



Cooperation, Coordination, Sharing Geographic Data

TO: Policy Board

FROM: Technical Leadership Steering Workgroup and Coordinating Committee
Coordinating Committee Chair: William Brown, Hennepin County
Contact: Randall Johnson (651-602-1638)

SUBJECT: Meeting Shared Geospatial Needs Beyond Data

DATE: April 3, 2008
(For the April. 23 meeting)

INTRODUCTION

The Coordinating Committee respectfully requests Policy Board to:

- 1) Endorse, as appropriate for MetroGIS's efforts, provision of the following roles in pursuit of collaborative solutions to shared needs for applications and web services: leadership, coordination, policy direction, and testbed funding to leverage the GIS resources possessed in the metropolitan region.
- 2) Endorse the suggested next steps presented below and their relative importance regarding MetroGIS's pursuit of collaborative solutions to shared needs for applications and web services.
- 3) Concur that a need exists for dedication of a Technical Coordinator to join the MetroGIS support team and pursuit of appointment of this resource by the Metropolitan Council, if the Council is willing to do so.

PREVIOUS DIRECTION FROM THE POLICY BOARD

On October 17, 2007, the Policy Board adopted the 2008-2011 MetroGIS Business Plan (http://www.metrogis.org/about/business_planning/2008-2011_businessplan.pdf). With this action, MetroGIS's scope was expanded to include seeking solution for shared application needs. This need, subject of this report, was also acknowledged as the most critical need for MetroGIS to address to ensure continued relevance to changing stakeholder needs. The Board also acknowledged that doing so will require additional technical leadership resources and additional stakeholder cooperation.

Accordingly, the Board directed the Coordinating Committee to develop a recommendation as to how to best proceed for consideration at its April 2008 meeting. The Board requested this recommendation in the form of a suggested work program strategy (see Agenda Item 5c) and support requirements for the remainder of 2008 and for 2009 and beyond. (See the Reference Section for more information about the implications of the Policy Board's adoption of the 2008-2011 Business Plan and the charge to the Committee.)

JANUARY 24 "BEYOND DATA" WORKSHOP

The Coordinating Committee concluded that hosting of workshop facilitated by an expert(s) in area of geospatial applications would be the most effective way to act on the direction received from the Board on October 17, 2008. The recommendations presented in this report evolved from this workshop which was held on January 24, 2008, entitled "Meeting Shared Geospatial Needs Beyond Data", and subsequent evaluation of options by the Technical Leadership Advisory Workgroup of the Coordinating Committee.

The purpose of the workshop was to reach agreement on:

- 1) A foundation from which to define appropriate roles for MetroGIS regarding pursuit of collaborative solutions to shared needs for application and web services; a top priority defined in the 2008-2011 Business Plan.
- 2) Next steps to act on those roles.

The 32 workshop participants included Policy Board members Cook and Elkins. (See the Reference Section for information about the Workshop.)

COORDINATING COMMITTEE ACTION

At its March 27, 2008 meeting, the Committee unanimously approved the recommendations presented in this report. (An excerpt from the Committee's meeting summary is provided in Attachment A.)

In addition to the actions described in the recommendations presented below, the Committee also:

- 1) Authorized its Technical Leadership Steering Workgroup to continue to serve as a surrogate for dedicated technical leadership to maintain momentum gained at the January 24 "Beyond Data" workshop. Assuming the Policy Board approves the proposed 2008 and 2009 work plans, this workgroup will oversee the process to "identify and prioritize shared needs for applications and web services"; a top priority project to complete in 2008.
- 2) Directed the Technical Advisory Team to test the potential to expand its scope to oversee a "mail list or list serve" mechanism as the initial strategy to foster partnering in addition to knowledge sharing.
- 3) Authorized creation of a workgroup to guide updating of MetroGIS's Outreach Plan (see Attachment C), once specific shared needs for application are defined. This updated plan is to incorporate direction provided in the 2008-2011 MetroGIS Business Plan and recommendations developed as a component of the "Meeting Shared Needs Beyond Data" investigate.

WHAT IS A GEOSPATIAL APPLICATION? WEB SERVICE?

With adoption of the 2008-2011 MetroGIS Business Plan in October 2007, pursuit of collaborative solutions to shared needs for geospatial applications and web services was defined as a top priority to ensure continued relevance to changing stakeholder needs. For purposes of discussion of work programming, when the term "application" is used the meaning is inclusive of all aspects, that is, applications, web services, and related components.

Definitions for these terms follow (excerpts from the Glossary in the Business Plan document). Examples will be provided when this report is presented to the Policy Board to assist Board members gain a firm understanding of the meaning of these terms as well as impacts and outcomes sought via MetroGIS's work programming:

Application: *a term used to describe a mechanism for creating information from data. By one definition, an application is a "program or web mapping service designed to perform a specific function directly for the user." Applications are also referred to as "software". Examples include word processing software, database programs, and mapping tools.*

Combination of computer software (e.g., web services, computer program, or script) used to query, combine, analyze, and/or print visualizations of geospatial data to address a particular business information need.

A computer program is used for a specific task or purpose, such as accounting or land use planning.

The use of GIS technology to solve problems, automate tasks, and/or generate information within a specific field of interest. For example, a common agricultural application of GIS is determining fertilization requirements based upon maps of soil chemistry and previous crop yields.

Web Service: *A software component accessible via the Internet for use in other applications. Web services are built using industry standards and thus are not dependant upon any particular operating system or programming language, allowing access to them through a wide range of applications.*

MAJOR CONCLUSIONS – INVESTIGATION OF SHARED NEEDS "BEYOND DATA"

- 1) The findings of the January 24th "Beyond Data" workshop and subsequent evaluation corroborate the value that can be achieved through improved efficiencies, across MetroGIS stakeholder community, from achieving of the scope expansions and related activities set forth in the 2008-2011 MetroGIS Business Plan. In particular, the need to:
 - a) Expand solutions to shared geospatial needs to include applications
 - b) Facilitate better data sharing by improving processes and adding more data and users.
 - c) Promote a forum for knowledge sharing
 - d) Build advocacy and awareness of the benefits of collaborative solutions to shared needs
 - e) Maintain funding policies that make the most efficient and effective use of available resources for system-wide benefit

- f) Optimize MetroGIS governance and organizational structure
- 2) The findings of the Beyond Data” evaluation corroborate the assumption made in the 2008-2011 Business Plan that achieving the applications “scope expansion” will require additional technical leadership support in the form of a Technical Coordinator. Reliance upon a workgroup or other alternative to an individual carrying out the responsibilities of a Technical Coordinator was found to be unrealistic.
 - 3) MetroGIS’s roles in pursuit of solutions to shared application needs, in order of their relative importance, should be:
 - a) Leadership
 - b) Coordination
 - c) Policy/Procedures
 - d) Funding

These are the same roles that MetroGIS has served to realize past data-centric accomplishments. Regarding funding, the Workgroup recommends that the established MetroGIS Regional GIS Project program continue to provide project seed money, and that resources beyond the Metropolitan Council’s MetroGIS budget, such as grants or contributions from participants, be considered. (See the Reference Section)

- 4) Sufficient direction was received to conclude that nine of ten candidate categories of sharing regarding applications (see Item 3 in the Reference Section) are appropriate for MetroGIS to promote among stakeholders.
- 5) The preliminary workplan priorities and budget adopted by the Policy Board in October 2007 should be modified to align resources with priority actions needed to both sustain previous accomplishments and pursue the priority needs refined through the “Beyond Data” investigation.

NEXT STEPS - TO BEGIN ADDRESSING SHARED NEEDS FOR APPLICATIONS

Based upon the conclusions outlined above, the following next steps are recommended to launch MetroGIS’s efforts to address shared needs for applications and web services. These recommendations assume that past collaborative accomplishments will continue to be sustained and that support resources available in the past will continue. The suggested priorities have been incorporated into the 2008 and 2009 work plans presented in Agenda Report 5c.

Proposed Next Step	Priority	Strategy -
1. Define a strategy to secure a Technical Coordinator and initiate negotiations	Very High	Establish dedicated staff position to work with Staff Coordinator and hire as soon as possible; Technical Leadership Steering Workgroup and/or mobility assignments to cover tasks until hire.
2. Define and prioritize shared needs for applications and web services. (Investigate do along with 2 nd -generation definition of priority shared data/information needs)	Very High	Timing and strategy will depend upon whether Technical Coordinator is secured Begin immediately, if possible, with oversight from the Technical Leadership Steering Workgroup.
3. Populate metadata for GeoServices Finder, including the creation of template to promote standardization	High	Use original project workgroup plus related state workgroups to define a strategy – <i>candidate 2008 Regional GIS Project?</i> Timing and strategy may depend upon whether Technical Coordinator is secured.
4. Define a more fully developed geographic data, applications and services broker based on needs outlined by the forum, the state conceptual geospatial architecture plan and the GeoServices Finder project.	High	Develop a more mature, MetroGIS specific vision of what a full geo data and services finder and broker would be, what resources would be needed to support it, and candidate implementation scenarios. Begin to champion the concept. Leverage the state Broker project workgroup.

Proposed Next Step	Priority	Strategy -
5. Explore methods for establishing trust in the reliability of shared services (e.g., multi-nodal systems, Service Level Agreements, etc.) and define appropriate role(s) for MetroGIS in establishing that trust	High	Timing and strategy will depend upon whether Technical Coordinator is secured; may involve Technical Advisory Team and/or special workgroup. Leverage the delivery of the Geocoder service as a test bed for developing documentation for custodial roles and responsibilities, in particular in the form of a Service Level Agreement that build on the current practice of documenting these aspects via Regional Solution Policy Statements.
6. Ensure “obstacles to sharing” defined at the January 24 th workshop do not become reality. [e.g., address security, licensing, and budget cycles (for trust issues, see above)].	High	Staff coordinator develop strategy to deal with these issues (aided by Technical Coordinator and/or Workgroup) and present to Coordinating Committee.
7. Define communication and presentation needs related to shared applications, such as collaboration mechanisms, “One-Stop Shop” web site, linking between MetroGIS related sites. (Collaboration registry proposal suggested by PlanGraphics)	High	Pass forum recommendations and related Workgroup discussions regarding creation of a “Collaboration Portal” and related components to those updating the Outreach Plan. Ask the Technical Advisory Team to expand scope to oversee a “mail list or list serve” mechanism as the initial strategy to foster partnering and knowledge sharing. A role of the proposed Technical Coordinator would be to moderate this communication mechanism
8. Create a forum for visioning, coordinating, finding and funding technical resources for the development and testing of applications and web services	Medium	Timing and strategy will depend upon whether Technical Coordinator is secured; may involve Staff Coordinator, Coordinating Committee, and Technical Advisory Team.
9. Incorporate recommendations related to applications into updated Outreach Plan. The nine categories of application-sharing activities should be a focus. Include ideas such as a recognition (award) program to highlight successful projects.	Medium	Pass this recommendation to those working on Outreach Plan. Efforts could be aided by input from Technical Coordinator
10. Incorporate discussion of Technical Leadership needs and recommendations of the PlanGraphics Team into the pending Leadership Development Plan (formerly referred to as Leadership Succession Plan)	Medium	Pass this recommendation to those working on Leadership Development Plan (described Agenda Item 5g, March 27 Committee meeting)
11. Incorporate the benefits evaluation-related recommendations of the PlanGraphics Team into the pending update of the Performance Measurement Plan	Medium	Pass this to those working on Performance Measurement Plan. Efforts could be aided by input from Technical Coordinator

TECHNICAL LEADERSHIP AND COORDINATION SUPPORT:

Need defined: The need to secure the skills and expertise of a Technical Coordinator, as a member of the MetroGIS support team, was initially identified during development of the 2008-2011 MetroGIS Business Plan, adopted October 17, 2007. This need was corroborated as an outcome of the above-referenced “Beyond Data” workshop held on January 24th. Recommended responsibilities and skills for a Technical Coordinator are presented in Attachment B.

The proposed 2008 and 2009 work programs include a statement of supplemental resource requirements anticipated to achieve each proposed activity. Technical leadership and coordination are cited as needs to achieve full satisfaction, in a timely manner, of many of the application-related activities; activities that must be accomplished to achieve the outcomes called for in MetroGIS’s 2008-2011 Business Plan and whose importance was also corroborated at the January 24th Workshop..

Options Investigated: Options for providing this support were investigated as a task associated with the “Beyond Data” evaluation. The conclusion was that this support cannot be effectively achieved via dependence on a workgroup(s) serving in a surrogate staff leadership role or via support solely by the Policy Coordinator; a consultant; individuals affiliated with stakeholder organizations on a project-by-project basis by; or by multiple individuals sharing the responsibilities of a Technical Coordinator. A major consideration of in reaching this conclusion was that options other than a single person cannot effectively establish and maintain long-term work relationships necessary to effectively achieve collaborative solutions.

For instance, the Technical Leadership Steering Workgroup was created, in part, to test the “leadership by workgroup” option. In the end, two members assumed responsibility for carrying out the more in-depth evaluation than could be accomplished in a group setting or by the Policy Coordinator. Without their in-depth analysis, the workgroup’s efforts would have been substantially less rigorous.

As a result, the conclusion was reached that an individual should be secured to provide the technical leadership and coordination expertise needed to achieve the outcomes set forth in the Business Plan, that is, assist MetroGIS fully and effectively maintain relevance to changing stakeholder needs.

Discussions with Metropolitan Council: On January 30th, a meeting was held with senior Metropolitan Council leadership to determine if there was support to pursue dedicating the above-describe technical coordination resource to support of MetroGIS’s “foster collaboration” function. Senior leadership acknowledged the substantial benefits realized by the Council and the community through the efforts of the Staff Coordinator, which currently a Council-financed position, and expressed cautious optimistic support that investment in the subject technical coordinator position would likewise benefit the Council. Negotiations on the specifics of such a position were in progress at the time that the Council enacted a hiring freeze, which was not anticipated at the time of the January 30th meeting. The freeze was in response to a projected \$47 million budget deficit associated with the Council’s transit operations that arose during the current Legislative session. Council leadership greatly values the benefits it receives from its participation in MetroGIS’s efforts, but is not in a position to give further consideration to the technical coordinator proposal until the budget deficit is resolved.

Workgroup to Maintain Momentum Until Dedicated Staff Available: The Coordinating Committee has concluded that the only practical option to maintain momentum gained at the January 24 “Beyond Data” Workshop until a Technical Coordinator can be secured, is to ask the members of its Technical Leadership Steering Workgroup to provide advice and oversight, to the extent possible, to move forward with critical next steps.

RECOMMENDATION

That the Policy Board:

- 1) Endorse, as appropriate for MetroGIS’s efforts, provision of the following roles in pursuit of collaborative solutions to shared needs for applications and web services: leadership, coordination, policy direction, and testbed funding to leverage the GIS resources possessed in the metropolitan region.
- 2) Endorse the Coordinating Committee’s suggested next steps and their relative importance regarding MetroGIS’s pursuit of collaborative solutions to shared needs for applications and web services.
- 3) Concur that a need exists for dedication of a Technical Coordinator to join the MetroGIS support team to maintain relevance to changing stakeholder needs.
- 4) Endorse continued negotiations with the Metropolitan Council to dedicate additional support resources to MetroGIS’s “foster collaboration” function sufficient to accomplish the roles and responsibilities of a Technical Coordinator, as described in Attachment B.

(Note: See Agenda Item 5c for the proposed 2008 and 2009 Work Plans and accompanying budget requests.

REFERENCE SECTION

TECHNICAL LEADERSHIP STEERING WORKGROUP

Immediately following adoption of the 2008-2011 MetroGIS Business Plan on October 17, 2007 by the MetroGIS Policy Board, the Coordinating Committee created the Technical Leadership Steering Workgroup. The Workgroup's primary charges were to submit recommendations to the Policy Board for consideration at the April 2008 Board meeting concerning:

- Appropriate role(s) for MetroGIS concerning pursuit of shared needs for applications and web services.
- Identification of additional technical leadership and support needed to effectively carry out this role(s) to ensure responsiveness to changing needs of MetroGIS stakeholders.
- Modifications to the preliminary 2008 workplan and "foster collaboration" budget necessary to achieve the recommended role(s).

This Workgroup guided the process to retain a consultant team to facilitate the January 24th workshop and preparations to host the workshop. The Consultant team consisted of John Antenucci, President and CEO of PlanGraphic, Inc., and Jim Fries, also with PlanGraphics, Inc. MetroGIS project funding provided by the Metropolitan Council was used to retain the consultant team. The fee was \$7,740.

Members of the Technical Leadership Steering Workgroup:

Bob Basques (City of St. Paul – TAT)	*Mark Kotz (Metropolitan Council & TAT Support)
David Bitner (MAC-Coordinating Committee)	Jim Maxwell (TLG - TAT),
David Brandt (Washington County – TAT Chair)	*Nancy Read* (MMCD - Coordinating Committee)
Jim Bunning (Scott County - Coordinating Committee),	Tim Loesch (DNR- Coordinating Committee)
Pat Cummins (ESRI)	Ben Verbick (LOGIS – Address Workgroup)

* Co-leaders

Staff support team: Randall Johnson, Jonathan Blake and Chris Kline

POLICY BOARD DIRECTION

On October 17, 2007, the Policy Board adopted the 2008-2011 MetroGIS Business Plan (http://www.metrogis.org/about/business_planning/2008-2011_businessplan.pdf). This Plan recognizes that MetroGIS must address three new areas to ensure continued relevance to changing stakeholder needs:

- Expand solutions to shared geographic information **needs beyond data-centric solutions to include applications** and, if necessary, related infrastructure.

The Policy Board recognized that achieving this role expansion is the most critical need for MetroGIS, in 2008 and beyond, and that doing so will involve additional resources in the areas of technical leadership and stakeholder cooperation

- When appropriate and on a project-by-project basis, seek ways to improve interoperability of geospatial resources with the jurisdictions that adjoin the Twin Cities metropolitan area.
- Seek opportunities to partner with more non-government interests to collaboratively address information needs they share with government interests.

The following actions were adopted by the Board and provided the foundation for the initial 2008 work plan.

- Sustaining past accomplishments, including engaged policy makers, participation in decision-making processes of knowledgeable and respected individuals representative of the stakeholder community, implemented regional solutions to shared information needs, DataFinder, performance measurement program, outreach, documentation of benefits to stakeholders from MetroGIS efforts, and a comprehensive and Internet-based institutional memory.
- Defining the role of MetroGIS in application development and support and pursuing projects consistent with that role. **The Board asked for a recommendation at its April 2008 meeting.**
- Securing additional technical leadership and support needed to address the changing needs of MetroGIS stakeholders. **The Board asked for a recommendation at its April 2008 meeting**

JANUARY 24, 2008 WORKSHOP – “MEETING SHARED GEOSPATIAL NEEDS BEYOND DATA”

1. Pending Project Report: A project report will be prepared to document the workshop through the Policy Board’s actions to define next steps. In the mean time, components of the pending project report are shared in this report as follows. Excerpts from that report relevant to the action recommended in this report follow.
2. Appropriate MetroGIS Role(s): The 32 workshop participants, representative the community of interests, responded to a survey designed to provide insight into roles appropriate for MetroGIS in pursuit of solutions to shared needs for applications and web services. A summary of the results follows. The questions and detailed survey will be documented in the final Project Report.

What role(s) do you believe MetroGIS should play in the fostering solutions to meet shared geospatial application needs	Ranking On a scale of 1 (low) to 3 (high) <i>(23 of 30 participants)</i>
Leadership	2.9
Coordination	2.8
Policy/Procedures	2.5
Funding	2.2
Implementation (including Hosting)	2.1
Support	2.0
Development	1.7

Regarding the funding role, the recommendation proposes that the established MetroGIS Regional GIS Project program continue to provide project seed money, and that resources beyond the Metropolitan Council’s MetroGIS budget, such as grants or contributions from participants, continue to be sought for such needs. The purpose of the Regional GIS Project program is to catalyze research and development activities important to achieving collaborative solutions by leveraging resources equal or greater than the seed funds. Stated another way, these funds are intended to serve as “challenge grants” to accomplish research and development activities important to solutions to priority shared needs.

The other three candidate roles (Implementation-including Hosting, Support, and Development) that were included in the ranking exercise are recommended to remain principally within the domain of those stakeholder organizations that have an internal business need for support of them, also the case with previously implemented data-centric regional solutions.

3. Application Sharing Activities Appropriate for MetroGIS Promotion: Another purpose of the participant survey was to seek guidance as to the appropriateness of MetroGIS promoting ten various predefined types of application sharing related activities. The participants were asked to rank each category according to two dimensions: 1) Importance to their organization and 2) Appropriateness for MetroGIS to dedicate resources to accomplishing.

Nine of the ten categories received appropriateness rankings of high to above medium as appropriate for MetroGIS to promote and foster as components of regional solutions and for use in general by stakeholder to achieve improved capacities. These nine “appropriate” types of application sharing activities are listed in the following table in order of most to least importance:

Priority	Technical Components of Resolving Shared Application Needs	Appropriate for MetroGIS Ranking On a scale of 1 (low) to 3 (high) <i>(23 of 30 participants)</i>
1	Writing Web-Based Services That Can Be Used Regardless Of Development Environment	2.7
2	Sharing Expertise And Best Practices In Writing And Implementing Applications	2.7

3	Hosting Applications And Services For Others To Use and/or Consuming Applications and Services from Others	2.7
4	Hosting Data Services	2.7
5	Funding A Portion Of Another Organization's Development Effort That Will Also Benefit Your Organization	2.5
6	Giving An Existing Application To Others To Use In Their Own Environment	2.5
7	Writing Modules That Can Be Reused By Others	2.5
8	Sharing The Writing And Implementation Of Whole Applications	2.3
9	Sharing The Cost Of Software Purchases	2.2
10	Cooperating To Agree To A Common Development Environment (.NET, ASP, Geocortex, Arcserver, Open Source Solutions, etc.)	1.5

The only category among the ten ranked as a low priority was “Cooperating To Agree To A Common Development Environment”. The consensus at the Workshop was that a common operating environment should not be sought but rather the focus should be on deliverables of the various options being able to “speak” to one another.

Note, these practices are intended to be employed wherever the opportunity arises. Accordingly, a general statement of concurrence with them as general business rules is recommended as opposed to attempting to apply them in any order of priority.

ATTACHMENT A

Excerpt Meeting Summary March 27, 2008 Coordinating Committee

5a) Next Steps: Solutions to Shared Application Needs

Member Read, acting as a spokesperson for Technical Leadership Steering Workgroup, summarized direction the Workgroup received from both the Policy Board and Committee in connection with adoption of the 2008-2011 MetroGIS Business Plan. The Workgroup started with that base and used surveys, presentations on current shared applications, and user input at a full-day workshop Jan. 24 facilitated by PlanGraphics, to explore issues and options and develop recommendations as to how MetroGIS should proceed to address application needs shared by the community. Read also commented that a surprising finding, from her perspective, was that organizational structure and funding issues could be as important for enabling shared applications as were more technological issues, a finding that highlights the continued need for MetroGIS's role.

Mark Kotz, also acting as a spokesperson for Technical Leadership Steering Workgroup, presented the Workgroup's recommendations... noting that a key finding of the Workgroup is that the services of a technical coordinator dedicated to MetroGIS will be needed to fully realize the broad outcomes defined in the 2008-2011 business plan and to achieve the application-sharing strategies defined via the evaluation overseen by the workgroup.

Before discussion of the recommended 2008-2009 workplan began, staff commented that the concept of securing the services of a technical coordinator was shared with senior Metropolitan Council officials on January 30, 2007. Member Vander Schaaf, who participated in the meeting, commented that Metropolitan Council Chairperson Bell, Councilmember Pistilli (Council representative to the MetroGIS Policy Board) and members of Council senior management attended to discuss preliminary findings of the Workgroup, including the need for a technical coordinator. He commented that Chairperson Bell and Regional Administrator Weaver had expressed cautious optimistic support, and acknowledged that such an investment would benefit the Council...Vander Schaaf concluded his remarks by stating that although the Council greatly values the benefits it receives from its participation in MetroGIS's efforts, it cannot give further consideration to pursuing the hiring of the technical coordinator until the budget deficit is resolved.

General discussion ensued as to how MetroGIS should proceed in terms of submitting a "foster collaboration function" budget request to the Metropolitan Council, given the uncertainties that have arisen due to the hiring freeze. After discussion of several options, it was agreed to submit a budget request for what the committee believes MetroGIS needs to achieve the outcomes defined in the business plan and leave it up to the Council to decide how it wishes to proceed.....

Motion: The following five recommendations were moved by Member Bitner and Seconded by Member Givens as a single motion with five parts, voted on simultaneously, and unanimously approved.

1) Endorse Appropriate Roles for MetroGIS: That the Coordinating Committee seek endorsement from the Policy Board that MetroGIS's roles related to shared application needs should consist of providing:

- Leadership,
- Coordination,
- Policy and procedural support, and
- Seed funding.

- 2) **Initiate Negotiations to Secure Technical Coordinator:** That the Coordinating Committee:
- Request the Policy Board to authorize immediate negotiations to achieve dedication of additional technical staff support to MetroGIS consistent with the responsibilities and skills defined in Attachment A, of Agenda Report 5c.
 - In the short term, to the extent practical, continue to rely upon the Technical Leadership Steering Workgroup to serve as a surrogate for a dedicated technical coordinator.
- 3) **Define Specific Shared Application Needs:** That the Coordinating Committee:
- Create a workgroup to begin work immediately to oversee a process to identify and prioritize shared needs for applications and web services.
 - Charge this workgroup to report back to the committee at its June 2008 meeting with progress made and if not completed, a proposed plan to secure resources needed to accomplish this task.
 - The membership shall be comprised of those members of the Technical Leadership Steering Workgroup who wish to continue to serve in this capacity, supplemented by persons that the Workgroup members wish to invite who possess skills important to achieving the charge.
 - The chair of the new Shared Applications Workgroup shall be designated by the workgroup members, subject to approval by the Coordinating Committee.
- 4) **Update Outreach Plan:** That the Coordinating Committee:
- Authorize creation of a workgroup to guide updating of MetroGIS's Outreach Plan to address direction provided in the 2008-2011 MetroGIS Business Plan (Attachment G), recommendations provided by the PlanGraphics Team (Appendix A), and recommendations of the Technical Leadership Steering Workgroup presented in this report such as showcasing of benefits anticipated to be achieved from collaborative application solutions, and explaining easy ways to find applications, services, and opportunities for collaboration.
 - This workgroup would begin its work once specific shared application needs are defined.
- 5) **Test Mechanism to Foster Partnering:** That the Coordinating Committee:
- Direct the Technical Advisory Team to test the potential for it to expand its scope as principally a knowledge sharing vehicle to oversee a "mail list or list serve" mechanism as the initial strategy to foster partnering in addition to knowledge sharing.
 - A role of the proposed Technical Coordinator would be to moderate this "partnering" mechanism.
 - Offer a recommendation for how best promote the nine categories of application related sharing defined as appropriate for MetroGIS to foster (e.g., add a business rule, outreach, etc.)

Motion carried, ayes all.

ATTACHMENT B

Expanded MetroGIS Technical Leadership and Coordination

*(Source: Appendix F, 2008-2011 MetroGIS Business Plan and
Updated by Coordinating Committee on Marcy 27, 2008)*

The following technical responsibilities and competencies are suggested as those necessary to effectively achieve the next-generation outcomes defined for MetroGIS's efforts, specifically scope expansions involving: shared applications, partnering with non-government, and data interoperability with jurisdictions that adjoin the Twin Cities metropolitan area.

Single Position - MetroGIS Technical Coordinator.

The outcomes to be achieved through performance of the roles and responsibilities listed herein are best carried out by one person. Alternatives, such as, distribution among more than one person, use of consultants, and reliance upon workgroups cannot effectively establish and maintain long-term working relationships among the variety of interests and individuals who comprise the MetroGIS community and whose involvement is essential to fostering and achieving solutions to shared geospatial needs. These alternatives also do not offer the capacity to effectively provide the leadership and coordination needed on an on-going basis to achieve the collaborative outcomes which are the foundation of MetroGIS's purpose.

Work Direction:

The MetroGIS Staff Coordinator will continue to be the main contact with the Policy Board. The work of the Technical Coordinator will be coordinated through the MetroGIS Staff Coordinator.

Principal Role

Provide leadership and coordination to assist the MetroGIS community investigate, develop and implement strategies for application sharing. Assist the community define what it means to share applications and methods for achieve sharing,

Responsibilities Sought for Expanded Technical Leadership / Coordination Support Role

1. Manage implementation of technical aspects of collaborative solutions (data, applications and infrastructure) to shared information and related geospatial technology needs.
2. Serves as project manager for some technical projects, including project planning, data development, testing of applications, and coordinating volunteer support.
3. Maintain a conceptual understanding of technology advancements related to addressing geospatial information needs of the stakeholder community.
4. Assist with ongoing satisfaction monitoring (custodians and users) of implemented solutions to shared geospatial needs.
5. Work closely and coordinate with staff of government and non-government stakeholder organizations to define and implement technical aspects of collaborative solutions to shared geospatial needs.
6. Provide lead support for the MetroGIS Technical Advisory Team.
7. Provide timely support for task-specific workgroups, including research and leadership to guide development and refinement of solutions to shared needs.
8. Serves as central point of contact for inquiries related to MetroGIS technical services and processes.
9. Maintains effective working relationship with wide range of GIS-related user groups that serve the Twin Cities
10. Monitors opportunities for partnering and assists to connect interests for activities aligned with outcomes defined for MetroGIS's efforts.
11. Provide expanded assistance to MetroGIS (Policy/Staff) Coordinator for: Outreach and advocacy for services available through MetroGIS's efforts, support of the MetroGIS Policy Board and Coordinating Committee, Business Planning activities, negotiation of agreements, support of Performance Measurement Reporting, frame policy obstacles that must be resolved to achieve desired technology solutions.

What Knowledge, Skills, Abilities Desired

1. Knowledge of current trends in GIS technology including geospatial data and applications, standards, metadata, web-based technology, service-oriented architecture, and the principals of the NSDI.
2. Experience supporting committees or boards comprised of members with varying points of view.
3. Problem solving in a consensus environment involving varied organizational and professional perspectives.
4. Experience with inter-organizational implementation and management of GIS technology, including needs assessments, database design, standards development, and web-based applications.
5. Understanding of the organizations and community of GIS professionals that serve the seven-county, Twin Cities metropolitan area.
6. Ability to effectively explain complex technical concepts to non-technical managers and policy makers.
7. Ability to write clear, concise, and logical reports and to make clear verbal and written presentations.

ATTACHMENT C

PLAN FOR
OUTREACH AND IDENTIFICATION OF OPPORTUNITIES
(Update of 2002 High-Level MetroGIS Outreach Plan)
(Draft Accepted by Coordinating Committee on December 17, 2007)

Purpose

This Outreach Plan is intended to guide MetroGIS's communications and outreach activities with leadership of organizations and entities that both current and prospective contributors and beneficiaries of MetroGIS's efforts. Specifically, the following six target groups of outreach interests have been identified:¹

- ✓ Currently active interests willing to investigate further collaborative opportunities
- ✓ Non-government entities willing to share resources,
- ✓ Municipal government entities which are potential contributors and or beneficiaries
- ✓ Departments within participating organizations that are not participating
- ✓ Organizations with data and resources value to others who are not participating
- ✓ Jurisdictions that adjoin the Twin Cities Metropolitan Area

In addition, this Plan recognizes the importance of MetroGIS continuing to foster relationships with organizations with which it has previously coordinated, including the Governor's Council on Geographic Information (GCGI), MN Land Management Information Center (LMIC), and Federal Geographic Data Committee (FGDC).

This Outreach Plan is a companion document to the 2008-2011 MetroGIS Business Plan, which identified outreach as a key organizational priority. Specific communications and outreach tactics, as well as budget implications, will be included in annual work plans.

Continue Current Practices

1. Produce an Annual Report and distribute it, principally via email, to the chief elected and chief administrative officials with local and regional government entities serving the Twin Cities Metropolitan Area and individuals included in MetroGIS's contact database.)
2. Produce an informational brochure every 2-3 years to distribute along with the Annual Report and to use as a handout at forums and conferences that focuses on benefits that have been experienced by stakeholders through MetroGIS efforts.
3. Administer Participant Satisfaction Surveys and host Peer Review Forums for implemented regional solutions and use each use as an opportunity to communicate past accomplishments as well as to receive feedback as to desired enhancements.
4. Maintain a current, complete, accurate, and easily accessible web-based institutional memory of all aspects of MetroGIS efforts.
5. Submit articles for the quarterly MN GIS/LIS newsletter.
6. Regularly attend county-based GIS user group meeting in all seven counties to observe and document interests that are shared among the groups.
7. Host workshops and educational sessions at the annual MN GIS/LIS conference and in cooperation with others to facilitate knowledge sharing.
8. Accept requests to speak about MetroGIS to stakeholder communities and continue the philosophy of encouraging Policy Board, Coordinating Committee and Team leadership to take the lead, supported by staff.
9. Keep the leadership of Governor's Council on Geographic Information (GCGI) and MN Land Management Information Center (LMIC) informed of MetroGIS' activities and continue to participate in activities of the GCGI and LMIC as invited.
10. Encourage Policy Board, Coordinating Committee, and Advisory Team members to proactively identify stakeholder workshop and conference opportunities, which would be appropriate/beneficial for MetroGIS to participate.

¹ Identified in Tactic 1, Chapter 3, Section VI of the 2008-2011 MetroGIS Business Plan. A sixth group, currently engaged interests, is listed to insure that new collaborative opportunities are also fostered among those interests that are currently participating.

11. Seek out opportunities to promote MetroGIS's philosophy, practices and projects via the news media and hands-on workshops.
12. Leverage workgroup membership as a means to establish on-going dialogue with stakeholders to both define shared opportunities and educate constituents on the benefits of collaborative solutions to shared geospatial needs...

Suggested New Practices

Prior to the adoption of the 2008-2011 MetroGIS Business Plan, the majority of MetroGIS's outreach efforts targeted organizations that already utilized and understood the value and potential of GIS technology and therefore recognized the benefit of a collaborative approach to addressing GIS needs. With the adoption of the 2008-2011 Business Plan, MetroGIS expanded the scope of its outreach activities to include organizations that do not currently utilize GIS technology, or do so sparingly. MetroGIS will work to improve awareness and understanding of the benefits of GIS technology and collaboration among these non-users. To that end, the following new practices will be adopted:

- a) Through the use of targeted messages, achieve ongoing communication about shared opportunities with representatives of the six constituencies identified in the Purpose Statement, above.
- b) Initiate regular communication with officials affiliated with jurisdictions that adjoin the Twin Cities Metropolitan Area, in particular counties, to pursue opportunities for coordination and cooperation with these counties in joint projects to address shared geographic information needs.
- c) Expand use of electronic tools to foster exchange of ideas and obtain feedback from stakeholders.
- d) Pursue opportunities to present to professional organizations of policy makers and managers of key stakeholder interests.
- e) Promote adoption of standards with interests beyond the Twin Cities Metropolitan Area (regional, state or federal) via case-by-case negotiations with the goals of eventual applicability statewide of policies and commitments to knowledge sharing and removing barriers to sharing and leveraging geospatial resources.
- f) Pursue opportunities to establish public-private partnerships, particularly to address application needs. (Note: The first step in this process is the establishment of a public/private working group, comprised of volunteers from MetroGIS participant organizations as well as private sector representatives, which will work to identify opportunities for collaboration.)
- g) Establish a partnership with the Governor's Council on Geographic Information (GCGI) to collaborate on outreach activities of common interest, in particular, to improve understanding among individuals affiliated with government in jurisdictions adjoining the Twin Cities Metropolitan Area and Greater Minnesota of MetroGIS' data sharing philosophy, practices, and lessons learned. In addition, share on an ongoing basis with the GCGI any information learned from MetroGIS's efforts to encourage the adoption of standards with entities beyond the Twin Cities Metropolitan Area.