



II: Expand Endorsed Regional Solutions to Include Support and Development of Application Services

This topic area was identified as an emerging need in the previous Business Plan. Several of MetroGIS's stakeholder organizations have also started independent or collaborative activity in this area. Examples of these independent activities include the parcel access application work of Dakota, Scott and Carver Counties, the OpenMNND project, and the M3D project.

In endorsing this activity, the Policy Board recognized that related infrastructure will also need to be developed so as to leverage the capability of regional datasets.

Challenges

1. **Expanding Expectations:** With high-quality geographic data easily accessible, more people are finding ways to utilize geospatial data to improve decision-making. Technology and user expectations have changed with increased interest in direct access to information through the Internet or through enterprise applications as opposed to obtaining a dataset and manipulating it on an organization's own GIS system. MetroGIS stakeholders are increasingly expected to develop applications and web services to meet these changing user needs. This change has elevated the topic of shared application needs to the *highest priority* for MetroGIS. However, the rapidly changing technology, much of which is not commonly understood by those asked to develop and adopt policy for shared needs, has made it difficult to define a plan of action.
2. **Difficulty Defining Shared Application Needs:** Efforts to explore the role of MetroGIS in the world of applications, such as the regional mailing label application, have not been successful. The reason for this lack of success is due, in large part, to the lack of a comprehensive needs assessment.⁹⁴ An effective mechanism is needed to identify shared application needs, develop technical application solutions, and define custodial roles and responsibilities to support those solutions. To date, efforts to apply the needs assessment process used in the past to identify shared information needs have not worked in this new environment.

Strategies

1. **Develop a Clear Understanding of the role of MetroGIS Relative to Shared Applications:**⁹⁵ A policy framework is in place to guide MetroGIS in its pursuit of collaborative solutions to shared application needs.
2. **Pursue Public-Private Partnership Opportunities:** For application needs shared by government and non-government interests, pursue partnership opportunities to support collaborative solutions which build upon the recommendations submitted to the Policy Board in the fall of 2006 by the "Beyond Government Users Partnership Opportunities" Workgroup. This recommendation is outlined in Appendix I.
3. **Foster Integration with State Infrastructure:** Seek out opportunities to participate in Minnesota's Spatial Technology Infrastructure planning to advocate for addressing regional needs. In particular, seek ways to leverage MetroGIS's investment in data discovery and distribution tools.

⁹⁴ The process used 1996-97 to define shared information needs has not worked to define shared application needs. See http://www.metrogis.org/data/about/index.shtml#identify_needs for information about how MetroGIS defined its initial set of shared information needs and an explanation of those initial priorities.

⁹⁵ At its July 25, 2007 meeting, the MetroGIS Policy Board acknowledged that pursuing shared applications has the potential to establish operational interdependencies among organizations and that the strategy should be pursued with the understanding that the risks and rewards will be considered on a case-by-case basis.

Tactics

Though this is not an exhaustive list, it is documentation of the tactics identified during development of the strategies. These tactics are listed here to ensure they are not overlooked when developing annual work programs.

1. **Study examples of cooperative application development:** As a component of developing a Plan to define and address “Shared Application” needs, leverage as test beds previous similar projects to identify policy and technical needs related to collaborating on shared applications or services. Projects to be tested include, but are not limited to: the M3D application⁹⁶; the Geocoding Web Service 2007 Regional GIS Project⁹⁷; the OpenMNND project; the Governor’s Council projects (e.g., service broker); the discontinued regional mailing label-maker application. This testing should investigate such areas as intellectual property rights, view-only access to licensed data, effect of web services on dependencies of one organization upon another and Data Practices Act issues. This study should also be used to raise the level of understanding of the technologies involved.
2. **Agree on a policy framework for addressing shared application needs:** Following the assessment called for in Tactic 1, pursue agreement on a policy framework to direct the actions appropriate for MetroGIS in its pursuit of solutions to shared application needs. The policy framework should address such questions⁹⁸ as:
 - a. What types of shared application-related activities and responsibilities are appropriate for investing MetroGIS resources? For example, should MetroGIS invest in fostering standards, fostering best practices, assisting with prototyping applications and web services, defining shared needs, or all of the above?
 - b. Should “shared services” be viewed as building blocks for applications?
 - c. Should priority be given to applications that broaden access to data?
 - d. What role should MetroGIS play regarding securing infrastructure critical to implementing a preferred solution to a shared application need?
 - e. Should leading edge web-based solutions, such as GeoWeb, be pursued as solutions to shared stakeholder application needs?
3. **Identify shared stakeholder application needs, and develop a tactical plan to address them:** Perspectives of both inter- and intra-sector communities that comprise MetroGIS’s stakeholder community should be included. In other words, MetroGIS should include communities within a single sector, such as counties, as well as communities across sectors. This assessment should be conducted in conjunction with Tactic 1, Activity Area VII, titled “Reassess Old and Identify New Shared Priorities.” Deliverables of the assessment⁹⁹ of the role of MetroGIS pertaining to Applications should:
 - a. Incorporate ideas offered by the Beyond Government Users Workgroup outlined in Appendix I.¹⁰⁰
 - b. Identify existing applications and services that can be shared among stakeholders.¹⁰¹
 - c. Promote shared services as a building block for applications.
4. **Host educational forums:** MetroGIS may wish to host facilitated forums to which recognized experts are invited to share market and technology trend information with the MetroGIS community. Expert input will be useful in defining and refining MetroGIS’s application-related efforts.
5. **Foster coordination among stakeholders:** Investigate the potential of developing and hosting a web-based “message board” or “clearinghouse” where project managers may post information about application development projects as a means to attract prospective partners and/or leverage lessons learned from others.

⁹⁶ See <http://w3.pppf.gov/m3d/index.php> for a complete project description. The M3D site was developed with a \$590,000 federal grant.

⁹⁷ See the report for Agenda Item 5a at http://www.metrogis.org/teams/cc/meetings/07_0627/07_0628_packet.pdf.

⁹⁸ These topics were identified by individuals at the February 8, 2007 Strategic Directions Workshop but were premature to discuss as policy components for an applications strategy.

⁹⁹ MetroGIS may wish to consider retaining a well-qualified expert to facilitate defining application-related needs that are shared by MetroGIS’s stakeholder community. The consultant-assisted process used in 1997 to define shared information needs should be reviewed for applicability to the current need for a policy foundation and tactical plan to address shared application needs. .

¹⁰⁰ The Policy Board recognized at its July 25, 2007 meeting that MetroGIS does not have the staff resources or expertise to conduct to an assessment of non-government application needs. As such, the Board concluded that a “Non-government Coordinating Committee” should be created, which would develop application development options to share with MetroGIS as prospective collaborative projects. This Non-government Coordinating Committee would be deferred to as a vehicle through which to address policy concerns related to data sharing.

¹⁰¹ Leverage the results of the “Service Broker” 2006 Regional GIS Project that was in progress during development of this Plan.