



September 21, 2005

Minnesota Counties Insurance Trust (MCIT) Building

100 Empire Dr., St. Paul, MN

(North of Capitol Building about 1/2-mile and west of Jackson Street on Empire)

1:00 to 3:00+ PM

See directory in lobby for meeting room location.

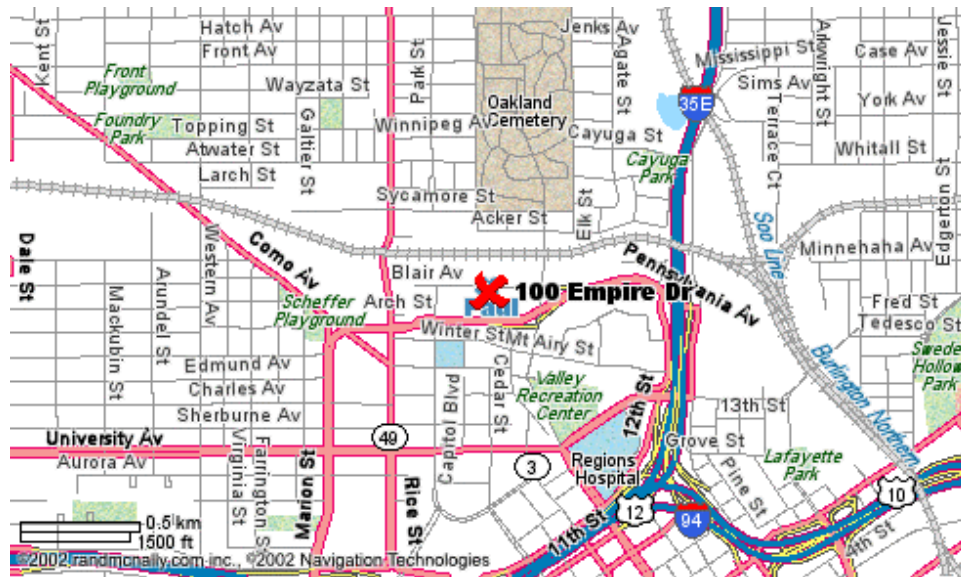
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Mission Statement

“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.”

How to find the MCIT Building:

Located six blocks north of the Capitol Complex, just minutes from downtown.



If you are traveling on I-94 eastbound -- Exit at Marion Street. Turn Left. Stay on Marion Street past University Avenue and Como Avenue. Marion Street is now Pennsylvania Avenue. Stay on Pennsylvania Avenue past Rice Street and take the next left. This is Empire Drive. Come down the hill and take another left. You will drive straight into our lot. Parking is to the left.

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Meeting Summary
MetroGIS Coordinating Committee
MN Counties Insurance Trust Bldg. – Room 205
June 29, 2005

1. CALL TO ORDER

Chairperson Read called the meeting to order at 1:00 p.m. and asked the members to introduce themselves. Chairperson Read then acknowledged this would be Lee Whitcraft's last meeting as he is retiring from TIES effective June 30th, and presented him with a Certificate of Appreciation for his valued advocacy for the use of GIS technology by school districts. Lee commented that school districts have definitely benefited from MetroGIS's efforts and wished the Committee members well.

Members Present: *Academics:* Will Craig (U of M); *Cities:* Steve Lorbach (AMM: core cities - City of St. Paul) and Bob Cockriel (AMM: suburban cities - City of Bloomington); *Counties:* Scott Simmer & Bill Brown (shared seat - Hennepin), John Slusarczyk (Anoka), David Claypool (Ramsey) and Jane Harper (Washington); *Federal:* Ron Wencil (USGS); *Metropolitan:* Rick Gelbmann and Mark Vander Schaaf (shared seat - Metropolitan Council), Nancy Read (Metropolitan Mosquito Control District); *Schools:* Lee Whitcraft (TIES); *State:* Joella Givens (Mn/DOT), and Robert Maki (DNR); *Watershed/Water Management Organizations:* Ned Phillips (Rice Creek Watershed District); and *Utilities:* Al Laumeier (CenterPoint Energy)

Members Absent: *Business Geographics:* Chet Harrison (CB Richard Ellis); *Counties:* Dave Drealan (Carver), Randy Knippel (Dakota), and Jim Hentges (Scott); *GIS Consultants:* Terese Rowekamp (Rowekamp Associates); *Metropolitan:* David Bitner (Metropolitan Airports Commission) and Gordon Chinander (Metropolitan 911 Board), *Non-Profits:* [vacant]; *Special Expertise:* Brad Henry (URS Corp.); and *State:* David Arbeit (LMIC)

Support Staff: Steve Fester, Randall Johnson, and Mike Dolbow (MetroGIS Staff Support)

Visitors: Jeff Corn (Longfellow Community Council) and Mindy Erickson (Mn/DOT)

2. ACCEPT AGENDA

Cockriel moved and Maki seconded to approve the agenda, as submitted. Motion carried, ayes all.

3. ACCEPT MEETING SUMMARY

Harper moved and Givens seconded to approve the summary for the Committee's March 30, 2005 meeting as submitted. Motion carried, ayes all.

4. SUMMARY OF APRIL 20th POLICY BOARD MEETING

Chairperson Read commented that the actions of most importance by Policy Board at its April 20, 2005 meeting were the adoption of vision statements for the E911 Compatible Street Centerline and Occupiable Units regional solutions, as well as the Board request for staff to arrange for a forum for non-government interest community to identify challenges and opportunities it believes MetroGIS should consider during its Strategic Direction Workshop. She noted that additional information about these topics is provided in the Project Update Report (Agenda Item 6).

5. ACTION AND DISCUSSION ITEMS

a) MetroGIS DataFinder Café – Upgrade Proposal

The Staff Coordinator summarized the proposal as outlined in the agenda report. The group concurred with staff's suggestion to form a special purpose workgroup to better clarify design needs, document costs for design options, and offer a suggested plan of action for Committee's consideration at a subsequent meeting. It was acknowledged that such a plan might point out some actions that could be taken which might not involve out-of-pocket expenditures.

All agreed with the need for the desired plan to be user-driven. It was further agreed that the task of documenting user needs can rely in large part upon the survey conducted by MetroGIS staff in May 2005 (included in the agenda packet) balanced by the opinion of the expert workgroup members as to the functionality that will likely emerge as commonplace even though it is not currently recognized as such by the user community. It was generally agreed that whatever application design is pursued that it should be easy to expand and/or modify.

Finally, the group concurred that the requested plan of action should include (not necessarily be limited to) the following options. (If possible, acquire cost information directly from vendors.):

- 1) Document functionality currently provided by the Café tool (application) that can be acquired via commercial off-the-shelf products and the associated cost.
- 2) Document current Cafe functionality that requires customization and document the cost to fill gaps between commercial off-the-shelf products and current DataFinder Café functionality.
- 3) Offer suggestions, based upon user needs and workgroup member knowledge of the technology environment, for which, if any, of the identified functionality gaps (Item 2) should be abandoned due to insufficient documented need.
- 4) Offer suggestions, based upon user needs and workgroup member knowledge of the technology environment, for any functionality enhancements that have sufficient user need but are not currently supported. The recommendation should include a general migration path (phasing plan) to accommodate the desired enhancements if the findings are not sufficient to complete the entire project at one time. (Note: this phasing plan also applies to Item 5 – the key being flexibility to allow possible expansion of the base design.)
- 5) Identify policy and technical considerations if Café’s functionality (delivery of geospatial data and web-services) expands beyond simply finding and downloading source datasets.

Motion:

Craig moved and Givens seconded to create a workgroup tasked with preparing a recommended plan of action that incorporates the direction from the Committee outlined above. Motion carried, ayes all.

The following Committee members volunteered to serve on this workgroup: Gelbmann, Givens, Lorbach, and Maki.

Editor’s note: Additional discussion about the importance of stabilizing the Café’s functionality occurred during discussion of Agenda Item 5b. In particular, the Committee acknowledged the need to act alone now that LMIC’s responsibilities and support resources have been dramatically reduced which no longer permit a collaborative project as had been hoped for last year. The Committee also noted its preference to forward its conclusion on to the Policy Board for consideration at its July 27 meeting that this project has merit for use of project funds.

b) Regional GIS Project Proposals

The Staff Coordinator summarized his findings concerning each of the proposals, as outlined in the agenda materials, emphasizing that each warrants further consideration but that additional information is needed regarding the scope of work and associated expenses. A representative from each proposer was then invited to summarize the specifics of their respective proposals. All concurred with Gelbmann’s general comment that offering this opportunity to propose projects for funding via MetroGIS resources provides a valuable forum through which to identify collaboration opportunities that might not otherwise be identified.

Proposal A – Common Parcel Data Query Application Design: Harper, representing the County Data Producers Workgroup which submitted this proposal, summarized the key points of this Proposal (page 18 in the agenda materials) as: 1) it would establish a common framework for online querying of parcel data whether accessed via MetroGIS or an individual county, 2) it is based upon an online application that

is operational in a South Carolina county, 3) the source code would be made available and customizable, and 4) several of the counties are currently in different stages of similar work. This project was conceived because the proposers would prefer to take advantage of this window of opportunity to collaborate and leverage resources; an opportunity that the proposers believe would also greatly benefit the user community. The basic features would be the same from county to county and the regional application but each entity would also have the ability to support functions that the others do not wish to support.

Harper concluded her comments by noting that the proposers believe that a standardized look and feel among the access portals would simplify and enhance access to the unprecedented regional parcel dataset, which has been a key focus of MetroGIS's efforts for the past several years.

The Committee agreed that a standardized application interface across the region could result in substantive efficiencies from the ability to leverage programming and related support resources; in other words, achieve a coordinated enterprise as opposed to the alternative of several similar but uncoordinated applications.

Craig commented that he strongly supports the proposed concept of a coordinated application interface among the counties but **asked who would have access and under what conditions** (e.g., the general public and non-government interests, without the need for prior licensure, or would access continue to be restricted to licensed government and academic interests)? Staff commented that the concept of unlicensed, view-only access to parcel data via an online application has previously been a discussion topic before the Committee and that the Policy Board endorsed such a policy in July 2004 subject to approval by each county in conjunction with a proposal from the Emergency Preparedness workgroup. The group asked Harper to pass this access question along to the proposer workgroup to address in a revised proposal, should it decide to incorporate feedback received from the Committee.

Although all agreed the proposed concept warrants further consideration, several members expressed concern about the appropriateness of purchasing the specified application from an unknown developer. Maki added that this type of application involves a **risk area involving emerging standards**, in particular regarding communications between services, and, as such, cautioned that the documentation needs to be clear on the standards and development processes used to develop the application. Maki further commented that he would prefer the proposed application to be part of a fully integrated enterprise. Whitcraft commented that his area of expertise involves software development and concurred with Maki's cautions. A general consensus was that it would be easier to recommend approval of a **general concept as opposed to the specific application** that is cited in the proposal. Harper made note of this feedback to share with the other proposers.

Laumeyer asked if the staff time needed to pursue this proposal would compete with the need to investigate options for upgrading of DataFinder Café. Staff commented that the workgroups would likely be separate.

A follow-up question from Laumeyer led to a request for more information about the **target user community and how they would benefit**. Harper briefly commented that the target user is not the GIS professional who wants access to source data but rather individuals from many backgrounds and levels of expertise who want a quick answer to a question that can be satisfied with a simple online query. Brown commented that the subject proposal is an attempt to reinvent (improve) the property query service that has been provided for some time by several of the counties.

The final topic of discussion involved the possibility of combining this query/mapping proposal with the analysis of options for addressing desired upgrades to MetroGIS DataFinder Café, given that both are likely to use Internet Mapping Service (IMS) software. It was agreed that the more important task is to clearly establish the **policy foundation as to how best to coordinate data distribution (downloading)**

and mapping needs (e.g., add functionality to Café for mapping or maintain data distribution as a separate application as is the current policy). The Committee concluded that it should task the workgroup created to investigate upgrading of DataFinder Café with developing a recommendation to address this need.

It was agreed to hear the next proposal before offering a recommendation concerning Proposal A.

Proposal B: Populate Attributes in Regional Parcel Dataset: Mike Dolbow, Metropolitan Council GIS Unit, summarized the proposal (page 21 of the Agenda materials). He began his comments by stating that the community is just beginning to scratch the surface of potential uses for the regional parcel dataset, which he believes is a major asset to the community. He noted that although substantial progress has been made to develop this asset, its value could be greatly increased if more of the 66 attributes were to be fully populated, noting that only 13 are currently well populated. He reiterated the long-standing policy that no county would be asked to expend any resources to populate attributes for which they do not have a business need. He encouraged those interested in further details to review the table provided in the metadata for a completeness status of each of the fields associated with the regional parcel dataset.

Dolbow then commented on suggested criteria for setting attribution completion priorities, such as a high priority could be given to situations where data are complete for all but 1 or 2 counties. Another option could be to focus on situations where 3-5 counties have completed 30+ percent of the desired data and that the presence of the remainder of the data would have wide value. Maki cautioned that a project plan is needed to set an expectation of achieving a certain completion threshold. This threshold should be associated with a level necessary to achieve a desired purpose(s) relative to an existing process(es) and that if there is not reasonable assurance this threshold can be met then no action should be taken until the threshold can be reasonably achieved.

Harper commented that Washington County has identified a business need to improve the completeness of its parcel attribute data for its own internal purposes and believes that Washington County officials would be receptive to working with MetroGIS on a project that would address both their and MetroGIS's needs simultaneously (e.g., review each data field, decide type of data needed, and estimate resources needed to capture the desired data.) She commented that a key need is to be able to clearly document the status of missing attribution in a report, noting that such a report is needed to have a productive dialogue with the assessors. She also expressed interest in a program to prototype a needs assessment process. Dolbow commented this type of documentation / prototype needs assessment process is consistent with the proposal before the Committee. This comment led to a short discussion about how the funding could be used, for example, to compensate counties for an intern's or other staff time to assist with desired evaluation and data population efforts. Claypool cautioned that the individual(s) chosen to work on this project must be very familiar with the data.

General Discussion

Chairperson Read summarized the purpose of this agenda item is for the Committee to offer advice as to: 1) whether a proposal has sufficient merit to warrant spending some of the Regional GIS Project funding and 2) the relative merit of each the three proposals presented (two addressed in this agenda item and upgrading DataFinder Café as dealt with in Agenda Item 5a), and general feedback for how the proposals might be improved. Maki commented that the Committee could only respond to the proposals as they are currently presented in the agenda material, unless comment is postponed until questions raised are addressed. The group concurred and elected to comment at this meeting as follows.

Proposal	Concept has Merit	Ready for Policy Board Review
<u>Proposal A</u> (Parcel Data Query Application)	Yes	No**
<u>Proposal B</u> (Complete Missing Parcel Attributes)	Yes	Yes
<u>Proposal C</u> (Upgrade DataFinder Cafe)	Yes	Yes

**Note: The Committee encouraged the proposers to modify their proposal as follows so that it could be considered by the Policy Board on July 27th: 1) Clarify the target audience(s), why the proposed application would benefit them, and any need for modification of current access policies and 2) address the Committee's concerns for purchase of an application developed for a county in another state by an unknown developer.

Relative Merit of Each Proposal

The Chairperson's request that the Committee offer advice on the relative merits of each of the three proposals resulted in resolute comments from Brown, Claypool, Maki, and Laumeier and then concurrence by the Committee that resolving the problems currently faced with an aging DataFinder Café and managing the existing investment is substantially more important than the other two proposals. The Committee's overall ranking was follows:

Proposal	Rank (Relative Importance)
<u>Proposal C</u> (Upgrade DataFinder Café)	1
<u>Proposal B</u> (Complete Missing Parcel Attributes)	2
<u>Proposal A</u> (Parcel Data Query Application)	3

The Committee also concurred that the matter of deciding how to best go about integrating data delivery functionality (DataFinder) with desired mapping and querying functionality should not be permitted to bog down efforts to upgrade the more important DataFinder Café functionality. It was agreed that the DataFinder Upgrade Workgroup should be charged with recommending a plan for how to best go about meeting both needs through an expandable design, including a phased implementation plan, as more funding may be needed than is available in 2005.

Motion:

Brown moved and Givens seconded to recommend to the Policy Board that the Board offer advice to the Metropolitan Council relative to funding each of the three Regional GIS Project proposals received, as follows:

- a) All three proposals have merit for further consideration for funding as a Regional GIS Project.
- b) Their relative ranking of importance to the MetroGIS community is: 1) Proposal C (Upgrade DataFinder Café), 2) Proposal B (Complete Missing Parcel Attributes), and 3) Proposal A (Parcel Data Query Application).

Motion carried, ayes all.

c) GIS Demonstration Topic for July Policy Board meeting

The Staff Coordinator summarized the staff report, which outlined several options for a demonstration to the Policy Board at the July meeting. It was agreed that David Windle should be invited to talk about the web application that the Ramsey County GIS Users Group has developed. The group concurred with Harper's suggestion to ask Windle to include in his presentation an overview about how Ramsey County is leveraging the User Group's investment.

Chairperson Read asked for permission to extend the meeting 15-20 minutes. Permission was so granted.

d) Fill Non-Profit Representative Seat on Committee

Chairperson Read asked Jeff Corn, Community Development Coordinator for the Longfellow Community Council in Minneapolis, to introduce himself and inform the Committee why he would like to serve as its non-profit representative. He commented that he uses GIS technology on a daily basis for

numerous functions and that he is also active in the Minneapolis Neighborhood Information System (MNIS) and the Minnesota 3-D (M3D) project. (Note: The M3D project is in process of developing an Internet-accessible and integrated system of employment, housing and development information and analysis tools for neighborhoods, community development corporations, employment trainers, businesses, central cities, suburbs, counties of the Twin Cities metropolitan region, and the State of Minnesota. The project launched in fall 2004 and is funded with a \$599,000, three-year grant from the federal Technology Opportunities Projects program.)

Craig moved and Givens seconded to accept Jeff Corn's request to fill the non-profit representative seat on the Committee that was vacated by Sandra Paddock when she left Wilder Research. Motion carried, ayes all.

e) Quarterly Performance Measures Anomaly Report

This item was not discussed due to a lack of time.

f) Postpone 9/22 Target Date for Strategic Directions Workshop

The staff Coordinator summarized reasons for recommending postponement of the September 22 target date for the proposed Strategic Directions Workshop, as a result of the Policy Board's request for a non-government perspective forum to precede the Workshop. The group concurred with the proposed postponement and establishment of a target date during the week of September 26 for the proposed non-government perspective forum.

Harper commented that although the postponement might result in the inability to secure Prof. John Bryson to facilitate the Workshop, she concurs that the need for non-government input is a more important consideration. The others concurred as well.

6. PROJECT UPDATES

Staff was asked to speak with LMIC officials for an update on how the recent changes in LMIC's organizational structure and funding might affect MetroGIS's efforts and that this information be passed along by email as opposed to waiting until the next meeting to share it.

There was no other discussion of this report due to a lack of time.

7. INFORMATION SHARING

There was no discussion of this report due to a lack of time.

8. NEXT SCHEDULED MEETING

September 21, 2005, 1:00-3:00 p.m.

9. ADJOURN

The meeting adjourned at 3:25 p.m.

Prepared by,

Randall Johnson, AICP
MetroGIS Staff



TO: Coordinating Committee

FROM: MetroGIS Staff
Contact: Randall Johnson (651-602-1638)

SUBJECT: Summary of July 2005 Policy Board Meeting

DATE: August 18, 2005
(For the Sept 21st Meeting)

The following major topics were considered/acted on by the Policy Board on July 27th. Refer to the meeting minutes at http://www.metrogis.org/teams/pb/meetings/m_07_27_05.pdf for the discussion points.

Regional GIS Project Funding Proposals

- 1) The Policy Board concluded that all three 2005 Regional GIS Project proposals, as described in the agenda materials, have merit that warrants preparation of detailed design, cost, and phasing options for further consideration, with the understanding that if a project can not be fully funded, whatever component(s) is funded must provide a value equal or greater to the investment funds via MetroGIS.
- 2) The following funding recommendations were also approved:
 - Up to \$16,000 of the budgeted \$22,000 to Proposal A: (Joint Web Application).
 - Up to \$500 of the budgeted \$22,000 to Proposal B: Parcel Attributes (only 2005 component).
 - The remaining portion of the budgeted \$22,000 (at least \$5,500) to DataFinder upgrades, in combination with budgeted maintenance funds (\$10,000), special grants (\$15,000), and donated funds (\$1,700). [Note: in a separate action, the Board authorized use of up to \$1,700 in funds that have been donated to MetroGIS to be used for upgrades to DataFinder.]

Regional Parcel Dataset – Policy for Unlicensed, View-Only Access

The Board affirmed its July 2004 finding that a policy of unlicensed, view-only access to parcel data has merit for further consideration as a regional best practice and extended, to July 2006, its sunset provision to achieve county affirmation that the subject proposal is consistent with their respective needs.

Non-Government Perspective Forum: Preparations Underway

The Board concurred that this forum would provide valuable perspective as the Board considered appropriate next steps for MetroGIS and, as such, should be held before the Strategic Directions Workshop. The Board also directed Chairperson Reinhardt to set a date for the Non-Government Perspective Forum after speaking with the Council about their timing preferences.



TO: Coordinating Committee

FROM: Emergency Preparedness Information Needs Workgroup
Chairperson: Randy Knippel, Dakota County (952-891-7080)

SUBJECT: **Emergency Preparedness Information Needs – Interim Regional Solution**

DATE: September 15, 2005
(For the Sept. 21st Meeting)

INTRODUCTION

The Emergency Preparedness (EP) Workgroup respectfully requests Coordinating Committee endorsement of its proposed interim regional strategy and related actions to address common emergency management information needs of the MetroGIS community, as outlined in the Recommendation Section. The proposed solution is labeled as “interim” because the Workgroup wants to be sure that the roles and responsibilities are thoroughly tested in a production environment before seeking formal endorsement as a regional solution. When the Workgroup believes that the testing and refinement process is complete, a formal Regional Policy Statement will be prepared for Committee and Policy Board endorsement.

The attached MetroGIS EP Workgroup Project Report describes, in detail, the data refinement process developed by the EP Workgroup. An overview schematic is provided on page 3 of this report. The purpose of the proposed process is to clearly communicate geographic data priorities and custodian roles and responsibilities for the development and maintenance of these priority data needed to carry out emergency management business functions. Active participation of each of the seven counties is necessary to oversee collection of best available data. As such, officials from each of the seven counties have been actively involved in the development of this proposal. Several statements of support are also in process of being obtained from other members of the EP community (refer to the Reference Section). Finally, the attached Project Report also explains other activities of the EP Workgroup that are important components to achieving a regional solution for EP information needs.

Policy Board consideration of the proposed interim solution is tentatively anticipated to occur at the Board’s October 19 meeting, assuming the Coordinating Committee endorses the proposal.

PROJECT OVERVIEW - EMERGENCY MANAGEMENT INFORMATION NEED

The purpose of the Emergency Preparedness Workgroup Project is to enable emergency managers to quickly secure the best available geographic information needed to respond to emergencies. Emergency managers include managers of police, fire, medical, public health, medical services, public works, homeland security and other responders to emergencies and disasters.

Making these best available data quickly accessible presents several challenges:

1. Determining which data are needed.
2. Acquiring and organizing the data so it meets emergency managers’ information needs.
3. Prepare GIS professionals to efficiently respond to emergency managers’ needs.

Refer to the Reference Section for an overview of the Workgroup’s composition, chronology of activities, and support from the Emergency Management community for the workgroup’s efforts. The Workgroup’s Project Report (Attachment A) also provides a detailed explanation of:

1. The Workgroup’s thought process used to formulate its recommendations,
2. An overview of each of the three Emergency Preparedness subcommittees,
3. Description of the proposed Emergency Preparedness Application website, and
4. Proposed data acquisition, refinement, and related custodial roles and responsibilities.

OVERVIEW OF KEY STRATEGY COMPONENTS

The Workgroup’s proposed interim strategy is comprised of the following four key components. (See Attachment A for an explanation of the details of each.)

- 1) **Secure buy-in for the emergency management data refinement process by the leadership of all seven counties** so counties and other participants know what they are responsible for and can efficiently complete coordinated data collection and maintenance tasks.
- 2) **Assemble emergency management-related data into regional datasets** so accurate and current data are available quickly for use in emergencies and for demonstrations to emergency managers.
- 3) **Continue outreach efforts to the emergency management community** so emergency managers understand and embrace GIS as a tool in their work.
- 4) **Engage the emergency managers in evaluating GIS technology and data** to ensure that the best GIS emergency management information is available across the region.

A schematic of the processes to achieve Item 1 and 2 is shown on page 3. A detailed explanation of each process component is also presented in Attachment A, the Workgroup's Project Report.

DISCUSSION

The following policy matters are recognized by the proposed strategy:

- 1) **Counties Proposed To Share Data Responsibilities Across Boundaries:** No single organization has a business need to manage the emergency management data across the region. While everyone in the region benefits, counties and cities, due to their governmental responsibilities, have the greatest business need for emergency management data. To organize data collection and maintenance costs effectively, each of the seven counties would accept region-wide coordination duties for specific data themes. This organizational structure will efficiently distribute responsibilities across the region but does call for each county to work beyond their normal jurisdiction.
- 2) **Workgroup to Serve as Regional Custodian:** Since no existing organization has been identified with a business need to serve as the regional custodian, it is recommended that the Workgroup serve in this capacity. This proposal raises the need to evaluate the organizational impacts of establishing another standing committee. During the testing of the proposed interim solution, the Workgroup will serve in the role of EP regional custodian. The Workgroup would be expected to manage all aspects of the regional solutions and communicate with the Coordinating Committee on a regular basis, as other regional custodians do.
- 3) **Focus on Data Refinement:** Refinement of existing data that are identified by the Workgroup to be important would be the focus of the Workgroup. Until the Workgroup understands clearly the data refinement priorities from the perspective of the emergency managers, little new data development is proposed. Development of new data would be considered on a case-by-case basis but only if it required little in terms of resources to accomplish. Extensive data development efforts will be proposed to the Coordinating Committee before those efforts begin.
- 4) **Open Communication Channels with Emergency Managers:** GIS has proven its value to emergency planning, response and recovery in situations such as:
 - Completing FEMA Required All Hazard Mitigation Planning,
 - Response and recovery from the September 11, 2001 terrorist attacks, and
 - Assessing the 2001 St Croix River flood property damage.

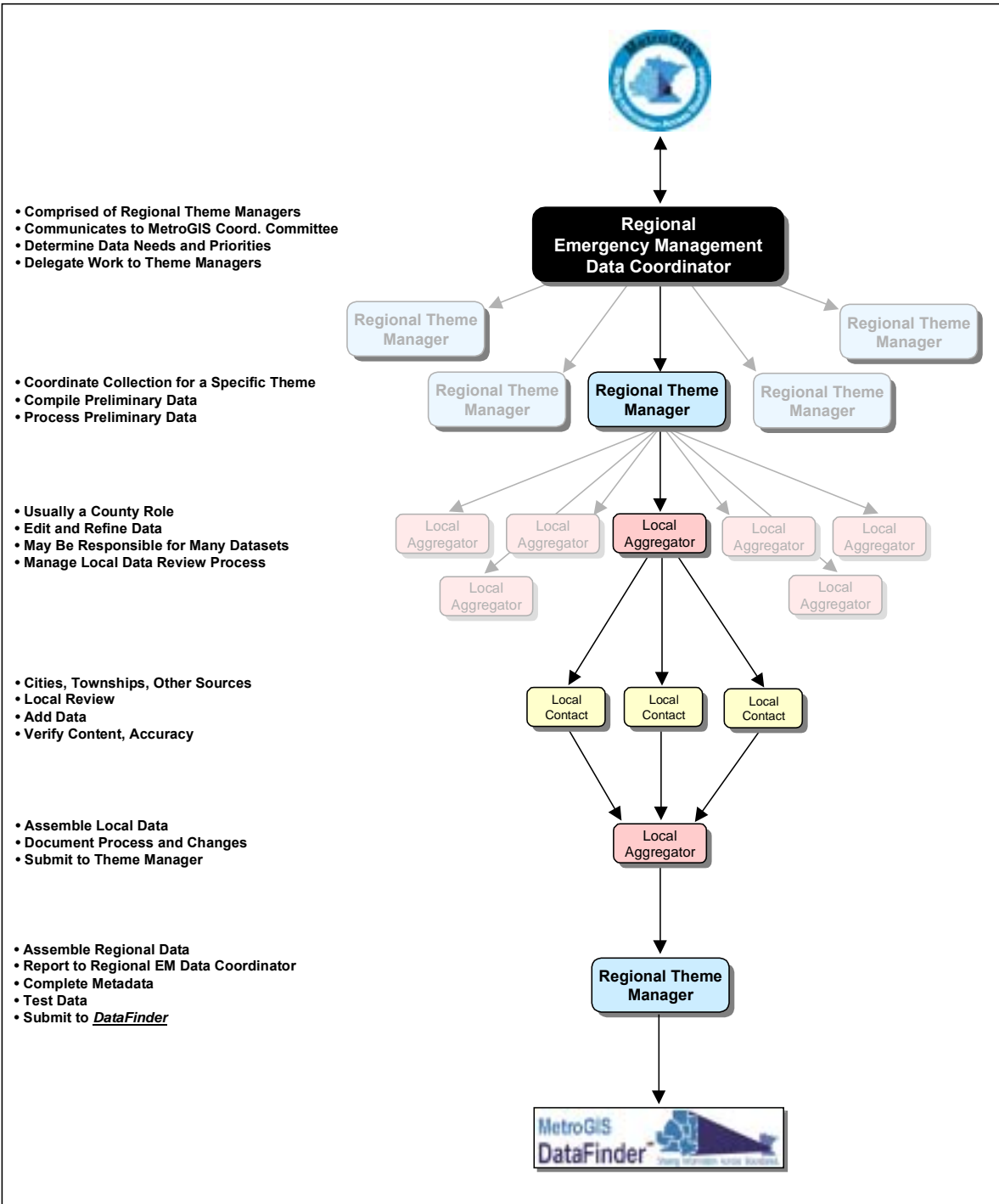
Many emergency managers have not adopted GIS technology in their work because they may not be aware of its value; they may not know whom to contact or may be hesitant to adopt unfamiliar technology. That leaves those charged with supporting emergency managers without a communication channel to understand emergency management information needs in detail in order to prepare an adequate response. Communicating with emergency managers is key to the widespread adoption of GIS as a tool in responding to emergencies. This requires a coordinated outreach effort to emergency managers by GIS professionals throughout the region - something that has not been part of past MetroGIS information needs processes.

RECOMMENDATIONS

That the Coordinating Committee:

- 1) Endorse the recommended strategy as described in the Workgroup's Project Report (Attachment A) as an interim solution to emergency preparedness information needs, including the Workgroup assuming the role of regional custodian.
- 2) Recommend that the Policy Board endorse the Workgroup's proposed interim solution and encourage the leadership of each county to commit to its support and any desired further refinement.

Emergency Management Data Custodian Roles



REFERENCE SECTION

SUPPORT FROM THE EMERGENCY MANAGEMENT COMMUNITY

The following members of the Emergency Management community that serve the seven county Minneapolis St. Paul Metropolitan Area have agreed to submit statements in support of the collaborative efforts between the EM and GIS communities and the Emergency Preparedness regional data solution goals that are in process of being endorsed by MetroGIS. Their written statements are anticipated to be included in the report forwarded to the Policy Board.

1. Rick Larkin, retired Emergency Preparedness Director, City of Burnsville and Past President of Metropolitan Emergency Managers Association (MEMA)
2. Mary Skube, Public Health Nurse, Hennepin County Human Services & Public Health Department
3. Judd Freed, Director of Emergency Management and Homeland Security, Ramsey County:

WORKGROUP CHRONOLOGY AND MEMBERS

1. In 2002, following the events of September 11, 2001, several members of the Coordinating Committee and the Governor's Council on Geographic Information (GCGI) began discussing the role of the GIS community in supporting the Emergency Management community. A standing committee of the GCGI was created and the MetroGIS Coordinating Committee accepted a suggestion from Members Knippel and Gelbmann to explore a role for MetroGIS.
2. The Workgroup organized itself around three subcommittees and a steering committee in Fall 2003 and sought formal recognition by the Coordinating Committee.
3. In December 2003, the Coordinating Committee formally created the Emergency Preparedness Workgroup and in January 2004 the Policy Board approved the 2004 MetroGIS workplan, which, in effect, ratified the Workgroup's creation.
4. The members of three subcommittees of the Emergency Management Workgroup (*Data Development And Deployment, Building Relationships With The Emergency Management Community, and Organizing GIS Resources*) who participated in the development of the proposed interim solution and of the Workgroup's Steering Committee are listed in Appendix A (page 13) of the attached Workgroup Project Report. The *Steering Committee*, which is comprised of the chairs of each subcommittee, the Workgroup Chair and representatives form the Metropolitan Emergency Services Board and Metropolitan Council, provided oversight and direction to the effort as a whole.

Attachment A

Project Report of the Emergency Preparedness Workgroup (September 1, 2005)

MetroGIS
Emergency Preparedness Workgroup

Project Report
(January 2003 to August 2005)



September 1, 2005

SECTION I. INTRODUCTION

This Project Report documents the efforts of the MetroGIS Emergency Preparedness Workgroup from its inception in January 2003 until August 2005. Its purpose is to provide context and a detailed explanation of the process through which the Workgroup defined its recommendation for proceeding with an interim solution to address common priority geospatial information needs of the Emergency Management community.

A. Project Goal

The goal of the Workgroup's effort is to continue to improve the Emergency Management community's understanding of how partnering with the GIS community can help deliver emergency management services quickly and efficiently. The ultimate goal is to enable emergency managers to more quickly secure accurate information that covers the area(s) impacted by an incident. The Emergency Management community is defined as all entities charged with supporting emergency management services for the seven-county Minneapolis-St. Paul Metropolitan Area, with a focus on local and regional government entities. Emergency managers include managers of police, fire, medical, public health, medical services, public works, homeland security and other responders to emergencies and disasters.

B. Context for Workgroup's Efforts and Recommendations

Disasters can occur anywhere, anytime, at any scale. Fire can ravage a single residence or an entire city block. Floodwaters can swell the banks of a secluded rural creek or inundate a populated river valley impacting multiple counties and states. Disease outbreaks can infect a school, metropolis, region or continent. Each event requires response; each responder requires immediate, accurate information. As a disaster's extent increases, acquiring and using the information necessary to respond effectively becomes an increasing challenge.

Recently, the critical information found in geospatial data and the power of geographic information system (GIS) technology have become increasing priorities for emergency managers. To gain the respect of the Emergency Management community as an effective resource, users of GIS technology must provide responders with quick and accurate information that covers the area affected, regardless of the jurisdictions involved, scale of the incident or recent changes to the site.

An increasing number of organizations are building geographic information systems today, many with little attention to where efforts are being duplicated, with quality unevenly applied or incompatibilities created. When called upon to support responders in an emergency, irreconcilable data and application designs in these systems can negate their usefulness and possibly exacerbate a critical situation. In its simplest terms, Emergency Management geospatial data must not compromise the safety of a first point responder.

In order to create effective and useful geospatial data for large-scale emergency scenarios, the information gathered must, first and foremost, be accurate and reliable. It must emanate from the most reliable sources and be available for regions that extend beyond local jurisdictional boundaries. This Workgroup acknowledges that data collection necessarily involves many different players, but a standards-based, data optimizing, collaborative must be organized in such a way that it allows the best information, whenever possible, from local to county to state and then to the national level.

This document explains the Workgroup's proposal to ensure that datasets critical to Emergency Management decision-making undergo a *refinement process* prior to use. The proposed refinement process calls for data produced by multiple sources to be reviewed and accepted by knowledgeable county or municipal personnel to ensure interoperability and the best possible accuracy and completeness. The proposed process also calls for not less than bi-annual updates to ensure that transactions are no more than two years old.

The collaborative data refinement process proposed by the Workgroup and as explained in this document would be applied to all datasets endorsed by the proposed process as part of a synchronized voluntary effort necessary to fulfill the needs of emergency personnel within the seven-county Minneapolis St. Paul Metropolitan Area. The Workgroup believes the results of a successful implementation of the proposed data management and refinement process will serve as a trustworthy resource supplying data needed by Emergency Management personnel on an ongoing basis. A schematic of the proposed custodial roles and responsibilities is provided on page 4.

This proposed process is designed to be a shared volunteer effort. No organization will be asked to support a role for which they do not have an internal business need. The resulting collaboration is expected to serve as an integral resource to supply emergency managers with critical geospatial data on an ongoing basis. And, if successful, the intent is to pass this business logic up to the next jurisdictional level. If the proposed regional model is successful, the Workgroup's intent is to pass this business logic along to State of Minnesota and federal interests with related business needs.

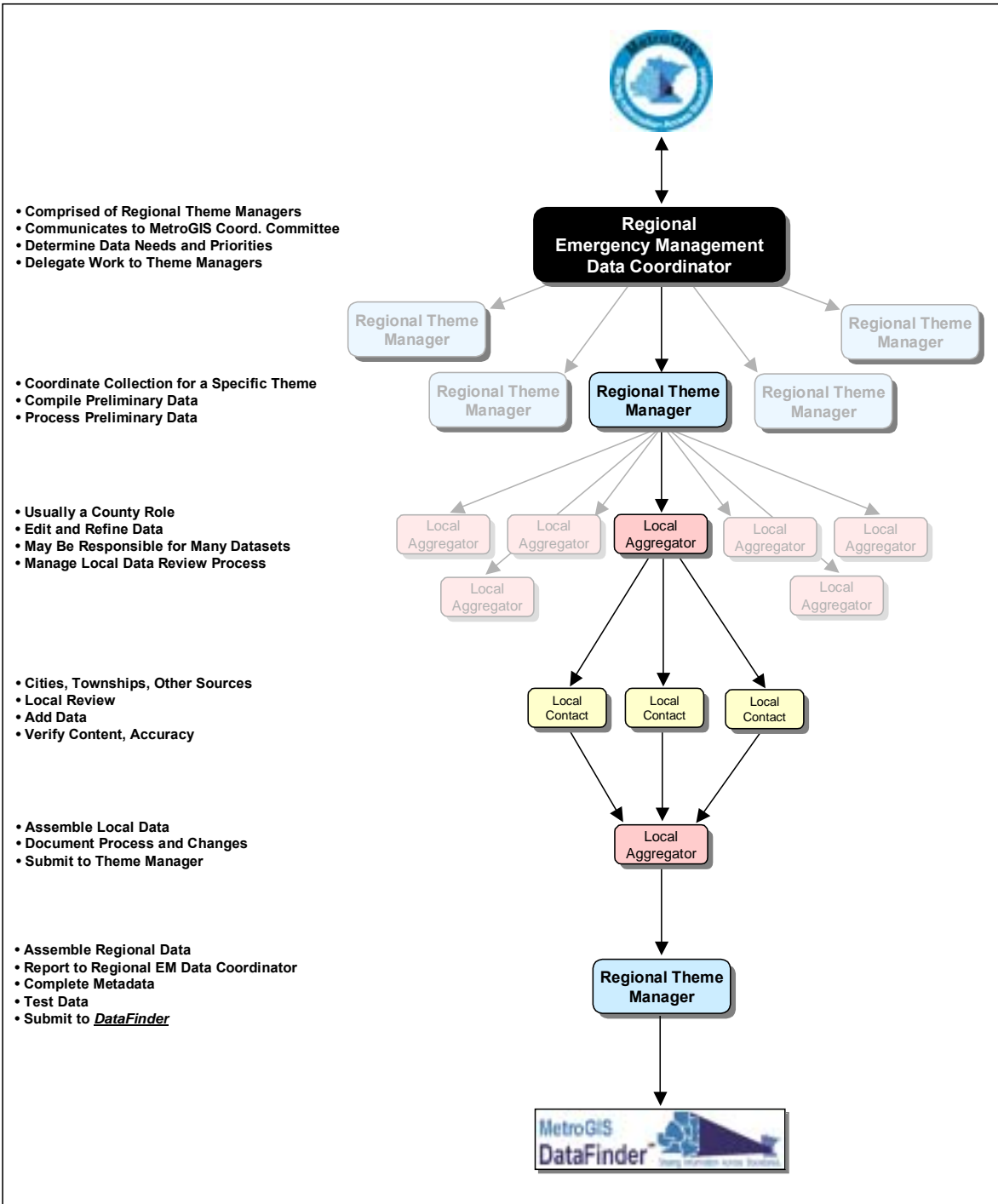
The discussion that follows provides a detailed explanation of the MetroGIS Emergency Preparedness Workgroup's proposed course of action to supply necessary and accurate geospatial information to those who require it, when they need it.

C. Workgroup's General Strategy

The Emergency Preparedness Workgroup's general strategy to achieve its desired outcome includes the following components:

- 1) **Achieve buy-in by the leadership of all seven counties** of the proposed collaborative Emergency Management data refinement process (page 4). The counties would share responsibilities for assembly and ongoing maintenance of several data themes, on a seven-county, regional scale.
- 2) **Assemble emergency management-related data into regional datasets** that the Workgroup has identified as important to emergency managers' responsibilities with whom they have interacted. A coordinated data refinement process for EM data assembly, documentation, and updating will ensure accurate and current data in the most cost effective manner. GIS professionals familiar with Emergency Management needs would select the initial data themes. This strategy makes data available quickly for use in emergencies and for GIS demonstrations to emergency managers.
- 3) **Continue outreach efforts to the emergency management community.** The outreach effort focuses on how GIS technology can help deliver emergency management services. A key component of this outreach effort involves hosting and continuing to refine the prototype regional web-based Emergency Management GIS Application, which is based on an application developed by Dakota County. Demonstrating capabilities and benefits of GIS technology using working Emergency Management applications is key to generating support in the Emergency Management community. Early adopters of GIS technology will spread the word about the value of GIS to their colleagues. Using the Emergency Management GIS Application is key in engaging emergency managers because they are able to directly see the value of GIS to their work.
- 4) **Engage emergency managers in evaluating GIS technology and data.** When the Workgroup believes enough emergency managers understand the value of GIS to adequately represent emergency management information needs, a needs assessment process would be conducted. The needs assessment would be focused exclusively on emergency management issues. Existing information needs documentation from local, state and national evaluations and from evaluation comments from users of the Emergency Management GIS Application would be used to begin the refinement of the Twin Cities' Emergency Management information needs. The results of this evaluation would be used to prioritize information needs from the emergency manager's perspective and prudently allocate resources to address gaps and shortcomings in existing data.

Emergency Management Data Custodian Roles



D. Tasks

To achieve its purposes, the Workgroup carried out the following tasks, the results of which are presented in this Project Report for endorsement by MetroGIS:

1. Determine preliminary geospatial information needs of the Emergency Management community.
2. Identify data sources that could potentially meet those needs.
3. Identify gaps between information needs and available data sources.
4. Recommend datasets for endorsement by MetroGIS as components of a regional Emergency Management information solution.
5. Recommend policies and actions to help fill gaps between available data and information needs.
6. Prototype a strategy for compiling and sustaining currency of the “Endorsed” Emergency Management datasets.
7. Recommend Emergency Management dataset dissemination and access strategies.
8. Recommend a strategy to promote understanding of GIS technology and applications by Emergency Managers.

E. Workgroup Membership

The MetroGIS Emergency Preparedness Workgroup is comprised of the following three subgroups:

- a) Data Development and Deployment
- b) Building Relationships with the Emergency Management Community
- c) Organizing GIS Resources

The Workgroup is managed by a Steering Committee comprised of the chairs of each of its three subgroups, the Chair of the Workgroup as a whole, and representatives from the Metropolitan Emergency Services Board (formerly the Metropolitan 911 Board) and the Metropolitan Council. The membership includes seven individuals who represent a wide diversity of emergency management interests at the city, county and regional levels of government. See Appendix A for a listing of members, by subgroup, along with their organizational affiliations. The members of the Steering Committee were the primary authors of this document who are as follows:

Chair, Emergency Preparedness Workgroup: Randy Knippel, Dakota County

Chair, Data Development And Deployment: Keith Anderson, LOGIS

Chair, Building Relationships with the Emergency Management Community: Carla Coates,
Ramsey County

Regional Theme Manager, Strategic National Stockpile: Tim Zimmerman, Hennepin County

Metropolitan Emergency Services Board GIS Coordinator, Gordon Chinander

Metropolitan Council GIS Manager, Rick Gelbmann

SECTION II. COMPONENTS OF PROPOSED INTERIM SOLUTION

A. Guiding Philosophies

The Emergency Preparedness Workgroup’s proposed Interim Regional Emergency Management Information Need Solution embodies the following philosophies:

- Creating and maintaining high quality GIS emergency management data adds to the safety and security of the Twin Cities region.
- Working cooperatively across jurisdictional boundaries is the most cost-effective way to create consistent and accurate data needed by Emergency Management.
- Emergency Management data must be sustainable and consistent with other regional GIS data and processes.

- Relying initially upon Workgroup members' understanding of emergency management data priorities will make it possible to develop demonstration data and applications.
- Demonstrating capabilities and benefits of GIS technology using working Emergency Management applications and accurate data is key to generating support of Emergency Managers.
- The best solutions are those endorsed by the Emergency Management and the MetroGIS communities.
- Communicating regularly with key GIS personnel at the County jurisdictional level on process is important to maintaining current and accurate data.
- Communicating regularly with key emergency managers at county and local jurisdiction will ensure needed data are identified for development.

Finally, the solution proposed in this document is labeled as "interim" because the Workgroup wants to be sure that the roles and responsibilities are thoroughly tested in a production environment before seeking endorsement by the Policy Board as a formal regional solution.

B. Website Developed as Visualization Tool

The Workgroup concluded that it needed a means to clearly demonstrate to Emergency Managers the benefits of collaborating with the GIS Community. The MetroGIS DataFinder Emergency Preparedness Application at http://www.datafinder.org/ep_launch.asp was developed to fill this need. It was patterned after a similar website created by Dakota County. The Metropolitan Council agreed to permit it to be hosted on the same server on which DataFinder Café operates. It became operational in the spring of 2004 and has been used by the Workgroup as an outreach tool at conferences and in meetings with key Emergency Management officials since that time.

To expedite deployment of the Emergency Management Resources Website, the Workgroup concluded that its Data Subcommittee should select the initial datasets to be supported. Selection was based upon the members' personal experience and knowledge. This solution is intended to be an interim measure because of the need to demonstrate benefit before inviting the community to participate in more detailed discussions of geospatial information needs. In the future, the Emergency Preparedness Workgroup plans to help the Emergency Management community define desired enhancements to the initial website solution.

C. Website Dataset Maintenance Assignments

The Workgroup has agreed that each of the seven counties should be responsible for maintaining the datasets viewable on the Emergency Management Resources Website and that county dataset assignments should be decided using a random selection process. If a county is uncomfortable assuming the Custodian role for a particular dataset, it can notify the Data Subcommittee, which will be responsible for mitigating the situation. The proposed interim solution requests a formal commitment from each to affirm their acceptance of roles and responsibilities proposed in this document.

The first series of Emergency Management datasets to be implemented concentrate on themes associated with the Strategic National Stockpile (SNS). The SNS is an effort to prepare a mass inoculation in the event of an epidemic, bio attack or other public health emergency. Federal, state, regional, county and local health and emergency services agencies are involved. GIS is being used to identify inoculation and triage sites as well as transportation, transit and traffic management issues. For this example GIS staff from each county have agreed upon the following assignments:

Hennepin: Hospitals & Nursing Homes (MDH Data Source) – Regional Theme Manager
Ramsey: Pharmacies (MDH Data Source)
Carver: Clinics (MDH Data Source)
Scott: Senior High Rises (MDH Data Source)

Anoka: Schools (Complete at LMIC)
Dakota: Red Cross (EM IMS Application)
Washington: Rehabilitation Centers (MDH Data Source)

The county GIS staff participants recognize the importance of cooperating to effectively compile and sustain current Emergency Management datasets. Additional maintenance assignments are being made to address other identified emergency management needs. See Appendix B for a list of identified priority data sets (shown as Priority 1) as well as other emergency management information need topical areas and data (Priority 2 or greater). As such, they concur that if any county cannot participate due to time or resource issues, the other counties should do what they can to populate any missing data.

D. Data Custodian Roles

(1) General: Defining data custodian roles for Emergency Management datasets is different than for past MetroGIS endorsed regional solutions. For the previously implemented regional solutions, an organization with a direct business need was identified that justified taking on regional data responsibilities. This situation has not and is not expected to materialize for the Emergency Preparedness Information Need. Hence, the proposed interim solution calls for the seven counties to oversee work beyond their normal jurisdictions to benefit from region-wide data processing efficiencies where a multi-county jurisdiction is not available.

The premise for this proposal is that each county has similar Emergency Management needs and should save effort by dividing custodial responsibilities for Emergency Management regional datasets. Each county would only have responsibility for a share of the Emergency Management datasets. In other words, having each county process 1/7th of the data files for the whole region takes less time than having each county process all the data files for their individual county. This procedure is also expected to decrease the total number of requests to many specific data sources already relied upon. In short, the proposed shared custodial responsibilities are expected to result in efficiency benefits for all.

(2) Hierarchy of Custodian Roles

The proposed solution creates the following hierarchy of custodian classes:

- Data Source
- Local Aggregator
- Regional Emergency Management Theme Manager
- Regional Emergency Management Data Coordinator

A diagram is provided on page 4 that illustrates the relationship between and among these data custodian roles. An explanation of these relationships follows.

Data Sources: This is the starting point for all regional Emergency Management data solutions. The producing organization (often a regional, state or federal agency) may or may not have a role other than to permit access to their data. The goal is to first acquire their data, and secondly to achieve buy-in from these organizations, where possible, to update their source data with modifications made through the data refinement objectives associated with the proposed Interim Emergency Management Solution. Ultimately, an ongoing partnership is preferred with these organizations to not only integrate the data enhancements made via the Interim Solution, but also to support a process whereby they update the data enhanced by the MetroGIS community with new data that they produce. The Regional Theme Manager would be the primary contact with each Data Source.

Local Aggregator: A guiding principle of proposed Interim Solution is that local government entities often produce the best available Emergency Management-related data. Local Aggregators are those closest to the source of information, which is usually county-level

government. The seven Metro Area counties are proposed to serve in this capacity. Each Local Aggregator would be responsible for:

- a) Arranging to access information from each organization that produces “best available” local data for their jurisdiction. Local data may come from a county, city, school district, emergency service provider or other local organization.
- b) Coordinating the compilation of the “best available” local data for their respective county’s jurisdiction that they acquire from all available organizations, for each Regional Emergency Management dataset.
- c) Processing the local data to integrate it into the Local Aggregator’s component of the Regional Emergency Management Dataset.
- d) Documenting the updated component of the Regional Emergency Management Dataset.
- e) Maintaining the updated component of the Regional Emergency Management Dataset.
- f) Submitting updates of their respective Regional Emergency Management Dataset component to the Regional Emergency Management Theme Manager on an agreed-upon schedule.

These compilations must be processed to be compatible (align) with other regional Emergency Management datasets, as well as other regional datasets endorsed by MetroGIS, using the associated data standards.

The counties (Local Aggregators) are expected to use the standardized process and data standards explained in this document along with any modifications agreed upon during testing of the Interim Solution. In particular, the seven county-based compilations must be processed to be compatible with other regional Emergency Management datasets and other MetroGIS-endorsed regional datasets.

The Workgroup would define “Best Available Data” during the Interim Solution. The focus would be on assembling and enhancing existing data during the Interim Solution. Development of new data, from scratch, would not be undertaken until a formal needs assessment is conducted from the users’ perspective, unless the effort would be minimal and the need great.

Where local interests, other than those of the Local Aggregator, have knowledge of the data that comprise an endorsed Emergency Management dataset, efforts should be made to formally incorporate them into the standardized review and update process.

Regional Theme Manager: One organization, the Regional Theme Manager, would have responsibility for coordinating the efforts of each Local Aggregator pertaining to a specified Regional Dataset and assembling the data components compiled by the seven Local Aggregators into a Regional Dataset. This coordination function applies not only to the data itself but also to advocating for solutions to policy obstacles, including but not limited to data standards, organizational responsibilities, and data access policies.

An organization may serve in the capacity as Regional Theme Manager for more than one Emergency Management Dataset. This role is similar to that performed by designated Regional Custodians for other MetroGIS endorsed regional data solutions. A Regional Theme Manager may also serve as a Local Aggregator for the same data theme.

During testing and refinement of the proposed Interim Solution, the Workgroup would seek out organizations with sufficient resources willing to serve in this capacity. Once the process is refined, the benefit of affirming these designations by the MetroGIS Policy Board is anticipated.

The creation of the initial regional datasets begins with the Regional Theme Manager. The Theme Manager will be expected to compile a preliminary regional dataset from the Data Source geo-process data and create county-based theme files. The Regional Theme Manager will then distribute the resulting seven county-based components to each Local Aggregator for updating and enhancement.

All data distributed by the Regional Theme Manager to the seven Local Aggregators will take place within the spatial file. The Local Aggregators are then expected to return updated data to the Regional Theme Manager within a timeframe to be determined by the Workgroup. As updated datasets are received from the Local Aggregators, the Regional Theme Manager will merge them into a single regional dataset. The Theme Manager will then submit the updated regional Emergency Management Dataset to MetroGIS, along with proper documentation, for distribution via the Emergency Management Resources Website and other appropriate applications.

Regional Emergency Management Data Coordinator:

The MetroGIS Coordinating Committee serves in this capacity for each of the previously implemented MetroGIS-endorsed regional data solutions. In each of the other cases, a single dataset was involved, which is not the case with the proposed Emergency Management solution. As such, during the testing of the Interim Solution, the Emergency Management Workgroup would serve in this capacity to ensure that coordination can be achieved among the many datasets anticipated to be involved. During the Interim Solution, the Workgroup would be responsible for recommending a process for coordinating with other regional data solutions via the MetroGIS Coordinating Committee.

E. Custodian Data Responsibilities (Process and Procedures)

The following Process and Procedures are proposed for testing and refinement during the Interim Solution. They serve as the preliminary Regional Policy Statement for the Emergency Management Information Need, with the understanding that this is a working document during the period of the Interim Solution.

Dataset Specifications: It is expected that most of the data sources for Emergency Management data will be in the form of an address and be best suited to representation with point data. To ensure interoperability, these data would need to be processed to be compatible with other MetroGIS-endorsed regional datasets. General specifications for that proposed data processing are as follows:

- The Lawrence Group Street Centerline and/or Parcel data will be used for address matching.
- Finished data will be in UTM 15 NAD83 coordinates.
- For datasets that are small enough to manually assign geographic locations in an efficient manner, these locations would be placed using the 1997 or later DOQs supplied by the Metropolitan Council.
- The Regional Theme Manager will enforce file and table field naming conventions.
- Metadata, conforming to MetroGIS standards, are required for all datasets.

Compilation

a) Transactional Data Sources: It is assumed that the source of most data will be from existing databases maintained by non-county entities. It is the responsibility of the Local Aggregators to research these locations and gain permission to acquire these transactional data. Datasets assembled from existing databases are to maintain all records from the original database query. Any changes to the original dataset would be provided to the original supplying agency for update into the parent transactional database. Once “Refinement” has been completed, the Local Aggregators would negotiate with the organizations from which the Source Data was obtained to establish who has ownership rights for the final spatial file and all data contained within it as well as redistribution rights, restrictions and limitations.

b) “New” (From Scratch) Data Sources: Some Emergency Management information needs may require data to be assembled from scratch. Until such time that definitive information need priorities are established from the Emergency Management users’ perspective, such new data development will not be pursued unless minimal resources are involved and there is a critical need for the data. In the latter case, the Workgroup would consult with the MetroGIS

Coordinating Committee regarding the appropriateness of pursuing development of the desired new data.

c) Existing Spatial Data Sources: If the Regional Theme Manager assumes responsibility for an existing Emergency Management dataset for which a spatial file exists and is maintained by another agency, they may begin with that data. Doing so is allowable, since it would expedite turnaround time for refining the Interim Solution protocol. This is only a recommended long-term process if MetroGIS Emergency Management standards can be maintained. For Emergency Management datasets housed at MetroGIS, the Local Aggregators should review the county-based components of each regional Emergency Management dataset. Because these datasets have already been “Processed” and “Geocoded”, the next course of action would be “Distribution”. The Workgroup would be responsible for proposing actions by MetroGIS to resolve any inter-organizational policy issues of security and data access.

d) Processing: The MetroGIS Emergency Preparedness Workgroup will work with each Regional Theme Manager and the respective Local Aggregator to recommend MetroGIS action on standards needed to ensure that Emergency Management datasets are interoperable across the seven-county region.

The Regional Theme Managers would be responsible for processing assigned regional Emergency Management dataset(s) into a spatial data layer and completing a preliminary update of the dataset(s). Processing may involve manual or automated (geocoded) placement. In either case, the address field must accompany the geography. All transactions must be inclusive within the spatial layer. Each transaction must contain a field stating whether the address is matched or unmatched to a location. The pre-processed, compiled data and the post-processed spatial data must have equal record counts. The preliminary update will use sources and knowledge available to the Custodian. All Emergency Management datasets will be compiled in UTM15 NAD83 coordinates.

e) Distribution: Once the Regional Emergency Management Theme Manager has processed and updated the assigned Emergency Management dataset(s), they would be divided into 7 county-based geographic subsets. The Theme Manager would then distribute the subsets to the respective Local Aggregators for “Refinement”.

f) Refinement: Upon receiving a subset of Emergency Management data from the Regional Theme Manager, each Local Aggregator will review these data, make the appropriate modifications, and return the corrected subset to the Theme Manager, along with documentation of changes, additions and processing. Each Local Aggregator would update their individual subset using the supplied audit fields as resources to show edits to any transactions. Upon completion of editing, each Local Aggregator would return the subset to the Theme Manager within a timeframe established by the Workgroup. The turnaround time may vary among datasets.

g) Metadata: All Regional Theme Managers would be responsible for supplying metadata for each spatial dataset they submit to MetroGIS for distribution. The metadata would be expected to conform to MetroGIS standards. The first submission can be in abbreviated form, which will be loaded to standard form.

h) Restoration: The Regional Theme Manager would reassemble the seven county components into a complete dataset for the seven-county region and update the metadata accordingly using documentation from the Local Aggregator.

i) Submission to MetroGIS: The Regional Theme Manager would submit the regional Emergency Management dataset and metadata to MetroGIS for posting to the Internet-based Emergency Preparedness Application. Emergency Management spatial datasets may also be available on the MetroGIS DataFinder website with data access password protection, as

appropriate. Metropolitan Council staff assigned to support MetroGIS functions will post it to the Emergency Preparedness Application and MetroGIS DataFinder websites and update the metadata record accordingly. Subject to internal approval, the Metropolitan Council will host the Emergency Preparedness Application website, in accordance with its responsibilities as primary sponsor of MetroGIS.

j) Bi-Annual Update and Review: In order to keep Emergency Management datasets current and accurate, the maintenance process must be ongoing. For the Interim Solution, the Workgroup has determined that a two-year update cycle will suffice, with the understanding that some datasets will not require as much attention. The process from Compilation through Submission would be repeated by the respective Regional Theme Manager for each Regional Emergency Management dataset supported. The concept of a User Satisfaction Forum, which is the method used to identify desired enhancements for other endorsed regional data solutions, will be investigated as an option for maintaining satisfaction with regional EP data solutions.

k) Coordination with data sources: Most data sources are anticipated to involve existing databases that are developed and maintained by non-county entities. Often these data are publicly available but may contain restrictions on their use. Once “Processing” and “Refinement” occur, property rights become less clear. Coordination with data sources is important since these sources may continue to supply information that would otherwise need to be collected by data custodians. The Regional Theme Manager and Local Aggregators will be expected to establish with the data sources:

- What rights and restrictions apply the data use,
- How anomalies and updates will be reported to data sources, and
- How future updates will be supplied by the data sources.

Local Aggregators will be expected to describe the local source data in the metadata submitted to the Theme Manager. Theme Managers will be responsible for documenting the original data source used at the beginning of the data acquisition process.

F. Outreach – Building Intergovernmental Relationships

Outreach efforts will continue to focus on building strong relationships between the GIS community and the Emergency Management community. Many emergency managers have not adopted GIS technology in their work because they may not be aware of its value, they may not know who to contact or may be hesitant to adopt unfamiliar technology. The Outreach subgroup works with emergency managers to demonstrate how GIS professionals and technology may be useful in addressing emergency planning, response and recovery responsibilities. When emergency managers understand the value of GIS technology, they will be interested in using it. This interest gives GIS professionals the chance to understand detailed emergency management needs, which allows complete and accurate information to be developed and delivered.

Activities of the Outreach workgroup are closely linked with similar activities of the Governor's Council on Geographic Information (GCGI) and have included GIS presentations at the annual Governor's Conference for Emergency Managers, the Minnesota Emergency Management Association conference, and Emergency Management educational workshops. Working relationships are being established with key leaders in local, regional, and state emergency management agencies in the state including city and county emergency managers, Homeland Security and Emergency Management (HSEM), and the Minnesota National Guard.

G. GIS Resource Organization

Activities related to organizing GIS resources are also closely linked with similar activities of the Minnesota Governor's Council on Geographic Information (GCGI) and have been endorsed and are actively supported by the Minnesota GIS/LIS Consortium. The primary focus is to increase awareness of the role of GIS professionals in helping the emergency management community become more aware of the technology and the services GIS professionals can provide to them. The subgroup also seeks to increase GIS professionals' awareness of what is needed by

emergency managers, how best to work with them and to recruit emergency management data refinement and maintenance participants.

To this effect, presentations are made at the annual Minnesota GIS/LIS Conference. A workshop titled "Emergency Management for GIS Professionals" was also organized by the subgroup. In May 2005, 65 GIS professionals attended the workshop. The MetroGIS EP Workgroup has developed an increased emphasis in the seven-county metropolitan region through county GIS contacts and GIS users groups. County GIS resources have been organized to support the data development and refinement effort and distribute the related workload.

SECTION III. CONCLUSION

This Regional Emergency Management data refinement process proposed in this Project Report has been prototyped through a combined effort of MetroGIS and GIS analysts in the seven-county Metropolitan Area. The Workgroup believes that sustained support of this process would accomplish the goal of faster access by Emergency Managers to accurate and reliable spatial data critical to emergency management decision-making. It is the Workgroup's hope that the State of Minnesota's Emergency Management officials will someday endorse the process defined herein. This interoperability at all levels is necessary to ensure that all levels of government have accurate and consistent datasets.

APPENDIX A

The members of the three subcommittees of the Emergency Management Workgroup (*Data Development And Deployment, Building Relationships With The Emergency Management Community, and Organizing GIS Resources*), who participated in the development of the proposed interim solution, as well as of the Workgroup's Steering Committee are listed below. The *Steering Committee* provided oversight and direction to the effort as a whole

Steering Committee:

Dakota County: Randy Knippel Co-Chair
Metropolitan Council: Rick Gelbmann Co-Chair
LOGIS: Keith Anderson
Ramsey County: Carla Coates
City of Maplewood: Chad Bergo
Hennepin County: Tim Zimmerman
Metropolitan Emergency Services Board: Gordon Chinander

Development And Deployment Subcommittee

The following individuals represent each of the seven metropolitan area counties and the Metropolitan Emergency Services Board:

LOGIS – Keith Anderson, Chair
Anoka County – John Slusarczyk
Carver County – Brad Rupert
Dakota County – Todd Lusk
Hennepin County – Tim Zimmerman
Hennepin County – Scott Simmer
Ramsey County – Carla Coates
Scott County – Jim Bunning
Washington County – Adam Snegosky
Metropolitan Emergency Services Board – Gordon Chinander

Building Relationships With The Emergency Management Community Subcommittee

Ramsey County – Carla Coates, Chair
John Studtmann, Individual
Sarah Schrader, Goodhue County
Mark McCormick, Civil Air Patrol
Judd Freed, Ramsey County

Organizing GIS Resources Subcommittee

City of Maplewood – Chad Bergo, Chair
Jennifer Wittkopf, City of Prior Lake
Carla Coates, Ramsey County
Keith Anderson, LOGIS
James Beal, UCIT Inc.

APPENDIX B
(data assignments)

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS							Refinement Complete
<input checked="" type="checkbox"/>	EM_Water_Reservoirs	Utilities	1	Anoka		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Water_Treatment_Plants	Utilities	1	Anoka	PCA	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Water_Wells	Utilities	1	Anoka		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Clinics	Health	1	Carver	MDH	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Cable_Coverage	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Cable_Dishes	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
	<i>Jody has compiled- Not sent yet</i>					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Fiber	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
	<i>Jody- Tough to get</i>					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Siren_Buffers	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Sirens	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	EM_Telephone_Coverage	Utilities	1	Carver		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input checked="" type="checkbox"/>	EM_TV_Radio_Grid <i>Jody has compiled- Not sent yet</i>	Utilities	1	Carver			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_TV_Radio_Towers <i>Jody has compiled- Not sent yet</i>	Utilities	1	Carver			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Red_Cross <i>Todd-Sent out to all counties for refinement in Nov 2004. No return results yet</i>	Health	1	Dakota	MDH		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Electric_Coverage <i>Todd-No contact yet. Need to go through the process to determine the pitfalls and communicate back to others counties.</i>	Utilities	1	Dakota			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_NaturalGas_Coverage <i>Todd-No contact yet. Need to go through the process to determine the pitfalls and communicate back to others counties.</i>	Utilities	1	Dakota			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Correctional_Facilities	Facilities	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Airports	Trans	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Bridges	Trans	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Flight_Patterns	Trans	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Overpasses	Trans	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input checked="" type="checkbox"/>	EM_Dams	Utilities	1	Hennepin-Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Power_Plants	Utilities	1	Hennepin-Scott	PCA		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Day_Care	Facilities	1	Hennepin-Tim Z			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Hospitals	Health	1	Hennepin-Tim Z	MDH		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Mass_Dispensing_Sites	Health	1	Hennepin-Tim Z			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Nursing_Homes	Health	1	Hennepin-Tim Z	MDH		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Pharmacies	Health	1	Hennepin-Tim Z	MDH		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Rehab_Centers	Health	1	Hennepin-Tim Z	MDH		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Ambulance_Response_Districts	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Ambulance_Stations	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input checked="" type="checkbox"/>	EM_Emergency_Operations	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Emergency_Service_Number_Zones <i>Numbers present. No Attributes! What is this for?</i>	EMS	1	Metro E911	Metro E911	9/1/2003	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Emergency_Shelters	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Fire_Districts	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Police_Districts	EMS	1	Metro E911	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_PSAPs	EMS	1	Metro E911	Metro E911	4/1/2003	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Emergency_Contacts	EMS	1	MetroGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Public_Buildings	Facilities	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_302_Storage	HAZ	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Haz_Waste_Generators	HAZ	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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<input checked="" type="checkbox"/>	EM_LUSK_Storage	HAZ	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Evacuation_Routes	Trans	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Haz_Material_Traffic	Trans	1	Ramsey			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Churches	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Grocery	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Hotels	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Housing_Point_Locations	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Libraries	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Malls	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Senior_High_Rises	Facilities	1	Scott			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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<input checked="" type="checkbox"/>	EM_Fire_Stations	EMS	1	Washington	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Police_Stations	EMS	1	Washington	Metro E911		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Armories	Facilities	1	Washington			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_City_Halls	Facilities	1	Washington			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Community_Centers	Facilities	1	Washington			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Jails	Facilities	1	Washington			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	EM_Public_Works_Buildings	Facilities	1	Washington			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Average Freezing Depth	Climate	2	LOGIS	State Climatolog		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Drought	Climate	2	LOGIS	State Climatolog		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Earthquakes	Climate	2	LOGIS	USGS		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete										
<input type="checkbox"/> Extream Heat	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hail Storms	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Historical Events	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ice Storm	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Land Slides	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lightning	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Max Temperature	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Min Temperature	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Severe Winter Storms	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Snowfall	Climate	2	LOGIS	State Climatolog	Anoka Carver	Dakota	Hennepin	Scott	Ramsey	Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input type="checkbox"/> Straight Line Wind	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Thunderstorms	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Tornados	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Weather Spotters	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Wild Fires	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Wind Speed Ave	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Wind Storms	Climate	2	LOGIS	State Climatolog	Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Key Boxes	Facilities	2	LOGIS		Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Contours	Land	2	LOGIS		Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Depth to Water Table	Land	2	LOGIS		Anoka Carver Dakota Hennepin Scott Ramsey Washington	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input type="checkbox"/>	FEMA	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Flood Plains	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Flood Zones	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Floods	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Future Landuse	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Ground Water	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lakes	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Land Cover	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Open space	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Permiability	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input type="checkbox"/>	Rivers	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Slope	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Storms	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Streams	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Surface Water	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Topography	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Water Table	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Wetlands	Land	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Census Data	Property	2	LOGIS	2000 Census		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Historic Sites	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input type="checkbox"/>	Population by Daytime	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Population by Nighttime	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Property Values	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Resident Phone Numbers	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Zoning	Property	2	LOGIS			Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Aerial_Photography	BaseData	0		MetroGIS DataFi		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Building_Footprints_Characteristics	BaseData	0				Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	MNDOT_Photos	BaseData	0		MNDOT		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Boundary_County	BaseData	0	MetroGIS	7 County Metro	7/1/2004	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Boundary_Municipal	BaseData	0	MetroGIS	7 County Metro	7/1/2004	Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cm	Feature Class	Dataset	Priority	Owner	Source	Sent to MetroGIS	Refinement Complete						
<input type="checkbox"/>	Parcel_Base	BaseData	0	MetroGIS	7 County Metro		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Street_Centerline_Address	BaseData	0	The Lawrence Gr	MetroGIS DataFi		Anoka	Carver	Dakota	Hennepin	Scott	Ramsey	Washington
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



TO: Coordinating Committee

FROM: MetroGIS Staff
Contact: Randall Johnson (651-602-1638)

SUBJECT: Regional GIS Projects Update

DATE: August 10, 2005
(For the Sept 21st Meeting)

INTRODUCTION

A spokesperson for each of the three Regional GIS Projects (Attachments A-C) there were deemed worthy of further consideration by the Policy Board on July 27th has been asked to provide a detailed update to the Committee at its September meeting on progress made to fully define their projects' respective specifications and costs. The three projects are as follows:

- A: Common Application Design for Web-based Data Queries
- B: Fill in incomplete fields in Regional Parcel Dataset
- C: Update DataFinder Café

The Committee is requested to provide further direction, as deemed appropriate, regarding each of these proposals. See the Reference Section for the information requested of each of the project spokespersons.

PAST CONSIDERATION - COORDINATING COMMITTEE AND POLICY BOARD

June 29th Coordinating Committee meeting. The Committee considered each of three subject proposals that had been submitted for funding consideration as a MetroGIS Regional GIS Project. Two of the three proposals (Proposal B: Fill in incomplete fields in Regional Parcel Dataset and Proposal C: Upgrade DataFinder Café) were deemed ready to forward to the Policy Board. The Committee identified several aspects of the third proposal (Proposal A: Common Application Design for Web-based Data Queries) for which it desired more information before deciding on the proposal. The complete meeting summary can be viewed at http://www.metrogis.org/teams/cc/meetings/05_0629/min.pdf.

(Note: Agenda Item 5c (Committee's September 21st meeting) provides a discussion of actions taken following the June 29th Committee meeting to modify Project A and forward it, along with Projects B and C, for consideration by the Policy Board on July 27th)

July 27th Policy Board meeting: The Board concurred that each of the three candidate proposals (A, B, and C) has merit that warrants preparation of detailed design, cost, and phasing options for further consideration, ***with the understanding that if a project can not be fully funded that whatever component(s) is funded must provide a value equal or greater to the investment of funds via MetroGIS.***

The Board also recommended the following funding allocation guidelines for use by the Metropolitan Council as it considers these projects (see http://www.metrogis.org/teams/pb/meetings/m_07_27_05.pdf for the complete meeting summary):

- Up to \$16,000 of the budgeted \$22,000 to Proposal A: (Joint Web Application).
- Up to \$500 of the budgeted \$22,000 to Proposal B: Parcel Attributes (only 2005 component).
- The remaining portion of the budgeted \$22,000 (at least \$5,500) to DataFinder upgrades, in combination with budgeted maintenance funds (\$10,000), special grants (\$15,000), and donated funds (\$1,700). [Note: in a separate action, the Policy Board authorized use of up to \$1,700 for updates to DataFinder from funds that have been donated to MetroGIS.]

HENNEPIN COUNTY – STATEMENT OF NON-PARTICIPATION

On September 12th, the Policy Board members received a letter from the Hennepin County Board Chair stating that Hennepin County would not be participating in the proposed Joint Web Application project (Proposal A). At the time of this writing, Commissioner Reinhardt was preparing a response to the Policy Board to clarify that the Joint Web Application Project is a one of many MetroGIS's initiatives and that Hennepin County's preference not to participate is not a problem. The objective is simply to serve as a pilot project with a 3-4 year time horizon to investigate benefits that can be gained by the counties if they collaborate on geospatial related web-based applications.

RECOMMENDATION

Consider what, if any, further direction is warranted to ensure the subject proposals adhere to goals established for Regional GIS projects.

REFERENCE SECTION

TEMPLATE FOR REGIONAL GIS PROJECT UPDATES

Regional GIS Project Workgroups:

Please provide a brief written statement addressing each of the following topics explaining progress made since the July 27th Policy Board meeting to refine design specifics and costs of your respective projects. This statement will be shared with the Coordinating Committee at its September 21st meeting for discussion and further direction as appropriate.

1. Name of Project:

- When presented to the Committee at the June 29th meeting: _____
- The currently preferred title, if any change: _____

2. Restatement of how the project aligns with a Regional GIS Project objective(s).

Definition of a Regional GIS Project:

"... a MetroGIS project to enhance the completeness, documentation, or accuracy of an Endorsed Regional Dataset, develop a regional dataset to address a Policy Board-endorsed priority common information need, or develop or enhance a geospatial application that enhances access to data which addresses a priority information need endorsed by MetroGIS."

3. Briefly identify all major project milestones and related timeframes, including a phasing plan if the project is note expected to be accomplished by year-end.

4. Briefly describe methods being used to identify options and select a desired course of action that is widely supported.

5. Please describe any unresolved issues or obstacles.

6. Provide an updated project implementation cost estimate, by phase to the extent possible. For those projects that involve software and application development, this estimate must include required support (direct and in-kind expense) needed to accomplish full implementation.

7. If the currently recommended funding allocation is not sufficient to fund all aspects of the proposal, identify the sources of the required additional funds and timing of their availability. Please explain how your project will satisfy the following requirement imposed by the Policy Board on July 27th that ***“if a project can not be fully funded, whatever component(s) is funded must provide a value equal or greater to the investment of funds via MetroGIS.”***

ATTACHMENT A

REGIONAL WEB-BASED GIS APPLICATION – PROVIDE UNIFORM GENERAL VIEW AND QUERY CAPABILITIES FOR REGIONAL DATA

PROPOSAL A: REGIONAL WEB-BASED GIS APPLICATION – PROVIDE UNIFORM GENERAL VIEW AND QUERY CAPABILITIES FOR REGIONAL DATA

Objective

To provide a common tool for the general public (and non-GIS county staff) to view and query regional parcel data online, by purchasing and/or developing a regional web-based GIS application. Final products would include a general application that runs on regional data sets, as well as individual county applications that could have additional capabilities and/or detail.

Project Description

The Metropolitan Council would host an application for regional use with the view and query capabilities agreeable to all MetroGIS partners. Each county would host the same application with additional view and query capabilities customized to fit their business needs. Although this approach would use eight separate web sites, the project objective is to maintain a consistent look and feel among all sites, creating a more seamless user experience than currently exists. The outcome of this project is to acquire the preferred solution. This solution would require 8 individual licenses to use and modify the application and all related source code. Based on one verbal quote, the requirements envisioned would be expected to cost about \$16,000.

The project objectives would be accomplished by the Metropolitan Council and all seven metro counties sharing and maintaining the source code for a single application. Currently, each county and the Metropolitan Council develop and maintain their own applications, occasionally sharing code to streamline individual development efforts. The proposed approach would give each organization a common application for core capabilities, allowing each to concentrate its own resources on enhancements rather than each developing the core capabilities.

Two counties currently have web mapping applications that provide the public limited access to the county's parcel data (Dakota: http://www.co.dakota.mn.us/assessor/real_estate_inquiry.htm, Ramsey: <http://maps.metro-inet.us/RamseyCoGIS/DisclaimerRCPublic.htm>). Other counties are in various stages of developing similar products. Significant savings could be achieved by counties working together to develop a common resource, and users would benefit from having a similar application in different counties or through a regional site.

Target Audience

The proposed view and query application is intended to extend the current user base to the general public who may not have GIS software. It also would be used by staff within each organization to do simple queries without the need for GIS software and training. This product would not provide for downloading data and would therefore not require licensing of individual users.

Approach

A workgroup of a representative from the Metropolitan Council and each county will execute the following steps to procure a product. A contract should be negotiated by December 31, 2005.

- Explore what counties currently have
- Determine the desired functionality and technical requirements
- Release a request for proposals
- Evaluate proposals
- Decide upon the desired product and negotiate the terms of an agreement with the provider

Initial consideration will be given to implementing the core capabilities that all participants agree to. The workgroup will determine design enhancements for future development that would be shared by all partners while preserving the consistent user experience. Any partner will always have the option of developing their own enhancements.

Potential Cost

An example of a possible solution is one available from Greenwood County, SC, with an estimated cost of \$16,000 (half the normal price for individual customers). This price includes eight licenses (one for the Metropolitan Council and one for each of the counties) and two days of technical training. All source

code is provided and licensees are allowed to customize it as they see fit. A request for proposals will be used to solicit the cost of other options.

Rationale for Project

- **Furtheres the MetroGIS Goals**

This project would address Item D, Task 1 in the MetroGIS 2005 Work Plan: “*Task 1 :Identify existing geospatial applications and post to “Application Finder”.*” It would take MetroGIS to the next level in its evolution from finding data (DataFinder) to accessing and downloading data (DataFinder Café) to gaining information from data through a query function. With each step in this evolution, MetroGIS partners have taken advantage of state-of-the art technology to provide users with geographically referenced data. State-of-the-art technology now makes it possible, through Web-based applications, to query data and produce a map without downloading the data.

The MetroGIS Business Plan recognizes the need to move to this next level to meet greater user expectations. It states:

...Technology and user expectations have changed over time with increased interest in more direct access to user-friendly information. This change has elevated applications to a higher priority level for the region.

As the quality of geodata improves and becomes more accessible, more people are finding ways to use this data to improve decision-making. Governmental units, businesses, non-profits, and private citizens can all benefit by having access through application software to the information that can be derived from geospatial datasets.

The issue of applications is also being raised at the national level, as high quality data becomes more available and users see new opportunities for creating better information to support decision-making.

- **Saves staff time devoted to application development**

As the demand for access to geographic information increases and the complexity of associated applications increases, it is imperative that we find smarter ways to get the job done. GIS applications are complex, and building them from scratch each time is costly, requires highly skilled developers and architects, involves inherently risky development, takes longer to complete, and results in inconsistent applications. A query application that can serve as a development framework tool such as that referenced in this proposal would provide reusable code to solve many of the common web application needs. This dramatically reduces the complexity and development lifecycle required to create an application.

- **Enhances User Experience**

Having a common “look and feel” for accessing information helps users get what they need and shows that the data providers are being efficient and effective.

Conclusion

The MetroGIS Policy Board at its July 2002 meeting stated that the world of applications could be boundless, and therefore, MetroGIS should move slowly using a gradual and incremental approach. This project would allow the MetroGIS partners to explore using a collaborative approach to procuring common applications with minimal cost and little risk.

This project exemplifies the values recognized in the following quote taken from the recent MetroGIS Annual Report:

In order to maximize the benefit of GIS technology and minimize the costs, governments in the Twin Cities metropolitan area work together in a regional collaborative ... Their goal is to promote and facilitate GIS data-sharing in order to reduce data development and acquisition costs, improve data quality, leverage technology investments, promote best practices, and foster broader intergovernmental cooperation.

Contact for Proposal

Randy Knippel, GIS Manager, Dakota County Office of GIS, Western Service Center, 14955 Galaxie Ave. Apple Valley, MN 55124, phone: 952-891-7080. Email: randy.knippel@co.dakota.mn.us

ATTACHMENT B

PROPOSAL B: POPULATING ATTRIBUTES IN THE REGIONAL PARCEL DATASET



REGIONAL GIS PROJECT - PROPOSAL FOR 2005 FUNDING:

Introduction

In 2004, an enhanced standard was adopted for the [Regional Parcel Dataset](#) as provided to MetroGIS users by the 7 metropolitan counties. The standard took effect with the first release of the dataset in 2005.

With 36 new standard attribute fields in addition to the original 29 fields, the potential to analyze parcel-based information across the metropolitan area has more than doubled. However, this potential is currently unrealized, as only 13 of the 65 standard attribute fields are fully populated across all seven counties (Table 1). MetroGIS staff have identified which fields are not fully populated by each county (see Page 3 of the [Parcel Data Attribute Description](#)) using the most recent release (April 2005) of the regional parcel dataset.

Objectives

The objectives of this proposed project are to populate priority attributes in the regional parcel dataset using the following steps:

1. Estimate the costs of populating a subset of those attributes,
2. Weigh those costs against the prioritized needs of the MetroGIS community to identify a list of attributes that can likely be populated within a given budget.
3. Make funds available to help populate the identified attributes.

Table 1. Parcel attributes fully populated* across all seven counties.

Regional Parcel Attribute	Anoka	Carver	Dakota	Hennepin	Ramsey	Scott	Washington
Unique County ID	100%	99.9%	99.9%	100%	99.7%	98.5%	100%
Unique Parcel ID	100%	100%	97%	99.6%	99.8%	100%	98%
House Number	85%	87%	84%	99.6%	94%	83%	75%
Street Name	85%	87%	84%	99.6%	99.7%	83%	75%
City (actual)	100%	99.9%	97%	99.6%	99.8%	98.5%	94%
City (mailing)	92%	88%	84%	96.1%	99.7%	83%	75%
ZIP Code	72%	88%	84%	96.1%	99.7%	83%	76%
Homestead Status	99%	99%	97%	100%	99.6%	98%	100%
Estimated Market Value - Land	95%	98%	97%	94.8%	95%	97%	95%
EMV - Buildings	81%	82%	86%	91.1%	99.7%	76%	74%
EMV - Total	95%	98%	97%	94.8%	99.4%	97%	95%
School District	99%	99.9%	97%	99.4%	99.7%	98%	96%
Watershed District	99.8%	99.9%	97%	69.5%	99.7%	98%	79%

*an attribute is considered fully populated if at least 50% of records in the file contain pertinent information

Project Activities, Schedule & Funding

The first two project objectives would be accomplished through the combined efforts of MetroGIS staff and county staff. Activities for this part of the project include defining and estimating costs for populating each attribute, identifying best methods to complete the work, prioritizing work to populate attributes and developing a plan to accomplish the work.

The project would use the entire \$22,000 available for MetroGIS projects. Most of the costs (estimated \$21,000) would be used to pay for programming, database design, data sharing coordination and as needed data compilation. The remaining funds (\$1,000) would be used for meeting, forum and evaluation expenses.

Task	Completion Date	Project Funds
<i>Measure % of attributes populated (Appendix A).</i>	<i>Completed</i>	<i>\$0</i>
Technical Expertise Forum: sharing methodologies for database design, linkage, & information flow.	August 31, 2005	\$500
Develop methodology and cost estimates within each county to populate each attribute.	November 31, 2005	\$0
Prioritize attributes to populate.	January 31, 2006	\$0
Populate priority attributes	August 31, 2006	\$21,000
Project evaluation of results, materials, meeting rooms, and other expenses.	October 31, 2006	\$500
Totals		\$22,000

Effect of Lower Funding Award

The project funds required to populate attributes is only estimated at this time. If less is made available, then fewer attributes are likely to be populated. It is also likely that funding levels below a certain threshold would make it difficult to achieve results that justify the organizational effort. More research is required to determine this threshold.

Alignment with Core MetroGIS Stakeholder Interests

One definition of a Regional GIS Project is “a MetroGIS project to enhance the completeness, documentation, or accuracy of an Endorsed Regional Dataset.” This project would significantly enhance the completeness of the Regional Parcel Dataset, which is part of the Endorsed Regional Solution for four common information needs.

At the September 2003 Regional Parcel Data Users’ Forum, “Attribute Consistency” across the seven counties was identified as a priority need (needed by many MetroGIS stakeholders), and was considered critical to the mission of at least one participating agency. This project’s main goals of enhancing the completeness and consistency of the Regional Parcel Dataset align with the goals of the greater MetroGIS community.

ATTACHMENT C

PROPOSAL C: UPGRADE DATAFINDER CAFÉ



REGIONAL GIS PROJECT PROPOSAL FOR 2005 FUNDING UPGRADE DATAFINDER CAFÉ

Introduction. On July 11, 2001, the MetroGIS Policy Board endorsed the project objectives to design and implement a secure Internet-based data distribution mechanism for the MetroGIS community as a way to automate MetroGIS's data distribution process. The resulting application, DataFinder Café, was officially rolled out at the MetroGIS Policy Board's July 2002 meeting.

Over the past two years, 15 percent of the total data downloads from DataFinder are from the Café component. This equals about 95 downloads per month. (It should be noted that the average for the last 3 months increased to 25 percent of the total or 163 downloads.) The remaining 85 percent of the download activity is via FTP. The key benefits of using the Café over FTP are 1) a user may subset the data by a predefined or custom geographic area as well as subset by attribute, 2) a user can pick from multiple formats, including shape file, DXF, etc., and 3) a user can download multiple datasets in one bundle. The Café works with both unlicensed and licensed (password required) datasets. In addition, the Café outputs WMS (web mapping services) in a format that can be used by agencies, such as The National Map.

The Café relies on ArcIMS and Java Web Start software, both of which have had multiple upgrades since Café was released. The Café application itself has not been upgraded since its initial deployment and as a result several issues have arisen: 1) New versions of Java do not support security functionality in the Café; 2) Newer ArcIMS features are unavailable to the Café or other MetroGIS and Metropolitan Council web-based GIS applications; 3) The WMS format no longer meets the standard; and 4) There is no support available for the Café. We cannot easily resolve these issues because the company that designed Café, Syncline, Inc., is no longer in business.

Objectives. Upgrade or replace the DataFinder Café software using the following steps:

1. Obtain input on Café functionality and usage from a user survey (already in progress by MetroGIS staff).
2. Reevaluate Café functionality based on user needs from survey.
3. Evaluate off-the-shelf software to see if anything meets these needs, and if not, research custom development options.
4. Purchase and install a new system to replace Café software. Special attention will be paid to the ongoing support and sustainability of the Café component of DataFinder.

Alignment with Core MetroGIS Stakeholder Interests. This project will provide ongoing support for the Café, which provides an easy and secure way to extract custom-defined MetroGIS-endorsed data. This will meet the objective of the Regional GIS Project that states "To assist data producers in performing primary custodial responsibilities, which have been endorsed by the Policy Board that exceed internal business functions, including extracting, documenting, manipulating, and delivering these data to the regional custodian." A survey was conducted in May 2005 in an attempt to better understand user needs. Additional user needs assessment work is proposed prior to finalizing design options.

Resources and Timeframe. This proposal requests the full \$22,000 to use for the purchase of an upgrade or replacement for DataFinder Café software. It is unclear at this point how much the total project will cost and so it is unknown how a lesser award would affect the outcome.

The timeline for this project is that the user survey and subsequent analysis will be complete by early June. The research of possible solutions will be performed over the summer of 2005, with a potential RFP and decision being made in Fall 2005.



TO: Coordinating Committee
FROM: Chairperson - Nancy Read, Metropolitan Mosquito Control District (651-643-8386)
Staff Coordinator - Randall Johnson (651-602-1638)
SUBJECT: Procedures – Conducting Business Outside of Meetings
DATE: August 10, 2005
(For Sept 21st Meeting)

INTRODUCTION

Chairperson Read added this agenda item. It is in response to a concern raised about the forwarding of a recommendation to the Policy Board that was formulated outside of an official Coordinating Committee meeting. Specifically, a modified version of Proposal A - Common Application Design for Web-based Data Queries - was forwarded to the Policy Board for consideration as a Regional GIS Project at its July 27th meeting without formal endorsement at a Coordinating Committee meeting.

Direction is sought from the Committee as to what, if any, modifications to MetroGIS's Operating Guidelines should be pursued as a result of this experience.

ISSUE – BETWEEN MEETING CONSIDERATION OF MODIFIED PROPOSAL

At its June 29th meeting, the Coordinating Committee identified several concerns with the subject Proposal for which it wanted more information before acting. (Refer to Agenda Item 5b for an excerpt from the Committee's June 29th meeting summary.) Following the Committee's June 29th meeting, the Committee Chair and Staff Coordinator met with Policy Board Chairperson Reinhardt to set the agenda for the Policy Board's July 27th meeting. Chairperson Reinhardt strongly requested that the Committee work with the Proposal A Project Team to address the outstanding concerns prior to the Board's July 27th meeting. She expressed concern that if the Board's consideration were to be delayed until October, sufficient time might not then be available to capture all of the 2005 funds budgeted for this purpose. An **understanding was reached with Chairperson Reinhardt** that if a revised proposal could be prepared addressing the Committee's concerns and distributed to the Committee for review, and if none of the Committee members expressed a concern with the revised proposal, it would be forwarded to the Policy Board for consideration on July 27th.

Chairperson Read then worked with the Proposal A Project Team to address the concerns raised by the Committee at its June 29th meeting and arranged with the Staff Coordinator to send a letter (Attachment A) via email to the Committee membership, along with the revised Proposal A, stating the reasons for requesting Committee acceptance outside of a formal meeting setting.

Several, but not all, members responded; all expressing satisfaction that, from their perspective, the revised proposal addressed the concerns identified at the June 29th Committee meeting. Furthermore, no one raised any issues with the revised proposal. As such, the revised Proposal A was forwarded to the Policy Board for consideration at its July 27th meeting and, subsequently, found by the Policy Board to warrant further consideration.

METROGIS'S OPERATING GUIDELINES

MetroGIS's Operating Guidelines do not specifically authorize decision-making by the Coordinating Committee outside of a formal meeting, as they do for other Advisory Teams (Article IV, Section 6), but they do contain in Article VI - Procedures the following provision: ...“Decisions that result from a process that does not meet the strict procedures set forth in Robert's Rules of Order shall remain in effect if the decision resulted from due consideration of the options presented for discussion.” (Refer to http://www.metrogis.org/about/history/ops_guidelines.pdf for the complete guidelines.)

DISCUSSION

This experience raises two questions:

- 1) A need for clarification on how to handle urgent business that comes up between meetings.

De facto objectives of the MetroGIS's decision-making process are to: a) provide flexibility to ensure timely decisions, b) balance the desire for flexibility against the need to ensure the process is thorough and that the resulting decisions are well thought out, and c) ensure decisions are widely supported. Given that the recommendation to the Policy Board concerning Proposal A was effectively for concept approval and that a valuable opportunity could be lost if a three month delay were required, the Chairs elected to err on side of offering a flexible process.

We were surprised to hear from relatively few members, and perhaps we erred in assuming that not hearing from members was the same as abstaining or acquiescence, or should have made it clearer in the e-mail exactly what was being asked of the members.

In hindsight, follow-up with each Committee member who had not responded should have been pursued to ensure each was comfortable with the revised proposal. Perhaps in the future, (assuming a policy is enacted to address urgent matters that arise between meetings) we should require a minimum number of replies, and/or use some code words ("e-vote?") to indicate that some urgent business has come up that needs response from Committee members.

- 2) Did the procedure used to inform Committee members of the modified Proposal A and to request their comment (Attachment A) satisfy the "due consideration of the options" requirement set forth in Article VI?

This requirement could have two meanings: procedural and project design. The procedural aspect has been addressed above – the risks outweighed the benefits of waiting three months. Options related to project design are not a factor at this point in the decision-making process as concept acceptance was needed before detailed design options could be evaluated.

Fortunately, given that the subject Proposal requires significant work to define design specifics and associated costs, opportunity remains for the Committee to provide further direction (Agenda Item 5b) and, as importantly, to learn from this experience.

RECOMMENDATION

That the Committee:

- 1) Decide if a formal policy is needed to attend to urgent business that may arise between meetings.
- 2) If so, identify the basic principles and direct the Committee Chair and staff to draft language for discussion at a subsequent meeting.

Reference Section

I. Excerpt from June 29th Committee meeting summary (Note: DataFinder Café was considered separately as Item 5a):

b) REGIONAL GIS PROJECT PROPOSALS

Proposal A – Common Parcel Data Query Application Design:

...The Committee agreed that a standardized application interface across the region could result in substantive efficiencies from the ability to leverage programming and related support resources; in other words, achieve a coordinated enterprise as opposed to the alternative of several similar but uncoordinated applications.

Craig commented that he strongly supports the proposed concept of a coordinated application interface among the counties but **asked who would have access and under what conditions** (e.g., the general public and non-government interests, without the need for prior licensure, or would access continue to be restricted to licensed government and academic interests)? Staff commented that the concept of unlicensed, view-only access to parcel data via an online application has previously been a discussion topic before the Committee and that the Policy Board endorsed such a policy in July 2004 subject to approval by each county in conjunction with a proposal from the Emergency Preparedness workgroup. The group asked Harper to pass this access question along to the proposer workgroup to address in a revised proposal, should it decide to incorporate feedback received from the Committee.

Although all agreed the proposed concept warrants further consideration, several members expressed concern about the appropriateness of purchasing the specified application from an unknown developer. Maki added that this type of application involves a **risk area involving emerging standards**, in particular regarding communications between services, and, as such, cautioned that the documentation needs to be clear on the standards and development processes used to develop the application. Maki further commented that he would prefer the proposed application to be part of a fully integrated enterprise. Whitcraft commented that his area of expertise involves software development and concurred with Maki's cautions. A general consensus was that it would be easier to recommend approval of a **general concept as opposed to the specific application** that is cited in the proposal. Harper made note of this feedback to share with the other proposers.....

...A ... question from Laumeyer led to a request for more information about the **target user community and how they would benefit**. Harper briefly commented that the target user is not the GIS professional who wants access to source data but rather individuals from many backgrounds and levels of expertise who want a quick answer to a question that can be satisfied with a simple online query. Brown commented that the subject proposal is an attempt to reinvent (improve) the property query service that has been provided for some time by several of the counties.

The final topic of discussion involved the possibility of combining this query/mapping proposal with the analysis of options for addressing desired upgrades to MetroGIS DataFinder Café, given that both are likely to use Internet Mapping Service (IMS) software. It was agreed that the more important task is to clearly establish the **policy foundation as to how best to coordinate data distribution (downloading) and mapping needs** (e.g., add functionality to Café for mapping or maintain data distribution as a separate application as is the current policy). The Committee concluded that it should task the workgroup created to investigate upgrading of DataFinder Café with developing a recommendation to address this need.

General Discussion

Chairperson Read summarized the purpose of this agenda item is for the Committee to offer advice as to: 1) whether a proposal has sufficient merit to warrant spending some of the Regional GIS Project funding and 2) the relative merit of each the three proposals presented (two addressed in this agenda item and

upgrading DataFinder Café as dealt with in Agenda Item 5a), and general feedback for how the proposals might be improved. Maki commented that the Committee could only respond to the proposals as they are currently presented in the agenda material, unless comment is postponed until questions raised are addressed. The group concurred and elected to comment at this meeting as follows.

Proposal	Concept has Merit	Ready for Policy Board Review
<u>Proposal A</u> (Parcel Data Query Application)	Yes	No**
<u>Proposal B</u> (Complete Missing Parcel Attributes)	Yes	Yes
<u>Proposal C</u> (Upgrade DataFinder Cafe)	Yes	Yes

**Note: The Committee encouraged the proposers to modify their proposal as follows so that it could be considered by the Policy Board on July 27th: 1) Clarify the target audience(s), why the proposed application would benefit them, and any need for modification of current access policies and 2) address the Committee’s concerns for purchase of an application developed for a county in another state by an unknown developer.

Relative Merit of Each Proposal

The Chairperson’s request that the Committee offer advice on the relative merits of each of the three proposals resulted in resolute comments from Brown, Claypool, Maki, and Laumeyer and then concurrence by the Committee that resolving the problems currently faced with an aging DataFinder Café and managing the existing investment is substantially more important than the other two proposals. The Committee’s overall ranking was follows:

Proposal	Rank (Relative Importance)
<u>Proposal C</u> (Upgrade DataFinder Café)	1
<u>Proposal B</u> (Complete Missing Parcel Attributes)	2
<u>Proposal A</u> (Parcel Data Query Application)	3

The Committee also concurred that the matter of deciding how to best go about integrating data delivery functionality (DataFinder) with desired mapping and querying functionality should not be permitted to bog down efforts to upgrade the more important DataFinder Café functionality. It was agreed that the DataFinder Upgrade Workgroup should be charged with recommending a plan for how to best go about meeting both needs through an expandable design, including a phased implementation plan, as more funding may be needed than is available in 2005.

Motion:

Brown moved and Givens seconded to recommend to the Policy Board that the Board offer advice to the Metropolitan Council relative to funding each of the three Regional GIS Project proposals received, as follows:

- a) All three proposals have merit for further consideration for funding as a Regional GIS Project.
- b) Their relative ranking of importance to the MetroGIS community is: 1) Proposal C (Upgrade DataFinder Café), 2) Proposal B (Complete Missing Parcel Attributes), and 3) Proposal A (Parcel Data Query Application).

Motion carried, ayes all.

II. Excerpt from July 27th Policy Board meeting summary

Motion: Member Pistilli moved and Member Egan seconded that the Policy Board:

- 1) Conclude that all three 2005 Regional GIS Project proposals, as cited in the agenda materials, have merit that warrants preparation of detailed design, cost, and phasing options for further consideration,

with the understanding that if a project can not be fully funded that whatever component(s) is funded must provide a value equal or greater to the investment funds via MetroGIS.

- 2) Authorize use of up to \$1,700 in funds donated to MetroGIS to be used for upgrades to DataFinder.
- 3) Forward recommendations to the Metropolitan Council that it authorize allocation of:
 - (a) Up to \$16,000 of the budgeted \$22,000 to Proposal A: (Joint Web Application)
 - (b) Up to \$500 of the budgeted \$22,000 to Proposal B: Parcel Attributes (only 2005 component)
 - (c) The remaining portion of the budgeted \$22,000 (at least \$5,500) to DataFinder upgrades, in combination with budgeted maintenance funds (\$10,000), special grants (\$15,000), and donated funds (\$1,700).

This recommendation acknowledges that the actual funding amounts may vary somewhat from those approved here after specific solutions for each proposal are developed. Requests to expend funds for specific solutions within these recommended projects may be sent directly through the Metropolitan Council to expedite the procurement process.

Motion carried, ayes all.

ATTACHMENT A

MetroGIS

Cooperation, Coordination, Sharing Geographic Data



To: MetroGIS Coordinating Committee
From: Nancy Read, Chair
Date: **July 11, 2005**
Subject: Proposal for Common View & Query Application for Parcel Data

As most of you know, at our last CC meeting some questions were raised about the proposal presented to allocate up to \$16,000 for Counties to work together with the Met. Council to develop a common application for public view & query access to regional parcel data. At that time the Committee approved the concept but asked to review proposal revisions before it went to the Policy Board.

Commissioner Reinhardt has asked that the Coordinating Committee review the attached revised proposal before the July Policy Board meeting, so that the Policy Board and proposers have adequate time to expend the funds before the end of the year.

I believe the concerns raised by Committee members have been addressed in the attached revision:

- the target audience for the application has been defined as general public and non-GIS county staff
- the application would provide view-only access
- a Request for Proposals would be used to investigate possible solutions
- source code could be provided for additional development and maintenance.

If you feel there are additional changes that should be made to the proposal before it advances to the Policy Board, please contact Randy Johnson and/or myself by Thursday, July 14.

Thanks for your attention to this. It looks like we have a great opportunity here, and we value Commissioner Reinhardt's concern that we move forward promptly and take advantage of it.

The above memorandum was sent to each Committee member on July 11th via email with the following cover message:

“See the attached cover memorandum from Chairperson Read and the revised proposal from the County Data Producers Workgroup. The revised proposal addresses comments offered by the Committee at its June 29th meeting. The draft meeting summary can also be viewed at http://www.metrogis.org/teams/cc/meetings/05_0629/min.pdf.

As noted in the Chair's memo, please get back to one of us by **Thursday (July 14)** if you have any further concerns.”



TO: Coordinating Committee
FROM: MetroGIS Staff
Contact: Randall Johnson (651-602-1638)
SUBJECT: GIS Technology Demonstration – October 2005 Policy Board Meeting
DATE: August 15, 2005
(For Sept 21st Meeting)

INTRODUCTION

The Coordinating Committee is requested to agree on a GIS Technology Demonstration topic and a person(s) to present that topic at the Policy Board's October 19th meeting.

PREVIOUSLY IDENTIFIED CANDIDATE DEMONSTRATION TOPICS

1. County GIS activities: During the agenda setting meeting for the January 2004 Policy Board meeting, Chairperson Reinhardt commented that she would like to hear again how the counties, particularly those with enterprise GIS programs, are using GIS and benefiting from collaboration. She would prefer one or two in-depth presentations, as opposed to 5-7 minute overviews, from each county at a single Board meeting. Since then, Dakota and Scott Counties have made presentations.
2. GIS-related work at the U of M: At the September 2004 Coordinating Committee meeting, the following options were identified:
 - An evacuation routing program that has been presented and was well received by elected officials on the national scene.
 - An NFS grant-funded project involving analysis of historic census data.
3. Prototype MetroGIS Emergency Preparedness Website: This option was identified at the June 2004 Committee meeting. However, it was determined to be premature to demonstrate this site until the organizational components are agreed upon, which is currently in process. Staff comment: the Committee may wish to ask the EM workgroup to demonstrate this site as part of its recommendation to the Policy Board (see Agenda Item 5a).

DISCUSSION

In addition to Items 1 and 2 above, Rick Gelbmann, Metropolitan Council GIS Manager, is prepared to demonstrate the Council's new ArcReader-based Natural Resources application at the October Policy Board meeting. It demonstrates the value of regional datasets and benefits that can be achieved with many organizations collaborating to share commonly needed data.

RECOMMENDATION

That the Coordinating Committee agree on a GIS Technology Demonstration topic and a person(s) to present that topic at the October 19th, 2005 Policy Board meeting.

REFERENCE SECTION

PAST POLICY BOARD DEMONSTRATION TOPICS:

- Jul. 2005: Ramsey County GIS User Group's Internet Mapping Service (IMS) site
- Apr. 2005: How Watershed Districts are Benefiting from MetroGIS's efforts
- Jan. 2005: Regional Mailing Application
- Oct. 2004: Improving Operational Effectiveness with GIS - Dakota County's Experience
- Jul. 2004: City of Roseville's Combined Use of Socioeconomic Data and GIS Technology to Improve Decision Making and Service Delivery
- Apr. 2004: Metro 911 Board initiative to integrate GIS into day-to-day operations of 27 Metro Area PSAPs
- Jan 2004: Scott County's Use of GIS technology to improve intra-department efficiencies
- Oct. 2003: GASB34 – GIS Technology's Relevance
- Jul. 2003 Minneapolis Neighborhood Information System use of GIS and data sharing activities
- Apr. 2003 Metropolitan Mosquito Control District use of GIS and benefits from MetroGIS
- Jan. 2003: Emergency Management Response applications developed by Carver and Washington Counties.
- Oct. 2002: Metropolitan Airports Commission use of GIS and benefits from MetroGIS
- Jul. 2002: MetroGIS DataFinder Café Rollout
- Mar. 2002: Presentations from each metro county regarding their respective GIS programs
- Jan. 2002: GIS's Role In Responding To The World Trade Center Tragedy – Mapping Ground Zero (*Paul Olson, Grand Rapids Office of the Minnesota DNR - Division of Forestry*)
- Oct. 2001: TIES – Benefits to School Districts as a result of MetroGIS
- Jul. 2001: DataFinder And Functionality Sought Via Proposed Internet-Enabled Data Distribution Mechanism (*since named DataFinder Café*)
- Apr. 2001: LMIC's Metro viewer software: A Mapping Tool for the Public
- Jan. 2001: Regional Census Geography and Legislative Redistricting Software/Process
- Oct. 2000: North Metro I-35W Corridor Coalition's Socio-Demographic Database Development
- Jul. 2000: DataFinder and Council's Internet-based Existing Land Use Application
- Apr. 2000: Regional Parcel Dataset (Version 1)
- Jul. 1999: Presentation to House of Representatives Subcommittee on June 9th
- Apr. 1999: North Metro I-35W Corridor Coalition GIS Capabilities
- Nov. 1998: Orthoimagery and its Uses
- Sep. 1998: DataFinder and Dakota County's Parcel Query Application
- Jan. 1997: Benefits from GIS in general and uses being made by all classes of stakeholders represented on the Policy Board.



TO: Coordinating Committee

FROM: MetroGIS Staff Support Team
Contact: Randall Johnson (651-602-1638)

SUBJECT: 2006 MetroGIS Major Program Objectives

DATE: August 9, 2005
(For the Sept 21st Meeting)

INTRODUCTION

The purpose of this report is to suggest that Coordinating Committee and Policy Board postpone initiating work programming for 2006 until the pending Strategic Directions Workshop is held and maintain the status quo until that time in terms of work on efforts that are in progress.

A listing of the major work objectives for 2005 is attached with annotations as to project status.

METROPOLITAN COUNCIL ACTIVITIES RELATED TO METROGIS

The Council approved its 2006 budget for hearing on August 10th. This budget includes \$86,000 in project funding and staff support for MetroGIS, as requested by the Policy Board in April 2005. Final action on the Council's 2006 budget is anticipated in December.

As part of the Council's agency-wide internal evaluation of programs and activities, its Program Evaluation and Audit Department has also been conducting a review of MetroGIS's costs and benefits relative to the Council's internal needs. Last spring, Council management requested postponement of the proposed Strategic Directions Workshop until they had had a chance to digest the findings of this review. That request was honored and preparations for MetroGIS's pending Strategic Directions Workshop were postponed. The results of the review are anticipated to be available by the time the Committee meets in September. Once the results are available, planning for the Strategic Directions Workshop is expected to resume. These preparations would begin with hosting of a forum to identify possible collaborative opportunities with non-government interests.

MAJOR ASSUMPTIONS (UNTIL THE STRATEGIC DIRECTIONS WORKSHOP IS HELD)

1. MetroGIS's core functions (see footnote #2 in Attachment A) will remain unchanged: a) implement regional solutions for priority common information needs (e.g., data, web services and applications), b) support an Internet-based geospatial data discovery, and c) retrieval tool (DataFinder), and support a forum for knowledge sharing.
2. Any substantive changes in policy that involve additional resources agreed upon as part of the Business Plan Update process anticipated 2006 following the Strategic Directions Workshop would need to be addressed in future budget proposals and/or through partnerships or grants.
3. The agreement in place with each of the seven counties and the Council that provides access to the regional parcel dataset, without fee, by government and academic interests will remain in effect.
4. Agreed-upon roles and responsibilities for support of MetroGIS-endorsed regional solutions, which have been accepted by stakeholder organizations, will continue to be performed in accordance with expectations.
5. Updating of MetroGIS DataFinder can be accomplished with available resources. (Agenda Item 5b).

RECOMMENDATION

That the Coordinating Committee comment on the recommendation to maintain the status quo in terms of 2006 work programming until the proposed MetroGIS Strategic Directions Workshop can be hosted.

Attachment A

**Current Year's (2005)
Major Program Objectives**

MetroGIS Mission Statement

(Adopted February 1996)

“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.”

Major 2005 MetroGIS Program Objectives¹

- Adopt an updated MetroGIS Business Plan (process to include a retreat of MetroGIS leadership with a theme of “Are We Done?” (Maintain What Has Been Built Or Pursue New Initiatives) and obtain endorsement by key stakeholder interests. (The remainder of the proposed objectives assume that MetroGIS’s current core functions² will not change substantively.) (POSTPONED FOR STRATEGIC PLANNING)
- Implement modifications to the Regional Parcel Dataset, which were endorsed by the Policy Board in July 2004, and establish common access policy concerning non-profits/community groups, whose functions complement government functions. PILOT PROJECT IN PROGRESS WITH HENNEPIN COUNTY
- Achieve Policy Board endorsement, at minimum, of a Phase I regional solution that effectively addresses each of the following common priority information needs:
 - 1) Addresses (of occupiable units) (VISION ADOPTED 4/05 - IN PROGRESS)
 - 2) Emergency Preparedness (PROPOSAL ANTICIPATED 9/05)
 - 3) Existing Land Use (POSTPONED FOR STRATEGIC PLANNING)
 - 4) Highway and Road Networks (SEE NEXT BULLET)
 - 5) Jurisdictional Boundaries – School Districts (NO PROGRESS – LMIC REORGANIZED)
 - 6) Jurisdictional Boundaries – Watershed Districts (pilot in Washington Co. nearing completion)
 - 7) Lakes and Wetlands (IN PROGRESS)
- Achieve Policy Board endorsement of strategies to effectively achieve a solution to address-related limitations of the endorsed Regional Street Centerline dataset for geocoding concerning: a) satisfying needs of the E911 community and b) incorporating locally-produced data into the U.S. Census Bureau’s TIGER data. (VISION ADOPTED 4/05 – IN PROGRESS)
- Implement a strategy (currently referred to as ApplicationFinder) to help data users efficiently share existing geospatial applications and leverage those existing investments. (POSTPONED FOR STRATEGIC PLANNING)
- Continue efforts to identify commonly needed geospatial applications appropriate for regional solutions and MetroGIS’s resources. (POSTPONED FOR STRATEGIC PLANNING)
- Continue to realize increased use of DataFinder as a tool used both by data users to search for and access data they need, and by data producers to distribute data important to others in the MetroGIS community.
- Continue to realize increased awareness of MetroGIS’s endorsed strategies, resources, and opportunities among MetroGIS stakeholders and officials involved in related efforts beyond the Metro Area.
- Continue to effectively support MetroGIS’s general information website (www.metrogis.org).
- Continue to effectively support MetroGIS’s DataFinder website (www.datafinder.org).
- Continue to perform activities defined in the Performance Measures Plan to monitor effectiveness of MetroGIS’s efforts – user satisfaction with data solutions and custodian conformance with expectations; document the benefits of MetroGIS’s efforts; and modify activities and policies, as appropriate.

1 It is recognized that these objectives may need to be modified if funding is reduced in response to the state’s continuing revenue shortfalls.

2 The current core functions are: implement regional solutions for priority common information needs (e.g., data, web services and applications), support an Internet-based geospatial data discovery and retrieval tool (DataFinder), and support a forum for knowledge sharing.



TO: Coordinating Committee

FROM: MetroGIS Staff Support Team
Contacts: Randall Johnson (651-602-1638)
Steve Fester (651-602-1363)

SUBJECT: Quarterly Performance Measures Update –Anomaly Report

DATE: September 14, 2005
(For the Sept. 21 meeting)

INTRODUCTION

At each meeting, the Committee has asked staff to bring forward, for discussion, one or more anomalies associated with the previous quarter’s performance measurement reporting results. This report includes performance-reporting statistics for the period from June 1 through August 31, 2005. During these three months, several noteworthy anomalies in the statistics presented themselves and are shared below for discussion and comment. Several measures of interest, which are not anomalies, are also called out for the Committee’s information.

PERFORMANCE REPORTING STATISTICS – JUNE-AUGUST 2005:

1. Data Downloading Activity

a) **General:** Dataset **downloads increased by 69 percent** from the same period in 2004, averaging 644 per month in 2005 period vs. 380 for the same period in 2004. During the same period in 2003, downloads averaged 607 per month. More notably, downloads via DataFinder Café **increased 265 percent** from the same period in 2004, from an average of 43 per month 2004 to 157 in 2005. Refer to the chart in the Reference Section for more details.

Comments: These increases in data downloading activity are substantial and evidence that MetroGIS’s efforts to streamline access to data are paying off. Staff conducted three surveys in May and June to assess user satisfaction with DataFinder. These surveys may account for some, but not likely all, of the increase experienced. **Does the Committee have any thoughts on other factors that may have contributed to the substantial increase in data downloading?**

b) **Endorsed Regional Data Solutions - General:** The six regionally-endorsed datasets for which MetroGIS monitors downloading activity – parcels, street centerlines, city/county boundaries, Census geography, Census Demographic Profiles, and Planned Land Use - continue to dominate data downloading activity. (Land Cover is primarily distributed by the DNR, and those statistics are not available.) Of the six datasets monitored, all but Land Cover were consistently in the top 10 datasets downloaded each month during this report period, as has often been the case in the past. The top three endorsed datasets downloaded during the current reporting period were Parcels (153), County & Municipal Boundaries (103), and TLG Street Centerlines (89).

Comments: The **six** identified regionally-endorsed datasets constitute, on average, 37 percent of the total downloads for each of the three months in the reporting period, with a high of 43 percent in August. Staff believes that since these 6 datasets account for this much of the data access traffic out of all 173 total datasets available, it is evident that the effort MetroGIS puts into implementing and seeking continued enhancements to regionally-endorsed datasets is valued. **Does the Committee concur?**

c) **Regional Parcel Dataset:** Since becoming available again on January 31 of this year, the Regional Parcel Dataset has continued to dominate the downloading activity, averaging 51 downloads per month from March to May. Parcel data maintained by Anoka and Hennepin counties were tied

for the most often downloaded among the seven counties' data during the past 3 months (20 each for the period.)

d) Regional Socioeconomic Data: Viewing of the data source pages accessed via the MetroGIS Socioeconomic Resources Page at www.datafinder.org/mg/socioeconomic_resources/index.asp continues to increase. For this reporting period (June through August), there was a total of 122 visitor sessions where a data source page(s) was viewed, compared with 36 for the same period in 2004 – a **239 percent increase**. The U.S. Census of Population and Housing, Minnesota Dept. of Education, and the Metropolitan Council continue to dominate the data accessed.

Comment: Does the Committee have any thoughts to which to attribute this significant increase in activity?

e) Regional Mailing Label Application: The Regional Mailing Label Application, which relies on data from the Regional Parcel Dataset, became operational earlier this year. The number of address lists created was averaging 4 per month until September, when 39 lists were created in just the first eight days of the month. The application will be promoted in the near future, which is expected to result in an increase in usage.

2) **Downloading and Viewing Organizational Documents**

General Use: The number of visitor sessions at www.metrogis.org has been trending upwards over the past 3-½ years. (See the chart in the Reference Section.). Monthly visitor sessions have almost quadrupled, from just over 2,000 per month in early 2002 to around 8,000 in 2005. Staff believes this is due to: a) the redesign of the website in early 2002, which made navigation more intuitive, and b) exposure in a variety of articles that have been published about MetroGIS, and c) the general increase in awareness of MetroGIS.

Comment: Does the Committee have any additional thoughts to explain this substantive increase in site usage or about a desired level of activity that should be established as a goal?

Proposed Reporting Modification: To minimize time spent and to improve accuracy, staff is proposing to modify the web reporting procedures for MetroGIS's informational website www.metrogis.org. This change does not apply to reporting for the DataFinder, which is supported by a newer and more flexible version of WebTrends software.

The problem is with the web reporting software used in conjunction with the NorthStar service operated by the State which hosts MetroGIS's informational website. The DataFinder site is hosted by the Metropolitan Council and is not affected by this proposal. The version of WebTrends used for the NorthStar site does not support non-standard calendar quarters and the option of reporting by the month involves an overly time intensive task relative to the benefit received.

Staff proposes a transition whereby beginning with the December Committee meeting, quarterly reporting comparisons will again be provided (April to June quarter compared with the July to September quarter) but for the two calendar quarters prior to the Committee meeting. The downside with the proposed change is that there will be a two-month lag in the most current reporting period relative the time of the Committee meetings. The information reported is not a critical performance measure and therefore the efficiencies gained are deemed a more important consideration.

Comment: Does the Committee concur with the proposed procedural change?

Document Viewing and Downloading Statistics for the last full calendar period (April to June) are as follows:

- Among the most frequently viewed pages on the MetroGIS informational website, www.metrogis.org, were *How to Find Twin Cities Metro Area Data* (968 visits), *Data Standards*,

Guidelines and Best Practices (763 visits), and *Parcel Data* [history/specifications] (615 visits). See the Reference Section for further detail.

- The most frequently downloaded document is MetroGIS's *Business Object Framing Model* (241), followed by *DataFinder Café – Scope of Work* (232), and MetroGIS's *2004 Annual Report* (227). The promotional brochure that accompanied the 2004 Annual Report was downloaded 107 times.

RECOMMENDATION

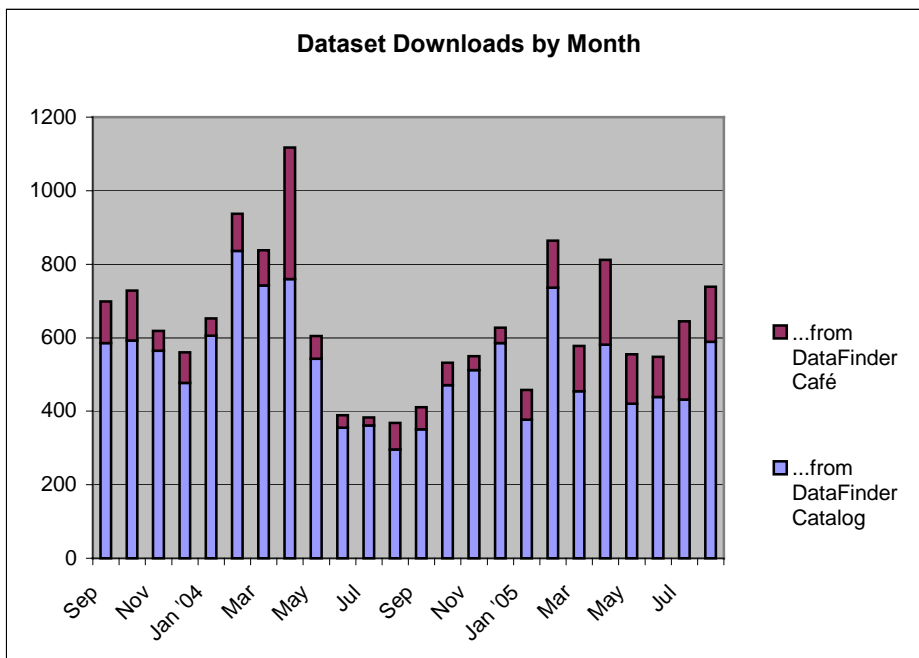
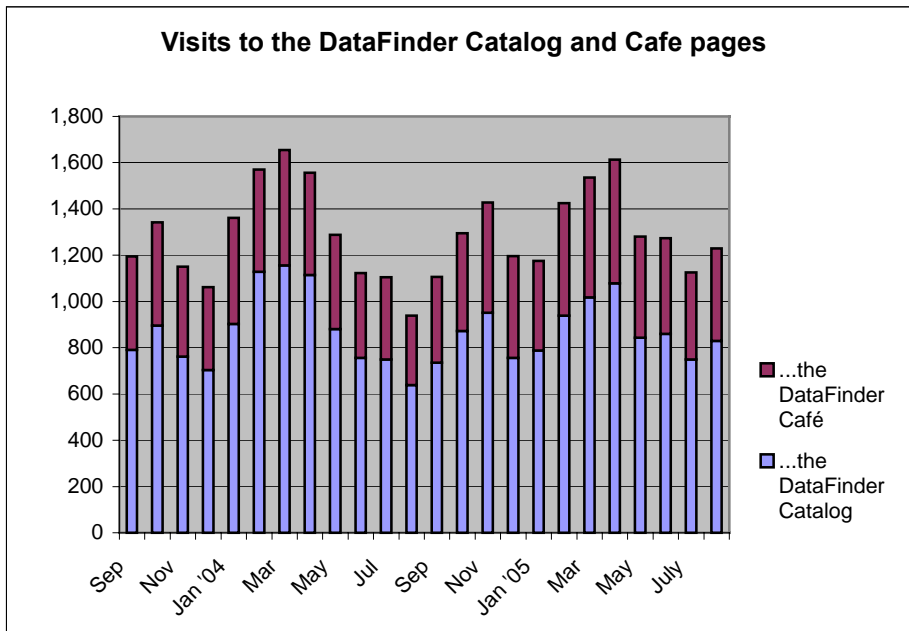
That the Coordinating Committee comment on questions and possible explanations offered by staff in an attempt to explain anomalies in performance measurement statistics for the June - August 2005 reporting period.

REFERENCE SECTION

PAST COMMITTEE ACTION

1. April 9, 2003, the Coordinating Committee:
 - a) Concluded that a formal performance measure report should occur only on an annual basis, with Committee consideration at its December meeting.
 - b) Agreed that staff should offer one or more anomalies (good or bad) in the Performance Measure for discussion at each of the Committee's other quarterly meetings for discussion. The results of these quarterly discussions are to be incorporated into the annual report.
2. January 26, 2005: The Policy Board adopted the 2004 Performance measures Report, as recommended by the Coordinating Committee. It is available for viewing and downloading at http://www.metrogis.org/teams/pb/meetings/05_0126/pm.pdf.

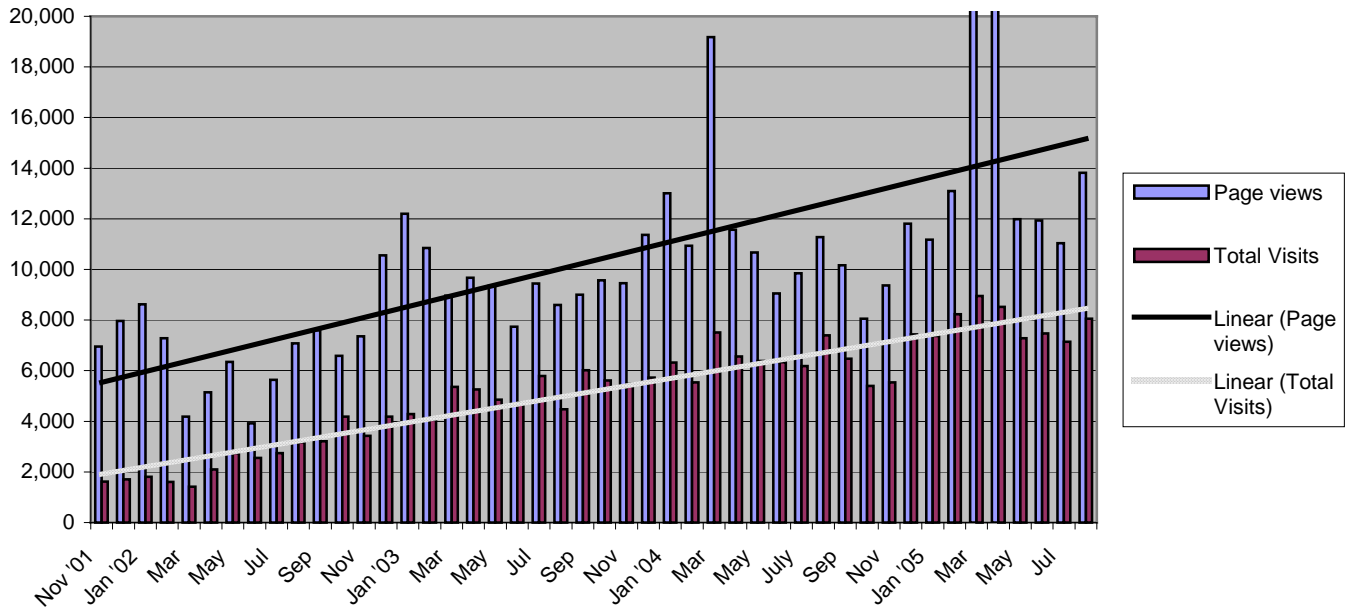
EXCERPTS FROM THE PERFORMANCE MEASURES REPORT – JUNE THROUGH AUGUST 2005



Monthly Usage of General MetroGIS Website (www.metrogis.org)

The lines labeled “linear” in the chart legend below represent trendlines that Excel calculates using regression analysis. These trendlines give a more accurate representation of the data than would a simple monthly average. Note that page views for March and April exceeded the maximum of 20,000 (roughly 22,000 and 34,000.) However, the trendline seen below is still based on these higher numbers.

www.metrogis.org: Page Views and Total Visits: November 2001 - August 2005



2nd Quarter 2005 Selected Statistics for www.metrogis.org

Ten Most Visited Pages (excluding home page)

1. Organizational Structure of Teams
metrogis.org/teams/org_structure.shtml
1,085 visits
2. How to Find Twin Cities Metro Area data
metrogis.org/data/getdata.shtml
968 visits
3. Guidelines for Working with Address Data
metrogis.org/data/standards/address_guidelines.shtml
799 visits
4. Data Standards, Guidelines and Best Practices
metrogis.org/data/standards/index.shtml
763 visits
5. Web Map Services
metrogis.org/data/web_map_services.shtml
620 visits
6. Parcel Dataset
metrogis.org/data/datasets/parcels/index.shtml
615 visits
7. Annual Reports
about/annual_reports/index.shtml
532 visits
8. Business Planning
metrogis.org/about/business_planning/index.shtml
510 visits
9. About MetroGIS
metrogis.org/about/index.shtml
481 visits
10. About Information Needs and Related Regional Solutions
metrogis.org/data/about/index.shtml
462 visits

Ten Most Downloaded Documents

1. Business Object Modeling - Entity Relationship Diagram
metrogis.org/data/about/bom_erd.pdf
241 downloads
2. DataFinder Café - Scope of Work
metrogis.org/data/datafinder/data_distribution_rfp_scope.pdf
232 downloads
3. 2004 MetroGIS Annual Report
about/annual_reports/ar04.pdf
227 downloads
4. DataFinder Café Functional Requirements Document
metrogis.org/data/datafinder/ieddm_func_req.pdf
191 downloads
5. GIS in Anoka County
metrogis.org/documents/presentations/anoka.pdf
161 downloads
6. Organizational Structure
metrogis.org/about/org_structure.pdf
160 downloads
7. MetroGIS Performance Measurement Plan
metrogis.org/benefits/perf_measure/perf_meas_plan.pdf
125 downloads
8. MetroGIS Operations Guidelines
metrogis.org/about/history/ops_guidelines.pdf
117 downloads
9. 2005 MetroGIS Promotional Brochure
about/annual_reports/05brochure.pdf
107 downloads
10. 2005 Goals and Deliverables
about/deliver/goals_05.pdf
103 downloads



TO: Coordinating Committee
FROM: MetroGIS Staff
Contact: Randall Johnson (651-602-1638)
SUBJECT: Google Earth – Possible to Leverage for MetroGIS Community’s Needs?
DATE: August 22, 2005
(For Sept 21st Meeting)

INTRODUCTION

This agenda item is targeted to those Committee members who are unaware of or who have not visited Google Earth, Google’s new website that provides access to satellite imagery and ocean topography for the entire Earth, without fee. A for-fee version is also available that provides additional functionality.

The purpose of this agenda item is to initiate a dialogue about what, if any, ways the public sector could leverage this and similar private sector endeavors to accomplish geospatial needs of the MetroGIS community. If you have not visited the site, you are encouraged to do so before the Committee meeting. However, do not attempt to use this site without high speed Internet access.

Go to <http://earth.google.com> to download the client application. Click on “Get Google Earth” (upper-right corner) for a free download of the client application. An icon will be loaded on your desktop to launch the program.

USING GOOGLE EARTH (The following text has been adapted from the August 2005 issue of *Planning Minnesota*, page 12, written by Cindy Carlsson and Jon Osmond)

...Instead of limiting the user to traditional top-down views of maps or satellite photos, this software wraps satellite photos, varying in resolution, on a three-dimensional model of the Earth’s surface, allowing you to view any location from any angle and altitude you wish. With Google Earth you can fly from outer space to your neighborhood - just type in an address and zoom right in, search for schools, parks, restaurants, and hotels. Get driving directions, tilt and rotate the view to see 3D terrain and buildings, save and share your searches and favorites and even add your own annotations. By selecting options from an extensive menu of “layers,” you can then add more data themes - outlines of roads and rails, models of buildings in major cities, census and crime statistics, business listings and a growing selection of tidbits shared by other Google Earth users. All these themes are clearly marked and the identifiers include addresses. Google Earth includes 3-D models of buildings in 38 American cities, including downtown Minneapolis and St. Paul. These don’t capture any facade details and sometimes mangle the appearance of such structures as the State Capitol, which appears with post rather than a dome, but even these inexact models can help with visualizing the area. The IDS tower is rendered more accurately and flying around downtown Minneapolis and St. Paul can be quite entertaining.

The application starts you off with a view of the world as a blue-and-green sphere in space. The first cue that you’re looking at a different sort of atlas comes when you type in a search for a place: Instead of simply jumping to the new location, Google Earth sends you hurtling toward that spot, plummeting faster and faster until you finally, smoothly glide to a halt in the sky above it. At that point, you must wait a moment or two as Google Earth loads the imagery and displays the details of your location. The client application utilizes Web Mapping Service technology to stream the images to your computer screen, the images are, therefore, not stored on your computer....

RECOMMENDATION

Begin a dialogue to identify what, if any, ways the public sector could leverage this and similar private sector endeavors to accomplish geospatial needs of the MetroGIS community.



TO: Coordinating Committee

FROM: MetroGIS Staff Support Team
Contact: Steve Fester (651-602-1363) and Randall Johnson (651-602-1638)

SUBJECT: Project Updates

DATE: September 14, 2005
(For the Sept. 21st meeting)

Information provided by persons other than the Staff Coordinator is noted.

A) PRIORITY BUSINESS INFORMATION NEEDS SOLUTIONS (See <http://www.metrogis.org/data/index.shtml> for complete information about the status of solutions for each of MetroGIS's common information needs.)

(1) Address (Occupiable Units) Workgroup

The Workgroup has set a self-imposed deadline of submitting a draft outreach white paper to the Coordinating Committee for its consideration at the September meeting. The paper will provide an explanation of the major components of the vision (e.g., rationale, need for local government involvement, database design and proposed web-based application to facilitate capture of occupiable units points). The Workgroup will also present its recommendations and solicit feedback at the Minnesota GIS/LIS Conference this fall. (*Nancy Read, Metropolitan Mosquito Control District, Workgroup Chair*)

MetroGIS has been invited to participate in the URISA/FGDC Street Address Data Standard Effort. Standards defined via the MetroGIS effort were used to facilitate the national discussion. See the related article (approximately halfway down the page) at <http://www.urisa.org/pressreleases.htm#URISA%20Leads%20Effort%20to%20Standardize%20National%20Address%20Data> for more information. Also see Agenda Item 7D(1) for the call for comments on the recommended standard. The comment deadline is October 3.

Gordon Chinander, GIS Coordinator for the Metropolitan Emergency Services Board [MESB; formerly Metropolitan 911 Board] and member of the Coordinating Committee, anticipates sharing the MetroGIS-endorsed vision for this regional solution with the MESB in September or October, as it would likely play a substantive role in the management of this proposed dataset. MESB unanimously endorsed the vision for the regional street centerline dataset (Item C4, below) earlier this summer.

(2) Existing Land Use

Preparations for a user satisfaction forum are on hold until a date is set for Strategic Directions Workshop. See Item C (below) for more information about this Workshop. The Coordinating Committee decided at its March 2005 meeting that the existing land use forum should follow the Workshop, as topics discussed at the Workshop could influence the topics discussed at the land use forum.

(3) Emergency Preparedness Workgroup

A summary of the Workgroup's activities follows. (*Submitted by Randy Knippel, Dakota County, Workgroup Chair*)

a) Data Development and Standards

See Agenda Item 5a. The Workgroup has submitted a recommendation for the Coordinating Committee consideration. It focuses on a data workflow process and associated

collaborative procedures for assembly of several regional datasets needed to support Emergency Management needs and to provide on-going updating. A flowchart describing the process has been developed as a vehicle to obtain buy-in from each of the seven counties for support the proposed multi-county enterprise framework. The recommendation also includes support of an Internet-based, ArcIMS application for use as an outreach tool.

b) Public Health - SNS/BT

The Minnesota Department of Health is coming to closure on their bio-terrorism and mass dispensing site project. This project is driven by the County Health Departments. The makeup of this team is very similar to the makeup of the Emergency Management data group. They require base map templates for consistent output from county to county. This will be an ongoing process of the next 3-4 months.

c) Organizing GIS Resources

A detailed GIS contact list covering 70 cities over 7 counties was compiled for a mailing to encourage GIS people to register on the Contact Database at the Governors Council GIS page. This is the beginning of getting a network of GIS users working in EM across the region.

d) Outreach to Emergency Management Community

A representative from the Workgroup is scheduled to attend and present at the Association of Minnesota Emergency Managers (AMEM) annual conference in partnership with the Governor's Council on Geographic Information Emergency Preparedness Committee.

e) Governor's Council on Geographic Information – Coordination

The GIS EP Contact website is operational (http://gis.metc.state.mn.us/ep_status_map/) and available to promote. Others at the GCGI EP committee are working on a series of slide shows to convey the EM message.

(4) Highway and Road Networks (*Gordon Chinander, Metropolitan Emergency Services Board [formerly Metropolitan 911 Board], Workgroup Chair*)

- a) The “E911 Address and Street Centerline Workgroup” has been actively working on a regional addressable street centerline solution. Initially, workgroup representatives from the Metropolitan Emergency Services Board, LOGIS, and the Metropolitan Council plan to work with Public Safety Answering Points (PSAPs) in the region to define their needs for data and business rules, and identify local address authorities. They will use that information to define a new standardized centerline product and business rules that will meet the needs of the E911 community as well as the broader needs of MetroGIS members.

That new standard will be reviewed by the rest of the workgroup as well as public data providers in the region. Public data providers that determine they can meet the standard may then volunteer to participate in a one-time conversion/enhancement process to create a pilot product for the entire community. Currently, the workgroup envisions creating and issuing an RFP to create this regional pilot product by combining the public data sources with private data sources. The RFP is tentatively proposed to be published this fall. More information on this workgroup can be found at

http://www.metrogis.org/teams/workgroups/e911_streets/index.shtml.

The workgroup is also charged with defining a set of business rules, roles and responsibilities for maintaining the street centerline product. The goal is to have one set of geometry for all users, but the attributes used by the E911 community may be in a separate, linked database to avoid confusion. Details of these rules and processes have not been finalized.

- b) The MetroGIS Roads & Highways technical group has been inactive for several months. A proposal for the goals and procedures of a pilot project to integrate local datasets with

Mn/DOT's LDM was written by staff and issued to the group on January 19th, 2005. To date, no comments or questions have been returned on this proposal. Information about agreed upon goals, expectations, and participant roles can be viewed at http://www.metrogis.org/data/info_needs/highway_roads/index.shtml.

c) There are currently 165 licenses issued to access and use The Lawrence Group's (TLG) Street Centerline Dataset. As of September 8, the types of organizations licensed were as follows:

- Local gov't: **88**
- Regional gov't: **11**
- State/Federal gov't: **22**
- Academic: **44**

(5) Lakes, Wetlands, etc. (*Robert Maki, MN DNR, Coordinating Committee Liaison*)

A White Paper is in progress towards analyzing gaps between 1997 needs and current developed (or developing) data. A 2006 forum is proposed to affirm needs and to discuss gap analysis in terms of defining a Regional solution. A pilot project, to work through partnerships and organizational roles needed to help facilitate the updating of the National Wetland Inventory (NWI) for the Twin Cities metropolitan area, is on hold until the new 2005 infrared imagery is acquired and processed (est. beginning of 2006). The pilot is viewed as a component of a broader Metro Area hydrologic solution that is anticipated once the statewide strategic planning effort is complete.

The initial components of the pilot can be viewed at <http://www.metrogis.org/teams/workgroups/index.shtml> under the Lakes & Wetlands Workgroup. The pilot project partners include the Metropolitan Council, Metropolitan Mosquito Control District (MMCD), U.S. Fish and Wildlife Service, Minnesota Department of Natural Resources (DNR), and the Ramsey Co. Soil and Water Conservation District (SWCD).

(6) Land Cover Dataset Enhancements (*Bart Richardson, MN DNR, Regional Custodian*)

The extent of coverage is now up to 71 percent of the seven-county region, with Anoka and Dakota counties completely done. Work is currently in progress to extend the coverage another 5 percent. In the past year, in response to user feedback, major revisions to the system have been implemented: changed the method for storing attributes, re-worked the manual, improved the ArcView tool, and migrated the final product into a tiled and composite Geodatabase dataset. DNR, the regional custodian, is tentatively planning on hosting a user forum in the first half of 2006 to identify other desired improvements.

(7) Parcels (*Mark Kotz, Metropolitan Council, Regional Custodian*)

There are currently 62 licenses issued to access and use the Regional Parcel Dataset. Staff would also like to note that the U.S. Census Bureau is now a licensed user of the dataset. As of September 13, the types of organizations licensed were as follows:

- Local gov't: **30** (8 added 3rd Party licenses)
- Regional gov't: **4** (1 added 3rd Party licenses)
- State/Federal gov't: **11** (1 added 3rd Party licenses)
- Academic: **17** (2 added 3rd Party licenses)

(8) Socioeconomic Characteristics of Areas (*Amy West, U of M Population Center, Regional Custodian*)

a) The University of Minnesota Population Center staff, aided by Will Craig (CURA), oversee management of the content of the Socioeconomic Resources Page (www.datafinder.org/mg/socioeconomic_resources/index.asp), fix broken links, and coordinate efforts to add new data sources.

- b) In accordance with a MetroGIS Policy Board request, the Metro Public Health GIS Users Group (Tim Zimmerman, Hennepin County, Chair) has secured agreement from the metro area counties for new ways to publish vital statistics (birth and death data) that present more small area information in formats compatible with GIS, while preserving confidentiality of individuals. Such information (the attributes associated with births and deaths, such as the number of low birth-weight births, births to teenage mothers, etc.) can serve as useful indicators of community well-being. Their proposal has not yet been officially sanctioned by the MN Department of Health, but was expected to be taken forward to the Department by the end of July. For more information contact Tim Zimmerman at tim.zimmerman@co.hennepin.mn.us or 612-348-0307.

B) NON-GOVERNMENT PROSPECTIVE FORUM AND STRATEGIC DIRECTION WORKSHOP

At the July 27th Policy Board meeting, the Board authorized the Policy Board Chairperson to set a date for the proposed Non-Government Prospective Forum. The afternoon of November 15 has been selected for the Forum. No decision has been made regarding a date for the subsequent Strategic Direction Workshop, other than at least a month should separate the two events to ensure that information obtained from the forum is digested and adequately summarized for discussion at the Workshop.

C) COUNTY DATA PRODUCER WORKGROUP ACTIVITIES *(Submitted by Dave Drealan, Carver County, Workgroup Chair)*

(1) Regional Parcel Dataset Policy- Access by Non-Profit Interests: Hennepin County Pilot

Hennepin County has instituted a policy permitting qualified non-profit interests to access its parcel data free of charge, subject to licensure that prohibits redistribution. This policy was enacted in cooperation with the M3D project. The results of this access trial are intended to serve as a pilot for possible consideration of a region-wide policy. M3D is a dynamic GIS-based Internet application that brings together labor market, housing and development information and analysis for the Twin Cities metro area into a single tool for economic and community developers. Neighborhood organization and non-profit interests are playing a central role in the M3D project. This Hennepin County access policy requires non-profits to be legally constituted, community-based, and working on a mission that benefits the public including: promoting jobs, economic development, affordable housing, environmental improvements, or community development in order to qualify for free access. Licensed data also must be secure and password protected. Hennepin County retains the right to evaluate requests and approve or deny them on a case-by-case basis.

(2) Negotiating Access to Approved by Unrecorded Plat Data

On July 27, 2005, the Workgroup received a request from the Address Workgroup (see Item C1) seeking to establish procedures to share approved, but unrecorded, plat information (parcel property lines) with local government to use as a preliminary reference data layer as they assign address point locations for new occupiable units.

This request was in conjunction with the MetroGIS Policy Board's approval in April 2005 of a vision statement for a Regional Occupiable Units Point Database. This vision includes development of a web-based application that communities could use to assign point locations and addresses for occupiable units. (The complete statement can be viewed at http://www.metrogis.org/data/info_needs/street_addresses/05_0427_pbreport.pdf). After speaking with several county surveyor officials, it was determined that as many as 5 of the 7 counties do not currently support digital version of pre-final plats and as such staff have withdrawn this request.



Cooperation, Coordination, Sharing Geographic Data

TO: Coordinating Committee

FROM: MetroGIS Staff Support Team
Contact: Steve Fester (651-602-1363) and Randall Johnson (651-602-1638)

SUBJECT: Information Sharing

DATE: September 14, 2005
(For the Sept 21st meeting)

Announcements and information provided by persons other than the Staff Coordinator are so noted.

A) NON-PROFIT MEMBER RESIGNS FORM COMMITTEE

Jeff Corn resigned his position with the Longfellow Community Council effective August 12 to take a new position. On June 29, Jeff was appointed by the Committee to serve as the Non-Profit representative. As his new position is not with a non-profit interest, he has also resigned his seat on the Coordinating Committee.

B) PRESENTATIONS / OUTREACH / STUDIES (not mentioned elsewhere)

Submitted Articles for Fall 2005 Issue of GIS/LIS Newsletter

One article was submitted for the Fall 2005 issue. The newsletter can be viewed at <http://www.mngislis.org/index.htm>.

C) RELATED METRO AND STATE GEOSPATIAL INITIATIVES UPDATE

1. Metropolitan Emergency Services Board: Moving to GIS-Centric 9-1-1 Location System

On August 10th and 11th, the Metropolitan Emergency Services Board (MESB; formerly the Metropolitan 911 Board) heard two vendor proposals to establish GIS-based data management systems as the foundation for metropolitan 911 response efforts. Based on technical capabilities, the vendors, microData GIS (VT) and Contact One (TX) were the top two finalists for a GIS Data Management RFP issued by the MESB this spring. MESB staff plan to recommend one of the proposals to MESB's Technical Operations Committee by October and to the full Board by November. If approved, implementation would begin immediately.

The MESB's recognition of the need to move to a GIS-based solution could present a watershed opportunity for the broader MetroGIS community. The data management systems under consideration would allow for the various data creators across the metropolitan area to update and share information in a real-time environment, ensuring that the data sets are accurate and available for governmental uses beyond 9-1-1 and emergency response needs, whenever they are needed. The proposed systems could provide a gateway to achieving the two regional solution visions adopted by the Policy Board in April for E911-compliant street centerlines and occupiable units.

Based on the MetroGIS staff evaluations, both vendor solutions comprise most (if not all) of the technology to build and maintain these datasets within the context of their respective visions. The organizational structures of the MESB and MetroGIS also provide the capacity to manage the many participant roles and establish shared funding as a single enterprise. In effect, the MESB could become the regional custodian of the regional street centerline and occupiable unit data solutions - or at least play a principal role in the dataset management. The Metropolitan Council currently serves as the regional custodian for the regional street centerlines, but the data is maintained by The Lawrence Group. MetroGIS staff feels this could be the most wide-reaching opportunity to capture inter-organizational efficiencies through the use of GIS technology in the Twin Cities since the creation of

MetroGIS itself. *(Submitted by Gordon Chinander and Nancy Pollock, Metropolitan Emergency Services Board)*

2. Minnesota's Open Source Internet MapServer to Receive Governor's Commendation

Minnesota has developed an outstanding tool for serving maps on the Internet. MapServer is used by hundreds of organizations around the world, perhaps thousand, although it is hard to know because the software is free and available to everyone. Originally developed by Tom Burk and Steve Lime at the University of Minnesota, it is being constantly updated and enhanced by its users. They can do this because all the source code is public. Quoting from one user, "MapServer was seen to outperform ArcIMS [the major commercial package] for rendering the types of images the DataPlace requires, and was chosen as the DataPlace map image rendering engine." The Governor's Commendation award is sponsored by the Minnesota Governor's Council on Geographic Information. It is given at the annual GIS/LIS Conference to outstanding GIS projects that provide benefits to many organizations, not just the sponsoring agency. The Commendation is awarded irregularly, only when an outstanding project is identified. *(Submitted by Will Craig, U of M CURA)*

3. E-Government Needs Assessment Conducted by Metropolitan Council

The E-Government Roadmap will be a strategic plan for the development of the Metropolitan Council's website functionality and online services. During the first phase ("visioning") of the project, information and ideas were gathered through fact-finding discussions with 53 people, both internal staff and external stakeholders. Another 101 people provided input through a survey that asked: Can Metropolitan Council services or information be improved with new web features, interfaces, or online services?

The complete scan identified over 80 opportunities, potential web tools, and solutions to Metropolitan Council service needs. These opportunities and solutions were roughly prioritized to cull out a Top 10 list of e-government opportunities that the Council could pursue over the next few years. A phase 1 report – covering service needs, opportunities identified, decision factors for prioritization, and foundational requirements – was reviewed and approved on June 1 by the Project Review Team.

The project is now proceeding with phases 2 and 3. These phases involve analysis of technical architecture and foundational prerequisites to e-government; analysis of management process, resources and standards; recommendations; and "conceptual architecture" profiles of three of the Top 10 opportunities carried over from phase 1. The three opportunities selected for "conceptual architecture" profiles are: (1) an enterprise-wide content management system; (2) interactive GIS functionality built into pages and portals, starting with the Metro Transit Trip Planner as a pilot; (3) an Online Regional Planning WebBook. *(Submitted by Todd Graham, Metropolitan Council Research Manager)*

4. Minnesota 3D Project – Needs Assessment Underway

Eighteen M3D consortium partners, including neighborhood and community organizations serving Minneapolis and several Twin Cities suburban municipalities, have been asked to respond to a community development/GIS-related needs assessment. The results will be used to help the M3D project team design a proposed Internet-based application. These results will also likely be valuable to MetroGIS as investigations proceed into development of commonly needed geospatial-based applications.

M3D community partners have identified community development applications for current work, including data, reporting and presentation needs. These projects, to be completed over the next several months, will influence the online mapping application that the Labor Market Information Office at DEED is developing for M3D. An alpha version will be created by September 2005 and a beta site for testing should be ready by February 2006.

An excerpt from the M3D Project Application's Executive Summary states: "Building on the existing GIS infrastructure, M3D is an Internet-accessible and integrated system of employment, housing and development information and analysis tools for neighborhoods, community development corporations, employment trainers, businesses, central cities, suburbs, counties of the Twin Cities metropolitan region, and the State of Minnesota.....By combining new statewide data on employment and demographics through an agreement with the U.S. Bureau of Labor Statistics, the Social Security Administration, and the Census Bureau with the existing region-wide parcel level housing data, Minnesota 3-D will be a "first-of-its-kind" system.....M3D is a scalable, standards-based system that can accommodate expanded data layers and geographic coverage." "The centerpiece of this approach is the creation of an online mapping application. With emerging Internet-based mapping technologies, this is the most cost-effective way to maximize access, analytical capacity, and user-to-user information sharing." (Submitted by Will Craig, U of M CURA)

5. Refinement of Minnesota's Municipal Boundary Adjustment Procedures

The Minnesota Land Management Information Center proposes to refine the state's municipal boundary annexation authorization and documentation procedures in a way that integrates 1) emerging Framework content standards, 2) the Web Feature Services capabilities of Minnesota MapServer software, and 3) the state's GIS coordinating council recommendations for an integrated enterprise solution that serves local, state and federal government needs from a single authoritative source.

Minnesota's municipal boundary changes are managed under the direction of the Office of Administrative Hearings Municipal Boundaries Adjustment Unit. The MBAU originated in 1959 as the Municipal Boundary Commission, the nation's first body of its kind designed to facilitate local incorporation and boundary adjustment questions. MBAU annually processes more than 400 municipal boundary changes. Up-to-date municipal boundary change information is critical to the business needs of all levels of government in every corner of the state. In addition to the legal and orderly transfer of jurisdictional authority among the counties and municipalities affected, annexation transactions affect statutorily required programs in the Departments of Transportation (base map update and federal state aid calculation), Revenue (municipal tax authority domains), and Natural Resources (water permitting), the State Demographer (population estimates), Secretary of State (voting district/precinct changes, polling place locations), State Legislature (redistricting), and Bureau of the Census (TIGER updates).

While the MBAU process effectively satisfies the legal codification of annexation decisions, the process falls short of providing adequate geospatial information to satisfy many of those business requirements. The process deals with legal descriptions of boundary changes, not mapped data. Agencies often duplicate work to convert those legal descriptions to mappable data in both analog and digital form. However, no single organization integrates digital geospatial boundary data for Minnesota and, therefore, no trustworthy source for this important enterprise framework layer is formally recognized.

LMIC is working to address this need in a strategy laid out by the Minnesota Governor's Council on Geographic Information, the state's GIS coordinating body. In its 2004 strategic plan, A Foundation for Coordinated GIS: Minnesota's Spatial Data Infrastructure, the Council recommends a plan that better coordinates the collection, management and distribution of Governmental Unit Boundary data. LMIC is working with the MBAU and the Department of Transportation to introduce rigorous coordinate geometry conversion methodologies to convert legal descriptions of proposed boundary changes to reliable digital geospatial renditions, and then incorporate those spatial data into a statewide framework. The process has been successfully prototyped to provide the Secretary of State with data for the 2004 elections. Partial updates are routinely prepared for the Department of Revenue, but a routinely updated, sustainable municipal boundary database remains an elusive target.

As the ANSI/INCITS Government Boundary Units Framework standards stabilize this year, we propose applying them to the emerging statewide annexation database. Procedures for COGO translations of legal annexation descriptions, currently being tested, will be finalized. LMIC's project team will work with MapServer development staff at the DNR to refine GML creation through MapServer's WFS connector to adhere to all formal standards. Those refinements will be shared with DM Solutions Group; a Canadian firm developing value-added products and services based on open source technologies, most notably, MapServer. LMIC will support current efforts at DNR to document the process of setting up a successful WFS installation. LMIC will work with the Departments of Transportation and a growth edge county government to test the interoperability of that GML expression. The result of this effort will be a WFS-compliant offering of statewide, current and well-documented municipal boundary data. This proposal will leverage work underway at the DNR as part of a 2004 CAP project to refine GML generated from the WFS connector currently provided through Minnesota MapServer and to provide detailed instructions to assist in the transfer of WFS technology. *(Submitted by David Arbeit, Director, Office of Geographic and Demographic Analysis, MN Department of Administration)*

6. County-Based GIS User Group Activities

No updates were received as of the distribution date for this report.

7. Coordinating Committee Members to Receive Polaris Mid-Career Awards.

Rick Gelbmann and Randy Knippel of the MetroGIS Coordinating Committee will be honored by the Minnesota GIS/LIS Consortium at their annual conference in St. Cloud on October 4. The Polaris Mid-Career Award is given to three outstanding leaders each year. Polaris, a triple star, provides direction to travelers and provides our state with its motto. Along with Annette Theroux of Walker Minnesota, Gelbmann and Knippel have provided Minnesota with direction and leadership. Gelbmann manages GIS activities for the Metropolitan Council, serves as vice chair of the Governor's Council on Geographic Information, and was a key force in starting MetroGIS. Knippel manages GIS activities for Dakota County, serves as vice chair of the MetroGIS Coordinating Committee, and is leading the Emergency Preparedness Committee for MetroGIS. In addition, Ken Pakarek of LMIC is to receive a Lifetime Achievement Award.) *(Submitted by Will Craig, U of M CURA)*

D) RELATED FEDERAL/NATIONAL GEOSPATIAL INITIATIVES UPDATE

1. Draft National Street Address Data Standard Released for Comment

The Urban and Regional Information Systems Association (URISA) is calling for comments on a recommended Street Address Data Standard. It is important to note that the efforts of the MetroGIS Address and Street Centerline Workgroups, over the past year to define address standards for the MetroGIS community, were submitted to launch this national effort.

The draft standard (117 page document) is available at www.urisa.org/address_data_standard.htm. **The comment period for this draft standard will end on October 3, 2005.** A second draft will be posted for comment after the URISA annual conference (October 9-12).

The objective of this effort was to create single street address data standard that consists of four parts: content, classification, quality, and transfer. URISA submitted a formal proposal to the Federal Geographic Data Committee (FGDC) to facilitate this effort, which was accepted by the FGDC. The resulting recommended standard is intended to provide a statement of best practices for defining street address data content and classes, setting standards and tests of street address data quality, and facilitating exchange of street address data files.

The results of this collaborative process will be submitted through the FGDC's formal standards approval process. If they are accepted, the Census Bureau will maintain the standards under the auspices of its duties as theme lead for the Federal Subcommittee on Cultural, Society, and Demographics. According to Mark Kotz, lead staff to the MetroGIS Address Workgroup, the national standard development process was exceptionally well done.

URISA Past President Martha Lombard, GISP and former Board Members Hilary Perkins, GISP and Ed Wells, GISP headed up this effort on URISA's behalf. Additional Core Committee team leaders include Carl Anderson, Anne O'Connor, and Sara Yurman.

URISA For the past six years, URISA has sponsored and organized the annual Street Smart and Address Savvy Conference (endorsed last year by the National Emergency Number Association (NENA), the United States Postal Service (USPS), and the U.S. Census Bureau), covering a broad spectrum of addressing issues and practices. URISA is a USGS Partner and an FGDC Stakeholder.

NENA is a professional association of 7,000 members and 46 chapters dedicated to providing effective and accessible 9-1-1 services for North America. NENA's objectives include the protection of human life, the preservation of property, and the maintenance of general community security are among NENA's objectives.

The FGDC is a long-standing national consortium organized in 1990 by the Office of Management and Budget to facilitate the development of a National Spatial Data Infrastructure (NSDI). Building the NSDI requires partnerships to facilitate the development of technologies, policies, and the sharing of geospatial data throughout all levels of government, the private and non-profit sectors, and the academic community.

2. **FY 2006 National Geospatial Programs Office (NGPO) Plan of Action Released**

Recently, the NGPO released guidelines for an ambitious, integrated three-part program to substantively move the nation closer to realizing the NSDI vision by June 30, 2006. (The NGPO was created in August 2004 to coordinate, under one director, FGDC, Geospatial One Stop, and The National Map programs.) A summary of the NGPO's plan published in the June 2005 edition of GeoWorld can be viewed at <http://geoplance.com/uploads/FeatureArticle/0506gc.asp>. The complete plan can be viewed at http://www.metrogis.org/teams/cc/meetings/05_0629/index.shtml.

In short, this ambitious Plan sets forth detailed strategies for: 1) moving toward a national GIS, 2) focusing on "matters and places of national importance" and, 3) concentrating on "management excellence". The Staff Coordinator has asked Ron Wencil, USGS Regional Liaison and member of the Coordinating Committee, to meet with MetroGIS leadership to talk about partnership opportunities that may be appropriate for the MetroGIS community in accordance with this Plan of Action. *(Submitted by Ron Wencil, USGS)*

3. **MetroGIS Cited in New Book - Only United States Example**

A new book by Dr. Ian Masser, "*GIS Worlds – Creating Spatial Data Infrastructures*", was recently published by ESRI Press. In the Foreword, Jack Dangermond, President of ESRI, states "Dr. Ian Masser's lifelong dedication to geography and his experience in the development of spatial data infrastructure (SDI) is unmatched..." The objective sought by Dr. Ian Masser, through the writing this book, is to provide an "overview of the development of SDI over the past 10-15 years ... (and) focus on new policy options and institutional structures associated with the formulation and implementation of successful SDI initiatives. The overall scope (of the book) is worldwide, although particular attention is given to developments in the four countries regarded as among the leaders in the field: Australia, Canada, the United Kingdom and the United States."

MetroGIS is the only example highlighted for the United States. Dr. Masser calls attention to several of MetroGIS's core principles: a) reliance upon a consensus decision-making process for all matters fundamental to long-term success, b) powers and resources to develop and sustain MetroGIS are secured through a voluntary, collaborative and cooperative process, and c) active involvement of elected officials representing core stakeholders. He also calls attention to the importance of the Metropolitan's Council's role as primary sponsor, as is the critical role played by each of the

volunteer data custodians. Permission has been requested to copy the excerpt about MetroGIS for viewing by MetroGIS participants.

4. **MetroGIS Participants Cited in Article about “White Knights”**

Five MetroGIS participants were highlighted in a recent article in the URISA Journal. URISA is an international association of professionals using GIS and other information technologies in state and local government. Its journal is refereed and is considered the best in the field.

The article, “White Knights of the Spatial Data Infrastructure,” by William J. Craig is about people who are pushing hard to share data across organizations – beyond what is expected. It is based on interviews with exceptional people in Minnesota. It asks them what they did and why they did it.

Each of their answers is detailed, but the answers can be summarized too. There are three common motivating factors for these white knights:

1. **Idealism:** They think better data makes better decisions.
2. **Enlightened self-interest:** Making their data available helps them and their organizations.
3. **Peer support:** They live in a professional environment that honors data sharing.

Among those interviewed were: Randall (Randy) Johnson, MetroGIS Staff Coordinator; David Arbeit, former chair of the Coordinating Committee, and Larry Charboneau, Les Maki and Gary Stevenson, former members of the Coordinating Committee. The author of the article, Will Craig, is a former chair of the Coordinating Committee.

To access the full article, see <http://www.urisa.org/Journal/Vol16No2/Craig.pdf>, and at <http://www.cura.umn.edu/reporter/05-Summ/Craig.pdf> (*Submitted by Will Craig, U of M CURA*)

5. **Public Participation GIS Conference held in Cleveland**

Non-profits and community-based organizations are increasingly using GIS to support their activities. Each year an international conference provides an opportunity to share experiences and learn from each other. The fourth annual conference was held in Cleveland, OH from July 31 to August 2. Will Craig, U of M CURA and MetroGIS Coordinating Committee, was on the conference committee and attended along with Jeff Matson, from the M3D project at the U of M. New breakthroughs are providing better access to data and maps over the Internet. One noteworthy story highlighted a Camden, NJ organization that is training high school kids from an area with high dropout rates to run a GIS and Internet service bureau; the organization is delivering quality products to clients and has moved 30 of its students into college. Conference proceedings will be available on CD soon. (*Submitted by Will Craig, U of M CURA*)