to success.
- Voluntary compliance for endorsed policies/procedures.
- Refining and testing the NSDI Area Integrator concept.

For more information:

- MetroGIS Staff Coordinator:
  Randall Johnson - 651-602-1638, randy.johnson@metc.state.mn.us
- General email contact: metrogis-contacts@metc.state.mn.us
- General information website: www.metrogis.org
- MetroGIS DataFinder (Node of National Geospatial Data Clearinghouse): www.datafinder.org

MetroGIS Endorsed Regional Data Solutions

Introduction
A central focus of MetroGIS's work is to identify common information needs of its stakeholder community who serve the Minneapolis/St. Paul Metropolitan Area and facilitate long-term support of regional solutions to meet these common information needs. Elements of the National Spatial Data Infrastructure (NDSI) vision[1], such as the area integrator, framework themes, framework functions, and skylines concepts, are embedded in the philosophy that underlies MetroGIS's "endorsed" regional solutions.

What is Meant by "Endorsed"?
The MetroGIS Policy Board provides a political "reality check" when it endorses desired specifications for geospatial data commonly needed by the MetroGIS data user community at the conclusion of a broadly participatory and replicable process. These commonly needed data are referred to as "regional data". Another component of the Policy Board's endorsement action involves roles and responsibilities for primary and regional custodians of these data and any related agreements with specified organizations to carry out the desired tasks. In addition, endorsement of a regional dataset involves guidelines for access, content, documentation and distribution of the dataset. For more information about MetroGIS's regional datasets, please see http://www.metrogis.org/data/index.shtml.

What Endorsed Regional Data Solutions Are Currently Available? (as of October 2005)
- Addressable Street Centerlines
- Census Boundaries (1990 and 2000)
- County/Minor Civil Division (MCD) Boundaries
- Land Cover
- Parcels (including unique IDs)
- Planned Land Use
- Socioeconomic Characteristics of Areas (Web Resources Page)

What are the Benefits of Regional Data Solutions?
- Regional endorsed solutions work together. Their interoperability saves substantial time and effort for setup prior to use.
- Standardized capture and reporting of endorsed data permits easy "apples-to-apples" comparisons regionwide.
- Builds trust in the data as the go-to source, resulting in higher quality data at less cost over time.
- Use of endorsed data focuses debate on intended issues rather than on competing data sources.
- Leverage resources or share costs of enhancements to data that are important to the community.
- Accessible for free via the Internet for as many solutions as possible.

For more information see http://www.metrogis.org/data/about/index.shtml

[1] A comprehensive explanation of the National Spatial Data Infrastructure (NSDI) is provided in the NSDI Framework Handbook, which can be viewed at http://www.fgdc.gov/framework/frameworkintroguide.

MetroGIS Regional Data Solutions

(*Priority Common Information Needs and Status of Related Regional Solutions*)

(For more about each information need, see http://www.metrogis.org/data/statements.shtml and to view the metadata for the cited related datasets see http://www.datafinder.org/catalog.asp)

Priority Common Information Need

ADDRESSED*	IN PROGRESS	NOT STARTED
Census Boundaries	Emergency Preparedness	Land Regulations
Land Cover	Existing Land Use	Rights to Property
Parcel Boundaries & Unique Parcel Identifiers	Jurisdictional Boundaries (*1of 3 components addressed*)	
Planned Land Use	Highway/Road Networks	
Socioeconomic Characteristics of Areas	Lakes and Wetlands	
	Where People Live & Street Addresses (*2 of 3 components addressed)*	
6	**7**	**2**

**Regional solutions have been endorsed by the Policy Board and associated datasets developed*

Endorsed Regional Data Solutions

INFORMATION NEED*	RELATED DATASET(S) AND CUSTODIAN(S) (Primary / Regional)
Census Boundaries	• 1990 Census Geography (N/A / Metropolitan Council) • 2000 Census Geography (N/A / Metropolitan Council)
Jurisdictional Boundaries	• MCD/County Boundaries (Counties / Metropolitan Council)
Land Cover	• MLCCS Land Cover (Many / DNR)
Parcel Boundaries & Unique Parcel Identifiers	• Parcels (Counties / Metropolitan Council)
Planned Land Use	• Planned Land Use (N/A / Metropolitan Council)
Socioeconomic Characteristics of Areas	• Web Resources Site (N/A / U of M Population Center (www.datafinder.org/mg/socioeconomic_resources/index.asp)
Street Addresses & Where People Live	• Parcels (Counties / Metropolitan Council) • Addressable Street Centerlines (TLG / Metropolitan Council)

Last Updated: September 19, 2005

MetroGIS Data Standards/Guidelines and Best Practices

To Improve Ease of Sharing Commonly Needed Data

Introduction

The MetroGIS Policy Board has endorsed the following GIS-related data standards and guidelines. The MetroGIS community is encouraged to incorporate them into their daily GIS procedures as "best practices", so that data commonly produced by multiple interests can be more easily shared.

An explanation for each of the endorsed best practices and standards listed below is provided at http://www.metrogis.org/data/standards/index.shtml. Included in each explanation is a description of the item, the date it was adopted or endorsed, where to obtain related information, and a contact person.

These best practices are meant to supplement or enhance standards and guidelines associated with specific data themes for which MetroGIS has endorsed a regional solution (companion summary document).

MetroGIS Endorsed Best Practices

- Thematic Data Categories (DataFinder)
- Municipal Boundary Mapping Guidelines
- Metadata Guidelines
- Metro-Wide Coordinate System
- National Standard for Spatial Data Accuracy (NSSDA)

MetroGIS Endorsed Data Content Standards

- Address Guidelines and Issues for Working with Address Data
- County and Minor Civil Division Coding Exchange Standards
- Minnesota Land Cover Classification System (MLCCS)
- Regional Planned Land Use Coding Scheme and Dataset
- Unique Parcel ID Guidelines

MetroGIS Endorsed Regional Geospatial Applications

Introduction

MetroGIS has endorsed four Internet-based geospatial applications in addition to the general information website at www.metrogis.org. Three of them facilitate data discovery and access and the fourth provides the user with functionality to use geospatial data to accomplish a specific business need.

Until 2002, MetroGIS's central focus was identifying common information needs of its stakeholder community and facilitating long-term support of regional solutions to meet those common information needs. In 2002, during preparation of MetroGIS's 2003-2005 Business Plan, MetroGIS's leadership recognized that effectively addressing a common information need often requires more than just access to data. As such, a priority objective was established to investigate collaborative opportunities related to applications that run on endorsed regional data solutions.

Operational Regional Geospatial Applications

Data Discovery and Access

- **MetroGIS DataFinder** (www.datafinder.org)

  Overview – See the following page.

- **MetroGIS Socioeconomic Web Resources Page** (www.datafinder.org/mg/socioeconomic_resources/index.asp)

  Overview – This application is organized around the concept of priority socioeconomic information needs that are organized into the following general categories: crime, demographics, employment locations, housing, K-12 school data, location of services, and transportation issues. Data sources that meet the following general specifications are identified: sub-city resolution, annual updates, and 10-year or longer times series.

- **Emergency Preparedness Website**

  Overview – This application is currently designed to educate emergency managers on the value of GIS technology to addressing their data and analysis related needs pertaining to disaster planning, response, and recovery. Access is password-protected. A brochure that provides additional information can be viewed at http://www.metrogis.org/data/info_needs/emergency_prep/epbro05.pdf.

Use for a Specified Business Need

- **MetroGIS Mailing Label Application** (www.datafinder.org/labels/login.asp)

  Overview – This application produces labels from the MetroGIS regional parcel and related parcel point datasets. Access is limited to government and academic organizations that are licensed to access the Regional Parcel Dataset. For information on obtaining the required license, see http://www.metrogis.org/data/datasets/parcels/public/index.shtml. Three types of addresses are supported – property (situs), property owner, and taxpayer.

  The application is particularly useful for people who want to make sets of mailing labels that cross jurisdictional boundaries, especially county boundaries. Users can import mailing label data for use in a local application, or create standard preformatted sheets of mailing labels in a PDF file directly from the MetroGIS application, which can then be printed locally.

  The user is guided through an easy step-by-step process. They may search for and select parcels by address or PIN (parcel identification number). The application also includes an option to create a buffer, designated by the user in feet or meters, around a selected parcel. All parcels within the buffer area become part of the label set. The user may also delete any parcels not desired from the buffer area.

MetroGIS DataFinder℠

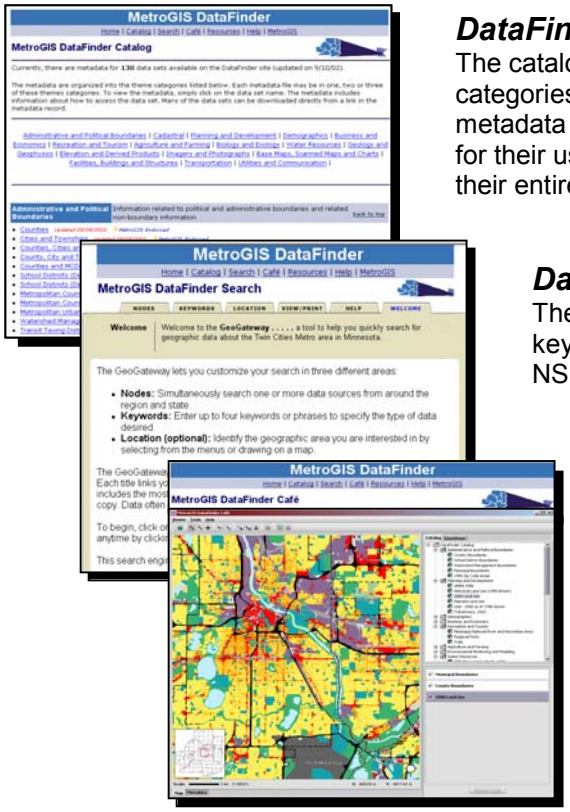
Sharing Information Across Boundaries.

http://www.datafinder.org

DataFinder is a website designed primarily to expedite sharing of GIS data among local and regional government organizations that serve the Minneapolis-St. Paul Metropolitan Area (Twin Cities) of Minnesota. The website has a suite of tools specifically designed for discovering and downloading geographic data.

- DataFinder is available as a data discovery and distribution option for any organization that produces GIS data pertaining to the Twin Cities and wishes to share it with others.
- Metadata are provided in FGDC-compatible format. DataFinder is a National Spatial Data Infrastructure (NSDI) Clearinghouse node, so metadata are searchable via any affiliated Clearinghouse search engine.
- DataFinder uses Minnesota Geospatial Data Theme Categories based on ISO 95115 (official state, federal and international categories).
- Data are downloadable via FTP or by creating custom bundles using DataFinder Café.
- MetroGIS-endorsed regional data solutions are quickly identifiable.
- Map services are available for direct use of data in GIS software or web applications. DataFinder offers OGC-compliant Web Mapping Services (WMS) and ArcIMS map services. By using map services, the most recent data available on DataFinder can be accessed without having to download, maintain and store the data on a local system.

Website Features



DataFinder Catalog

The catalog provides a list of available datasets by theme categories. Each item in the catalog links to a standardized metadata record that allows the user to evaluate the dataset for their use. Many of the datasets can be downloaded in their entirety via an FTP link in the metadata record.

DataFinder Search

The search tool allows a search of metadata by keyword and/or location. DataFinder is a registered NSDI Clearinghouse node.

DataFinder Café

The Café enables users to browse GIS data and interactively clip datasets to user-defined areas for download. Users may download the data in one of several common GIS data formats offered by Café.

Appendix I

Pre-Forum Survey Results

(Steve – convert the one liners to the "short statements" we used at the forum – leave the long responses as they are for the time being and fix the formatting. It broke when I imported the text)

1. **Organizational interests of those who participated and number or respondents:**
   - **(1)** Business geographics (firms that use GIS technology for site selection, customer base analysis, etc.)
   - **(1)** Chamber of commerce (map making support)
   - **(2)** GIS consultant (perform GIS technical services for others, for government in particular)
   - **(4)** GIS data producer
   - **(3)** Non-profit (hospitals, neighborhood planning groups …)
   - **(3)** Planning and engineering consultant Property insurance company
   - **(1)** Real estate
   - **(3)** Utility
   - **18**

2. **GIS-related opportunity(ies) identified for MetroGIS's consideration** ranked on a "0" to "3" scale with "0" - not applicable, "1" – desirable, "2" – important, and "3" - critical.
   - _**1.8**__Develop / maintain additional commonly needed geospatial data
   - _**1.6**__Develop / maintain additional web-based mechanisms to distribute geospatial data
   - _**1.3**__Establish additional data standards and related best practices
   - _**1.2**__Develop / maintain commonly needed applications to use geospatial data for decision making and support of business functions
   - _**1.1**__Support an expanded forum to promote knowledge sharing and collaboration

   Specific suggestions for each of these five topic areas follow. They will be included in the forum deliberations, so no need to repeat them.

3. **Develop / maintain additional commonly needed geospatial data**
   - More contour data, normal water level information for lakes and wetlands, more accurate lakes files with names and DNR numbers, more accurate stream and ditch files with names and numbers.
   - Utilities, i.e. One Call
   - Child care business locations
   - Digital Elevation Models
   - This is what TeleAtlas does.
   - Including the 9-county metro are rather than just the 7.
   - Coordinates and/or address data for restaurants, banks, etc.
   - Census data by various geographic levels.

4. **Develop / maintain additional web-based mechanisms to distribute geospatial data**
   - Work toward creating a single website that combines data from MetroGIS, LMIC, DNR, MnDOT, ETC.
   - Community informatics for neighborhood groups and orgs with very little funding for GIS.
   - Web services
   - Information on one site, more user-friendly, complete data.

5. **Develop / maintain commonly needed applications to use geospatial data for decision making and support of business functions**
   - MetroGIS should not be in software development
   - TLG
   - This is what our [TeleAtlas] data is used for.

6. Establish additional data standards and related best practices

- Work toward creating a common naming convention for layers that could be adopted by all state agencies
- I love standards. There are so many to choose from.

7. Support an expanded forum to promote knowledge sharing and collaboration

- Business GIS dialogues with nonprofit planning and/or economic development orgs (ex. we would like to know how businesses use GIS to determine where to start a business so we can apply those techniques to helping start-up child care businesses.)

8. Other

- American Community Survey data formatted for easy GIS use in Metro area. [3 – critical]
- When contracting with a Chamber of Commerce or Visitors Bureau, the private publisher should have access to current GIS data at no charge. [3 – critical]

9. Other comments

- If the county is spending tax dollars creating GIS data, I should not have to pay for this data. The county is not a business. It does not have to make business decisions. The amount of money the county expects to 'recoup' by charging the private sector for data is nothing compared to the amount of tax dollars that would be generated by business models based on this data.
- There has been a lot of effort on training neighborhoods and community developers on how to use GIS technology. This is great - however, not all of us have the time or inclination to become GIS experts - we just want the a couple maps! More user friendly web based applications and GIS 'centers' for those of us that may have needs for occasional canned reports/maps would be helpful.

How do you see your organization participating in efforts to build collaborative solutions to common geospatial needs in the Twin Cities Metropolitan Area, specifically one or more of the opportunities identified in Item 2 above?

- Our organization is working towards using a federal file naming convention that could be adopted by state and county agencies. If a naming convention is adopted then a user could download data layers such as roads, and the layer could be named the same regardless if the layer came from Mn/DOT, DNR, Washington County, etc. This may increase the overall efficiency of file structure within many companies. Emmons and Olivier Resources may be able to provide assistance in adopting a naming convention.
- I believe it would be very advantageous to all involved if a data sharing initiative could be worked out among the counties, cities, state, utilities etc.
- Help spread awareness and develop capability.
- We might be able to provide child care business 'point' files' with supplemental information (type of care, size, etc.), which may be useful for 1) businesses looking to offer child care services or volunteer opportunities to their employees, or 2) labor market econometrics, such as parental and/or maternal labor force participation.
- Support the goal and plans of MetroGIS by having access and availability to data for incorporation into our existing data.
- Support an expanded forum to promote knowledge sharing and collaboration
- We will try to steer the cities we work in to participate in the MetroGIS solutions.
- Leveraging Tele Atlas data, processes and ongoing maintenance abilities to increase overall accuracy within MetroGIS but also the entire State of Minnesota.
- Bringing information from other large metropolitan areas to share what is being done elsewhere. Review/Input by technology experts.
- We can provide LBS for any objects that are along or on the roads.
- Facet Technology can provide mapping services on any objects that are on or near roadways.
- I am only beginning in this role at our organization so I cannot comment at this time what participation we can provide other than involvement.
- Assist in identifying needs of Community Developers - helping to shape web-based applications.