



December 2002 Project Updates and Information Sharing

Contact: Randall Johnson (651.602.1638)

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- a) **Priority Business Information Needs** (See <http://www.metrogis.org/data/index.shtml> for complete information about each of MetroGIS's common information needs.)
- (1) **Street Centerline Dataset** (*Produced by The Lawrence Group*)
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 the year.
 - (2) **Highways and Roads**. A Peer Review Forum to address this priority information need was held on October 24, from 1-4:30, at the Roseville Skating Facility. Mike Dolbow and David Vessel of the Metropolitan Council's GIS and Transportation Planning staff, respectively, and Joella Givens and Chad Martini with MnDOT facilitated the Forum. 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, was distributed to the participants for comment prior to broader distribution and can be viewed at http://www.metrogis.org/data/info_needs/highway_roads/index.shtml.
 - (3) **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 Information Final Workshop Documents at 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.
 - (4) **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 Spring 2003.

A letter will be sent this month to encourage the May 2002 forum participants (and anyone else interested) to use the newly developed regional Planned Land Use dataset and the Council's 2000 Existing Land Use in preparation for the Spring 2003 forum. The May 2002 forum participants are being asked to familiarize themselves with both datasets and identify any issues or concerns that they may have with: 1) use of the Council's Existing Land Use to address the MetroGIS community's existing land use information needs and 2) attempting to use the same regional coding scheme for both datasets.

(5) Jurisdictional Boundaries – School Districts

On hold until the Business Planning process is completed.

(6) Jurisdictional Boundaries – Watershed Districts

On hold awaiting a scoping study to be prepared by Washington County.

b) MetroGIS DataFinder Café (*customized data viewing data and distribution tool* – www.datafinder.org)

In late September, 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 data 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 retain Syncline to prepared 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 MetroGIS is seeking through this partnership are:

- *Add a projection conversion capability to the Café download wizard*

- *Support transfer of data in Geography Markup Language (GML).*

This capability would enable the Café to “speak” to the MN Mapserver software that is utilized by the DNR to support distribution of data via their Data Deli.

c) Regional Parcel Dataset – Private Sector Version and Collaborative Distribution Strategy

On October 22, the Policy Board endorsed a regional policy statement which set forth guidelines for collaboration by the counties on a common strategy for distribution of parcel data to non-profit and for-profit interests. This regional policy statement was the first deliverable produced by the County Data Producer User Group. This group is meeting monthly to work on collaborative solutions to a number of geodata issues common to counties. Dave Drealan, Carver County, is the workgroup chair.

Staff was asked by the Workgroup to detail several collaborative parcel data distribution options that involve collection of fees for access to parcel data. These options were discussed by the workgroup on

December 6 and the group concurred to move forward with the basic and intermediary options simultaneously. Chairperson Drealan will be prepared to update the Committee on the progress of the workgroup at the Committee's December 18 meeting. The options white paper is available upon request and will be attached to the meeting summary.

d) November 19th 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 over 470 individual who have contributed to MetroGIS's accomplishments and present Certificates of Appreciation 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 geospatial 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.

e) Pending Articles about MetroGIS in GeoWorld and DirectionsMag

Following MetroGIS presentations at the National URISA Conference held the end of October:

- GeoWorld invited MetroGIS to submit an article for publication that focuses on MetroGIS's unconventional organizational structure, objectives, benefits that have been realized from MetroGIS's existence, and lessons learned. Jeanne Landkamer has been retained to write the article. The submission deadline is January 15 for publication in March 2003.
- Staff participated in a lengthy interview by Joe Francia, managing editor for DirectionsMag, an online publication that focuses on the geospatial community. An article is tentatively scheduled to be published in January or February 2003.

f) State Geospatial Data Initiatives Update

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

The MN Land Management Information Center (LMIC) has elected to retain 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) is in the process of developing a statewide parcel dataset solution as a component of a statewide I-Plan. 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. A draft vision has been agreed upon and incorporated into a working draft of an I-Plan for the state. This Plan will include vision statements for all seven NDSI Framework data themes

(parcels or cadastral data being one of the seven), plus soils. The goal is to submit the I-Plan to the National I-Team Coordinator by the end of 2002.

- **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 of 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 GIS/LIS State 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).

g) Federal Geospatial Initiatives Update

➤ 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 presented in Attachment A.

➤ The National Map by Will Craig

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. I 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.

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. My white paper (not an official UCGIS statement) stressed the need for research to overcome some of the technical and institutional barriers. I 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.

➤ Concern for Overlapping and Confusing National Initiatives

Chairperson Craig forwarded an excerpt from *GeoReport* (Attachment B), which references the results of a recent survey that reveal a growing frustration with federal geodata initiatives that have similar goals. Chairperson Craig asked for this excerpt article to be included in the Committee's packet along with the Staff Coordinator's response which was "It has and will continue to be an 'and - both - all' proposition. I've tried to keep MetroGIS positioned to work with any and all as the opportunity arises to further our own needs as well as coordination on much larger scales".

➤ National GeoData Alliance (GDA)

Chairperson Reinhardt's one-year term on the GDA National Board of Trustees ended on October 26th, 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.

h) Conferences Presented At (*since last Committee meeting*)

➤ GIS/LIS State Conference – October 2-4

Alison Slaats, MetroGIS DataFinder Manager and technical manager for development of MetroGIS's DataFinder Café, and Mark Kotz, GIS Database Manager for the Metropolitan Council, shared key aspects of DataFinder Café's capabilities for customized viewing and downloading geospatial data.

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

Two presentation proposals related to MetroGIS's activities were accepted. The first is for a panel presentation entitled "Lessons from Practice: Organizational Aspects of Data Sharing". The second focused on DataFinder Café's capabilities for customized viewing and downloading geospatial data. 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.

i) 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 for networking about common geodata needs have been established with the staff of Chisago, Goodhue, and Wright counties as well as with the ARDC (Duluth) staff. These coordination opportunities will continue to be fostered and expanded in accordance with MetroGIS's outreach plan.
- ✓ During and following the National URISA Conference in late October, the Staff Coordinator proposed the formation of a Special Interest Group (SIG) to promote networking among organizations across the country that perform "area integrator" functions. Nine organizations thus far have expressed interest. Denver COG, King County Washington, Eastern Florida Planning Commission, San Francisco Bay Area COG, Nashville Tennessee, Sacramento COG, and OGETA in Metro Atlanta, National Capitol Planning Commission in Washington D.C., and a startup collaborative serving the Victoria, B.C. area.

➤ Metro Area:

- ✓ The City of St. Paul is testing MetroGIS DataFinder Café to serve its internal and external data distribution needs.
- ✓ MetroGIS LMIC staff are exploring a partnership to collaboratively develop enhancements to DataFinder Café.

j) ICMA Request to Post MetroGIS Documents

In October ICMA (International City Managers Association) requested permission to post over 20 documents produced by or about MetroGIS on their web site subject to citing the appropriate sources. The Business Plan, Performance Measures Plan, benefits studies and related presentations and white papers for major projects were the focus of the request. Permission was granted.

ATTACHMENT A

GeoSpatial One Stop Invitation to Comment and Response

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

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).

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
Telephone	651-602-1638
Email	randy.johnson@metc.state.mn.us
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

Received via email... Invitation to comment on GeoSpatial One Stop Proposal

Dear Colleague,

>
This letter is an introduction and invitation to participate in the development of the Geospatial One Stop Portal. I hope you will engage with this opportunity to help define the functional requirements for the Portal and help improve accessibility to geospatial data for all levels of government. I invite you also to forward this Call within your organization and to interested colleagues for the broadest possible distribution.

>
First, let me introduce the Geospatial One Stop initiative. Geospatial One-Stop is one of 24 federal E-Government initiatives to improve effectiveness, efficiency, and customer service throughout all layers of government. Geospatial One-Stop builds upon National Spatial Data Infrastructure (NSDI) objectives to enhance interoperability among geographic components of government activities and to maintain a common inventory of geospatial content and services.

The implementation of the Geospatial One-Stop in the near-term will:

- >
 - > *Build consensus on and publish standard content models for several basic themes of geospatial data, known as Framework data, with specifications as needed to ensure interoperability;
- >
- > *Ensure that existing content at Federal and non-Federal levels in Framework data themes has been documented and published;
- >
- > *Publish descriptions of planned spatial data collection activities to minimize redundant data gathering;
- >
- > *Establish interoperable data access and visualization services for at least the Framework data themes; and
- >
- > *Provide an online information discovery, data access and mapping Portal. That Portal is the main subject of this letter.

>
The Geospatial One-Stop Portal will operate as a general user interface to distributed geospatial data and services, with maximum participation among all levels of government. Furthermore, applications such as desktop GIS software, Decision Support Systems, and other portal-type services will be able to utilize the One-Stop Portal through published open software interfaces.

>
The Geospatial One-Stop Portal Team includes state, local, and federal representatives working together to define the requirements of the Portal and to guide the implementation of the first version. We are addressing such questions as: What will this portal provide? What will it look like? How will it function across many different interfaces? We are identifying the requirements that users have and we are developing an architecture for a portal that will access validated Framework data and other data using open-standard interface specifications.

>
This is where you come in.

>
We are seeking input on the Portal requirements from local, state, tribal and federal organizations that either provide or use geospatial data. The Portal Team has already identified some requirements for the Portal--that is, some of the functions it must be able to perform--but we are seeking comments on those requirements and new requirements not yet identified. This Call for Additional Requirements is your opportunity to participate in the process.

>
The One-Stop activity is designed to improve the ability of peer organizations to discover and access digital geospatial data over the web in real time. For example, this could mean the exchange of local data across county lines within a watershed, or across state boundaries for emergency management purposes. We think of the One-Stop as the newest infrastructure in our country, increasing information access, strengthening partnerships

among governmental entities, and implementing standards, access and opportunities for multiple sectors and interests.

>

What's in it for you? Benefits of participating in this project include the ability to advertise and publish data sets with standard content, to gain early access to discovery, mapping, and data delivery solutions, and to have your requirements as a user incorporated into the functional definition of the access portal--in short, to more easily exchange common information content within a broad, diverse community.

>

Please visit <http://www.geo-one-stop.gov/cfar/>, where you will find a document describing the Geospatial One-Stop Portal and existing requirements, and instructions for providing input, including a template for submitting additional requirements. Responses received by November 22, 2002 will receive the fullest consideration in version 1 of the Geospatial One-Stop Portal. Later responses will be retained for consideration in the continuing One-Stop initiative.

>

Again, I invite you to forward this message to other interested parties. I thank you for your time and look forward to your participation. For questions about this Call for Additional Requirements please contact the Portal Manager, Dr. Jeff de La Beaujardiere, at 301-286-1569 or portal-cfar-comments@sunrise.gsfc.nasa.gov. To respond to this Call, please see the instructions at the web page above.

>

Sincerely,

Myra Bambacus

Executive Director (acting), Geospatial One-Stop

ATTACHMENT B

Excerpt from *GeoReport*

forwarded by Will Craig.... :

>

“Last week, we touched on a political hot button with the question of the week: Which federal initiative do you feel will have the greatest success in creating the U.S. National Spatial Data Infrastructure? The choices were Office of Management and Budget, Geospatial One Stop; U.S. Geological Survey, National Map; or National Imagery and Mapping Agency, 120 Cities Project. 60 percent of the respondents felt that the USGS National Map will be the winner, and the other 40 percent were split equally between Geospatial One Stop and the 120 Cities Project.

>

The comments tell a story of frustration, confusion and, yes, even annoyance with the entire subject. One person pointed out that there really is no focused effort to build a shareable infrastructure, but that the three agencies are offering the initiatives to strengthen their own positions to obtain a bigger piece of the "budget pie." More than one-third of the respondents believe that the initiatives are confusing and competitive. The efforts of all three agencies appear to have a lot of duplication with no real attempt to distinguish the benefits of one from the other.

Funding and management of the programs are common threads of concern as well. Obviously no program can be successful without proper funding. Assuming the money is allocated to pay for the program, the next problem is management. One person had this to say about management: "NIMA has a tradition of managing classified data. Geospatial One-Stop and the National Map have yet to deal with private data; licensed, copyrighted data; and prevention of competition with the private sector. Until they do, these programs will never get off the ground. "Many problems, few answers. It's going to be interesting to see how the agencies go forward in creating a successful program.”

>