



**TO:** Policy Board

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

**SUBJECT:** Information Sharing and Project Updates

**DATE:** January 7, 2003  
(For the Jan. 29 Meeting)

**a) Testimonials to the Benefits of MetroGIS**

In 2002, five testimonials were completed in accordance with MetroGIS's Performance Measurement Plan to document benefits to metro area organizations from the existence of MetroGIS. Two completed since the Board met in October are for the Riley-Purgatory-Bluff Creek Watershed District and the Metropolitan Airports Commission (MAC). All five are posted on MetroGIS's website at <http://www.metrogis.org/benefits/testimonials/index.shtml>.

**b) Progress on Priority Business Information Needs** (See <http://www.metrogis.org/data/index.shtml>)

- (1) **Emergency Management Preparedness:** The Coordinating Committee concluded on December 18, 2002 that this new category should be added to MetroGIS's list of endorsed common information without waiting until the 2<sup>nd</sup> generation needs evaluation is conducted given the significant attention this topic have received nationally since September 11, 2001. Board action to endorse the addition of this category as a common information need of the MetroGIS community is scheduled for January 29. A work group has tentatively begun a scoping process in anticipation of Policy Board endorsement to allocate MetroGIS resources to this topic.
- (2) **Existing Land Use:** On May 23, 2002, as a part of the launch forum for the Regional Planned Land Use Dataset, the participants concurred that a Peer Review Forum for the proposed Regional Existing Land Use dataset should not be initiated until the user community has had an opportunity to use the Regional Planned Land Use dataset for 6-9 months. The Regional Planned Land Use dataset first became available, via DataFinder, in July 2002. Consequently, work on an Existing Land Use Peer Review Forum is tentatively scheduled to begin in Spring 2003. A letter will be sent this month to invite the May 2002 forum participants, city planners and other users of existing land use data to participate in the Spring 2003 forum.
- (3) **Highways and Roads:** A Peer Review Forum to address this priority information need was held on October 24, 2002. Twenty-four participants from a variety of agencies provided their diverse content expertise, along with 11 observers. A forum summary, which includes the comments and concerns expressed by the participants, is posted at [http://www.metrogis.org/data/info\\_needs/highway\\_roads/peer\\_forum\\_summary.pdf](http://www.metrogis.org/data/info_needs/highway_roads/peer_forum_summary.pdf). Eight individuals have been selected for a Technical Workgroup, with their first meeting tentatively scheduled for January 28, 2003. Based upon needs identified at the forum, the workgroup will develop recommendations for: a) data specifications for a regional solution to this common information need, b) custodial roles and responsibilities, and c) candidate custodians.
- (4) **Jurisdictional Boundaries – School Districts**  
Work on a custodian recommendation is scheduled to begin in May 2003. Recommended data specifications and roles and responsibilities were agreed upon in March 2001.
- (5) **Jurisdictional Boundaries – Watershed Districts**  
On hold awaiting a scoping study to be prepared by Washington County.
- (6) **Lakes, Wetlands, etc.:** Paul Hanson of the Metropolitan Council's GIS staff and member of the MetroGIS Technical Support Team serves as the MetroGIS liaison role on the Governor's Council on Geographic Information (GCGI) Hydrology Committee. MetroGIS's work plan assumes the state's solution may also serve the metro region. Desired data specifications were identified by

participants at the October 29, 1999 Information Needs Workshop which included MetroGIS representation. (Refer to the Final Workshop Document at [http://www.metrogis.org/data/info\\_needs/lakes\\_wetlands/turnaround.pdf](http://www.metrogis.org/data/info_needs/lakes_wetlands/turnaround.pdf)). One or more pilot projects are being considered to test various aspects of the solution. A recommendation to the GCGI from the Committee is expected in early 2003.

(7) **Parcels:**

*Public Sector Version:* The January 2003 update is complete and available on DataFinder ([www.datafinder.org](http://www.datafinder.org)) to licensed users. Updates are planned quarterly. This is the second time through the update process. Improvements in procedures are making the process easier for everyone involved. (If you are a government or academic interest that desires access to this data, see <http://www.metrogis.org/data/datasets/parcels/public/index.shtml> to obtain a license).

*Private Sector Version:* The County Data Producers Workgroup is scheduled to meet on January 27<sup>th</sup>. At the December meeting, the members, representing each of the seven counties, agreed on procedures to again offer parcel data to non-government interests in a manner that addresses problems with the initial offering, released in June 2001. These members will report to one another on January 27 whether or not these procedures are acceptable to their respective management. Dave Drealan, Carver County, is the workgroup chair.

(8) **Street Centerline Dataset** (*Produced by The Lawrence Group-TLG*): TLG has authorized the Metropolitan Council to distribute this dataset via the DataFinder Café. This means that users can download this street centerline data for their specified geographic extents. The target is to be operational before the end of February 2003.

(9) **Socioeconomic Characteristics of Areas – Enhancement of Accessibility to US Census Data:** Phase I of this accessibility project was completed in October. Phase II work is scheduled to begin in February and will focus on Tract level data that was recently released by the Census Bureau.

c) **Enhancements to MetroGIS DataFinder Café and Coordination with MN GeoIntegrator Project**

This past fall, two enhancements to DataFinder Café that were identified during the beta testing this past spring were completed. They were:

- ***Separate Viewable and Extractable Extents***

This feature will implement separate, definable extents for viewing and extracting data. This would enable a user to zoom to the extent of a county without displaying all of the parcels in that county, while still permitting all of those parcels to be downloaded in one operation.

- ***Add AutoCAD DWG, DXF to the supported download formats***

MetroGIS's investment to date to develop DataFinder Café is \$98,200 (\$76,145 for application development and \$22,055 for SpatialDirect/FME software. It should be noted these costs do not reflect the total expense of the project. The Metropolitan Council previously had purchased other specialty software needed to support Café - SDE, Oracle and ArcIMS – and owned an Internet server with capacity to host the application. In addition, MetroGIS project funds were also used to prepare an eCommerce scoping study for \$7,740, for an investment to date of \$105,940, in addition to the foundation DataFinder site.

MetroGIS and Council staff have been meeting with LMIC staff to discuss collaboration for funding of additional Café enhancements, tentatively planned for 2003, and leveraging MetroGIS's investment in Café by extending its functionality statewide. LMIC has been awarded a \$117,000 grant, which identified this investment leveraging as an objective. Two enhancements that MetroGIS is seeking through this partnership are:

- Add a projection conversion capability to the Café download wizard
- Enable the Café to “speak” to non-ESRI platforms, such as, the MN Mapserver, utilized by the DNR, Intergraph, and SmallWorld.

**d) Expansion of Coordinating Committee Membership and New Officers**

The Coordinating Committee has expanded its membership to include three regional government interests in addition to the Metropolitan Council: Metropolitan Mosquito Control District, Metropolitan Airports Commission and Metropolitan 911 Board. At its December meeting Jane Harper (Washington County) was elected chair and Dave Drealan (Carver County) was elected vice-chair.

**e) November 19, 2002 Participant Appreciation Event Summary**

The MetroGIS Policy Board and Staff Coordinator hosted MetroGIS's Inaugural Participant Appreciation Event the evening of November 19 to acknowledge the 470-plus individuals who have contributed to MetroGIS's accomplishments. Certificates of Appreciation were presented to the Metropolitan Council for sponsoring MetroGIS and to the following 14 individuals who have provided exemplary leadership:

Arbeit, David	(LMIC)	Moulder, Bob	(Hennepin County)
Claypool, David	(Ramsey County)	Read, Nancy	(Mosquito Control)
Craig, Will	(CURA-U of M)	Richardson, Bart	(DNR)
Drealan, Dave	(Carver County)	Welsch, Dennis	(City of Roseville)
Gelbmann, Rick	(Metro Council)	Wencl, Ron	(USGS)
Harper, Jane	(Washington County)	Windle, David	(City of Roseville)
Henry, Brad	(URS/BRW & Mpls)	Zimmerman, Tim	(Hennepin County)

The Staff Coordinator also was also recognized by Chairperson Reinhardt and Rick Gelbmann, Metropolitan Council GIS Manager, for his work to achieve the vision of MetroGIS. Nancy Tosta, 2002 URISA Leadership Award recipient and nationally known leader in the geodata community, keynoted the event. The theme of her talk was the increasingly important role that geospatial data will continue to play in decision making. She also complimented MetroGIS on its efforts to improve the quality and ease of access to geodata commonly needed by government and others to support day-to-day business functions and offered several suggestions for MetroGIS to consider as it continues to mature. Over 70 individuals, including eight Policy Board members, attended the three-hour event.

**f) December MetroGIS Presentation to the Metropolitan Council**

On December 18, 2002, Policy Board Chairperson Reinhardt presented to the Metropolitan Council, which serves as the primary sponsor of MetroGIS, the 2002 Exemplary Systems in Government Award that was received by MetroGIS in October at the national URISA conference in Chicago. Chairperson Reinhardt also presented the Council with a Certificate of Appreciation from the Policy Board for its support of the MetroGIS initiative. Chairman Mondale and Council Member Williams, Council liaison to the MetroGIS Policy Board accepted the award and certificate on behalf of the full Council.

**g) Federal Service Mark Approved**

On December 30, a federal certificate of registration for MetroGIS DataFinder was approved.

**h) State Geodata Initiatives Update**

➤ **Contract with Syncline to Expand DataFinder Café Statewide**

The MN Land Management Information Center (LMIC) is in the process of retaining Syncline, developer of MetroGIS DataFinder Café, to expand the Café's functionality statewide and in so doing partner with the MetroGIS community to develop additional functionality that was beyond the scope of MetroGIS's Version 1 project.

➤ **GCGI's LRM Committee – Progress with Statewide Parcel Dataset**

The Land Records Modernization (LRM) Committee of the Governors Council on Geographic Information (GCGI) has received approval for the GCGI to submit Version 1 of a statewide parcel I-Plan to the National I-Team Coordinator. The Team is now working on next steps to implement the parcel I-Plan, meeting again on January 16. This effort has its roots in a July 2001 request from the MetroGIS Policy Board that the GCGI provide leadership for a statewide parcel data solution that incorporates the solution endorsed by the Board for the Metro Area. Several

individuals on the LRM Committee are also active in MetroGIS's activities: David Arbeit, Will Craig, David Claypool, and Randall Johnson. Johnson participated on the Parcel Data Policy Vision workgroup. This Plan will eventually include vision statements for all seven NDSI Framework data themes (parcels or cadastral data being one of the seven), plus soils.

➤ **GCGI Guidebook - Making the Most of Geospatial Data Exchange: A Guide for Data Distribution**

A handbook has been produced by the Data Committee of the Governor's Council on Geographic Information. The guide is designed to walk organizations, that have elected to share their data, through the decisions that are involved, in a step-by-step manner with examples and explanatory text. A draft of the guide was distributed for comment during a session at the MN GIS/LIS 2002 annual conference. Full GCGI endorsement is expected in the near future, after which it will be distributed via the Internet and printed copy. The workgroup included two individuals active in MetroGIS's affairs: David Arbeit (LMIC's Executive Director) and Randall Johnson (MetroGIS Staff Coordinator).

**i) Federal Geodata Initiatives Update**

➤ **I-Teams**

MetroGIS is a featured organization in the most recent I-Teams Connections newsletter (page 6). The complete newsletter can be viewed at

[http://www.excelgov.org/usermedia/images/uploads/PDFs/I-Team\\_Connections\\_3.pdf](http://www.excelgov.org/usermedia/images/uploads/PDFs/I-Team_Connections_3.pdf).

➤ **GeoSpatial One Stop**

Alison Slaats, MetroGIS DataFinder Manager, submitted a response on November 18 to a call for comments and participation. The call for comments and MetroGIS's response are available in Attachment A.

➤ **The National Map**

The USGS concept of *The National Map* is under review by the Mapping Science Committee and UCGIS is participating. A workshop was held on September 25-26 in Washington DC. Will Craig, past chair of the Coordinating Committee, was chosen to attend as a representative of UCGIS. For more information see <http://www.nationalmap.usgs.gov> and [http://www7.nationalacademies.org/besr/National\\_Map.html](http://www7.nationalacademies.org/besr/National_Map.html).

Workshop participants were inspired by the vision of a current, seamless, digital map of the nation - but concerned by the many obstacles to its fulfillment. Craig's white paper (not an official UCGIS statement) stressed the need for research to overcome some of the technical and institutional barriers. He also stressed the need to broaden the scope of data content and the need for incentives to entice locals to partner. Others stressed the need for the various federal agencies to coordinate themselves before asking locals to participate. The committee report will be written by the end of the year, then reviewed and published next spring.

➤ **National GeoData Alliance (GDA)**

Chairperson Reinhardt's one-year term on the GDA National Board of Trustees ended on October 26, 2002, following the Board meeting that day. Chairperson Reinhardt represented Regional Government interests. She did not seek reappointment, informing Chairperson Bacastow that although she enjoyed being part of shaping the organization during GDA's exciting first year, time constraints do not allow her to continue in the Board of Trustees role.

**j) Conferences Presented At (since the last Board meeting)**

➤ **URISA National Conference – October 26-30, Chicago, IL**

Two MetroGIS-related presentations were made. The first, as part of a luncheon seminar, was entitled "Lessons from Practice: Organizational Aspects of Data Sharing". The second focused on DataFinder Café's capabilities for customized viewing and downloading geospatial data. MetroGIS officials also received URISA's 2002 ESIG Award at this conference.

The “Lessons from Practice” presentation was also the subject for MetroGIS’s presentation at the Global Spatial Data Infrastructure (GSDI) Conference in Hungary, September 16-19. Dr. Francis Harvey, U of M Geography Department, presented MetroGIS’s paper.

**k) Outreach Efforts – *Other Than Conferences***

Beyond the Metro Area: Primarily in conjunction with the Staff Coordinator’s involvement in the GCGI’s initiative to devise a statewide parcel data policy, contacts to share geodata lessons and needs have been established with the staff of Chisago, Goodhue, and Wright counties as well as the ARDC (Duluth) staff. These coordination opportunities will continue to be fostered and expanded in accordance with MetroGIS’s outreach plan. MetroGIS participants are also involved in related national initiatives, such as, Geospatial One Stop (comments submitted in December), I-Teams, and the HSIP (Homeland Security Infrastructure Protection) Initiative. GeoWorld invited MetroGIS to submit an article for a feature in the March 2003 issue. Several photos will also be submitted.

Metro Area: The City of St. Paul is testing MetroGIS DataFinder Café to serve its internal and external data distribution needs. Washington County is using the DataFinder server to test remote hosting of a data distribution tool for exclusively Washington County data. MetroGIS staff met with LMIC staff to explore a partnership to collaboratively develop enhancements to DataFinder Café that the user community requested during beta testing and to ensure interoperability with all major GIS platforms.

**l) December 18, 2002 Coordinating Committee Meeting Summary**

See [http://www.metrogis.org/teams/cc/index.shtml#agendas\\_minutes](http://www.metrogis.org/teams/cc/index.shtml#agendas_minutes)

**ATTACHMENT A**  
**GeoSpatial One Stop Invitation to Comment and Response**

**MetroGIS Response to Geospatial One-Stop Portal Call for Additional Requirements**

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**Comments on existing Portal requirements:**

From the MetroGIS perspective, the existing portal requirements appear to be quite complete and aligned with the current MetroGIS data discovery and distribution initiatives. For further information, please see the white paper, which describes MetroGIS's data distribution initiative ([http://www.metrogis.org/data/datafinder/MetroGIS\\_DataFinder\\_Cafe\\_WhitePaper.pdf](http://www.metrogis.org/data/datafinder/MetroGIS_DataFinder_Cafe_WhitePaper.pdf)).

**3.2 View metadata for services**

This is listed as a "low" priority. We are concerned that the metadata for a web map service might be critical information needed to use that service in an application outside of the One-Stop Portal. Because we do not yet know what the metadata for a service will contain, we cannot say for certain how important it will be in this regard. But MetroGIS does believe that finding map services to use within an organization's enterprise GIS applications (e.g. ArcGIS or ArcIMS) may become as important as finding static GIS datasets to use in those applications.

**3.4 Download and save for future use the data upon which a map is based, returning the entire dataset.**

This is listed as a "medium" priority. If, without this requirement, a portal user is allowed to download a dataset without rendering/drawing it on the map first, then we have no problem with the "medium" priority of this requirement. However, if Portal Users are only allowed to download datasets that are actually drawn on the map first, then this requirement is critical. MetroGIS experienced this problem with its portal (MetroGIS DataFinder Cafe) when users were only allowed to download an entire county of parcel data after they had drawn it on the screen. The draw time was lengthy and a waste of the users' time. We modified our portal to allow datasets to be downloaded for the specified area of interest, without requiring them to be drawn.

**Comments on provider requirements**

In general, the provider requirements are reasonable. The data discovery and distribution initiatives of MetroGIS are aligned with these goals.

MetroGIS can currently adhere to the following:

**A. Document all data in accordance with FGDC/ISO 19115 metadata standard, and publish metadata in a registry. In the dataset metadata, include references to any services implemented in C, D or E below.**

Current MetroGIS services are not referenced in metadata – but this enhancement is planned for 2003 once a metadata standard that permits referencing services is available (i.e. ISO 19115)

**B. Comply with applicable ANSI Framework data standards for content, encoding and exchange when available (standards now under development as part of Geospatial One-Stop initiative).**

Without knowing what the standards are, it is impossible to say if MetroGIS could or would comply with them. In general, MetroGIS is a strong proponent of standardized data. At the same time, MetroGIS has specifically stated that no MetroGIS affiliated data producer is expected to spend resources processing or modifying its datasets without a defined internal business need to do so. Generally, MetroGIS's regional data solutions have begun with NSDI standards where they existed

and intends to comply with state and national standards when possible. Most importantly, MetroGIS has found that to gain the confidence and active participation of primary producers, a policy was enacted that area integrators shall not modify data received from primary producers in any way, except to reproject it to conform with regional data sharing conventions. States or the regional governments may have business needs to convert data to, for example, comply with national coding standards, which in turn will need to be integrated into MetroGIS's the regional policy to maintain the trust of the primary producers. Clarification is needed on this provider requirement.

**C. Implement OGC Web Map Service (WMS) specification, and register service in catalog.**

Note that MetroGIS is already serving WMS and is prepared to register the WMS with the Geospatial One-Stop catalog when it is fully functional.

**New Requirements**

Respondent Information (For follow-up or clarification only -- responses will be published anonymously)	
Your Name	Randall Johnson, Staff Coordinator
Organization	MetroGIS
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Task Description	
Task Name	Download and save for future use the data upon which a map is based, clipping the dataset based on a user defined polygon or a polygon feature from another service.
Summary	This would be an expansion of requirement 3.3. (Download and save for future use the data upon which a map is based, clipping the dataset to the region shown on the map), adding the ability to clip the data based on a free-form polygon drawn by the user, or by using a polygon feature from another service as a "cookie-cutter" (such as a county boundary).
Priority	Medium
Actors	
Pre-existing conditions	More robust tools for creating or selecting a polygon to use as a data extraction cookie-cutter.
Sequence of operations to complete the task	
Enumerate the individual steps that are taken to complete the task.	Case 1: User draws free-form polygon to define area of interest  Step 1: Tool must be available in portal client to draw a multi-point polygon. Step 2: multi-point polygon must be transferable to server & be used to clip data from map service.
	Case 2: User selects an existing polygon to use as data cookie-cutter.  Step 1: User must be able to select a polygon layer from those in the map Step 2: User must be able to select a polygon from this layer to use as a cookie-cutter. (Multiple polygon selection would also be desirable) Step 3: Selected multi-point polygon must be transferable to server & be used to clip data from map service.
End state	Multiple methods for and more robust methods of data extraction