

MetroGIS

Cooperation, Coordination, Sharing Geographic Data



MetroGIS DataFinder: *Café Component*

Beta Test Summary Report May 20, 2002

Serving the Minneapolis-St. Paul Metropolitan Area

PREFACE

On July 10, 2001, the MetroGIS Policy Board authorized publication of a Request for Proposals (RFP) to significantly enhance the data download functionality provided by MetroGIS DataFinder. The project objectives endorsed by the Policy Board were as follows:

- Automate MetroGIS's data distribution process, including ability to distinguish between data requests that require licensing and data requests that require fees.
- Provide the user with the ability to specify a geographic area of interest within the seven-county area.
- Support a format(s) readily useable by all major GIS software types used by the MetroGIS community to the extent possible and practical.
- Work in conjunction with MetroGIS's Web Map Services capabilities.
- As a bid option, provide the user with the ability to specify attributes from all those available for each data theme.

Refer to http://www.metrogis.org/data/datafinder/index.shtml#data_distribution for more information about the consultant selection process, application design, and activities that led up to the beta test that is the subject of this report.

The beta test comment period began on April 12, 2002 and ended on May 8, 2002. The participants were encouraged to test the various features offered by the new Internet-enabled state-of-art-data delivery mechanism (now referred to as MetroGIS DataFinder Cafe) and complete an online survey to rate their satisfaction with the new features.

PURPOSES OF THE BETA TEST

The purposes of the beta test were to:

- Test the functionality provided by the new application to make sure it worked as expected
- Inform key MetroGIS stakeholders of the availability of this new functionality.

WHO WAS INVITED TO PARTICIPATE?

Over 80 individuals were invited to participate in the beta testing of this new application. On March 21, 2002, a notice (Attachment A) of the pending testing period was emailed to members of MetroGIS's Coordinating Committee, Technical Advisory Team, attendees of the April 2001 Parcel Data Pilot Project Forum¹, and a host of individuals who had asked to be notified of the testing, including individuals active in or seeking to establish geodata collaborative efforts in greater Minnesota in other parts of the country were also invited to participate. The target audience, the same for MetroGIS in general, was local and regional government that serve that Twin Cities Metropolitan Area, but a number of state and federal officials as well as academic, non-profit, and for-profit interests were also invited.

This "pre-notice" was sent to encourage anyone who wanted to test the new data downloading capabilities using parcel data to initiate the required licensing procedures so that they would have their license in place when the testing period actually began. Approximately 17% of invitees chose to submit licenses. Upon approval of their license, users were then provided user IDs and passwords to access the parcel data via the online mechanism.

¹ The participants of the April 19, 2001 Parcel Data Pilot Project Forum not only identified desired enhancements to the data content of regional parcel dataset but also identified desired enhancements to the Compact Disc method of data delivery. These enhancements evolved into the objectives for MetroGIS's Internet-Enabled Data Distribution Mechanism referred to in the Preface to this report.

A second invitation (Attachment B) was emailed on April 12, 2002, the date that the beta testing officially began. Everyone who had received the initial invitation also received this follow-up invitation. Following their individual testing, each participant was asked to complete an online survey to rate, on a 1 to 5 scale, how they believed each function satisfied their needs and to comment on perceived “bugs”.

WHO PARTICIPATED?

Only thirteen individuals elected to fill out and submit an online survey response. However, MetroGIS staff also received approximately 25 direct email responses in addition to the online survey responses.

The online survey responses were anonymous. The only information requested about the respondent was whether their organization serves an area within the Twin Cities and what type of organization (government, academic, non-profit, or for-profit) they represent. All but two respondents represent government organizations and all but two represent organizations that have a service area in the Twin Cities.

WHAT DID WE LEARN AND ACTION TAKEN?

The number of responses is too low to draw any definitive conclusions about the satisfaction, or lack thereof, of the broader MetroGIS community with the new data distribution mechanism. However, the comments submitted along with the ratings, together with comments that have been received since the testing period expired, indicate the new application is generally being well received. A selection of these “positive” comments is as follows:

- "Very easy to download & install."
- "Very intuitive design; pays off if you are an ArcView user, but could figure it out without difficulty."
- "I like the fact that when you download the parcel data you receive metadata as well as use and care information. Gives people a second reminder."
- "This functionality is very cool."
- "This site is incredible, what a fantastic application, great job. We will be setting the link on our site for our customers to use it to get data."
- "Overall, this is what I envisioned MetroGIS would become when first involved back in 1995-6 -- GREAT WORK!"

Notwithstanding the limited number of respondents, the overall combined mean for all of the ratings was: 3.66, on a scale of 1 to 5, with 5 being very satisfied. However, if the concerns related regarding complicated licensing are removed from the calculations, the mean response rises to 3.8. And, one respondent rated every feature as a “1” (very dissatisfied) but their accompanying comments were generally positive in nature, leading staff to believe this respondent may not have understood the rating scale. If this respondent’s ratings are also removed, the overall mean rises to 3.97. This latter number appears to be more reflective of general level of satisfaction with actual application.

The following table provides a summary of the comments received from the beta test participants. The Project Manager’s response to each comment and the action that has been or will be taken is also stated for each comment. A detailed summary of the results from each question on the survey is available upon request.

General Comments about Application		
User Comment	MetroGIS comment	Action
<p><i>Name of Application</i> What does IEDDM stand for? Why give your application an acronym for a name, how about instead of DataFinder use DataDistributor or DataDistribution!!</p>	We agree we need to come up with good name.	The name "DataFinder Cafe" was selected on May 13, after a nominating and voting process in which 21 individuals from local, regional and state interests participated.
<p><i>Application Installation</i> The JRE & Java Web Start install procedures are complex</p>	Expanded installation help would be a good idea	FAQ page proposed for Fall 2002
<p><i>Button Locations</i> It would be nice if all of the extraction buttons were together and separated from any other buttons instead of having the print button in the middle of them.</p>	Good idea	Completed
<p><i>Selection of Features</i> Features are not highlighted when selected</p>	The WMS standard that we used to build this application does not support the concept of "highlighting" – so it was a trade of between standards & functionality. If this gets integrated into a new WMS standard – we could add it	Continue to monitor
<p><i>Additional Functionality</i></p> <ul style="list-style-type: none"> • "It does the job, but isn't overly flexible (legend editing for example) for what I was doing." • "Any way to change colors or line thickness?" • Any way to zoom to an address or street intersection? • Search for last owners name? 	These requests blur the line between a data distribution application and an on-line GIS application. This blurring of the lines has been identified as a "challenge area" to address in the current Business Plan Update project.	Further discussion needed at the policy level. Has been added as a "Challenge Area as part of current Business Plan Update process.

Metadata & Layer Catalog		
User Comment	MetroGIS comment	Action
<p>Metadata access Access to metadata via a right click could be improved.</p>	We will try to get the metadata pane to update when a different layer is activated	Completed
<p><i>Layer Catalog</i> From working in the field, I "know" the categories, but for somebody who doesn't the hierarchy of categories and terms are hard to grasp, often confusing, and, much too often, frustrating.</p>	We are working with LMIC to standardize layer categories with new ISO theme categories. Hopefully this will help users, as well as some kind of search capability.	Enhancement proposed for Fall 2002
<p><i>Metadata Search Capability</i> "... I think people should be able to query the databases using metadata and, in the long run, natural language queries, e.g., where is the nearest police station from 4564 S 26th Ave in Minneapolis?"</p>	Integrating metadata search capability into the application is a great idea – but not within the scope of the project. We would like to work closely with LMIC to do this. Not sure about "natural language queries" – we will discuss this.	Potential enhancement but no action proposed in 2002 or 2003.

Data Distribution Functionality		
User Comment	MetroGIS comment	Action
<i>A: Drive Problem</i> The download function requests the user to utilize the A: drive of their computer. Is this necessary?	No it is not necessary! It has been fixed	Bug fixed
<i>Scale Dependent layer visibility</i> Sometimes a layer in the legend does not draw	Scale dependent layers caused confusion – visibility of parcels and orthophotos is scale dependent. Application should “gray” out layers that will not draw	Bug fixed
<i>Speed: Some data downloads are slow:</i> <ul style="list-style-type: none"> • For large datasets • For data that is requested in another format (e.g., MapInfo) 	One enhancement already in the works is a file size message box that will give the user some estimate of how much time it will take to download file	Proposed for Fall 2002
<i>Speed: Application (especially map rendering) is slow.</i>	Could be caused by part of beta application being hosted on non-server class machine. We anticipate that this will improve after install on MetroGIS server	Continue to monitor
<i>Download Extent</i> Currently, the user is limited to downloading only the data that is visible. With Parcels – scale-dependent visibility prevented users from downloading a large area of parcel data (e.g., a county)	This is a very important problem to resolve ... we will try and fix it before implementation	Enhancement proposed fall 2002.
<i>Projection/Datum changes</i> Add choice of changing the projection/datum of the dataset(s) as part of the download wizard	Feasible – but not part of project scope	Enhancement tentatively proposed for 2003.
<i>Additional data format requests:</i> <ul style="list-style-type: none"> • Arc Info export • ESRI Geodatabase • AutoCad DWG, DXF • Intergraph GeoMedia Access Warehouse • Tabular data (i.e., “.dbf” format) 	Feasible – but not part of project scope. (Note that both ESRI Geodatabase & Intergraph GeoMedia Access Warehouse require purchase of additional software & maintenance.)	The addition of ArcInfo (e00) and AutoCAD DWG and DXF formats tentatively proposed for 2003.

Licensing Issues		
User Comment	MetroGIS comment	Action
<ul style="list-style-type: none"> • Dual licensing procedure** was confusing – users would prefer one license • Licensing instruction were confusing • Users suggested electronic methods to get license, obtain passwords etc. 	<ul style="list-style-type: none"> • Efforts to simplify licensing procedures are ongoing • Application will soon give users option to create and change their own passwords – and also give a summary of data they have access to and the data license expiration date (if any) 	Ongoing effort to improve instructions. Discussions in progress** with the data producers to investigate simpler and automated licensing processes.
<p>** On 5/14/02, MetroGIS learned that Hennepin County has agreed in principle to join into a common license procedure with the other six counties, which will eliminate the dual procedures and substantially simplify the process.</p>		

ATTACHMENT A

March 20, 2002

MetroGIS Stakeholders:

You are invited to participate in testing the new DataFinder geodata viewing and distribution application that MetroGIS commissioned last July. Syncline, Inc., a GIS/Web applications consultant firm, headquartered in Boston, MA, is heading up the technical design, development, and implementation of this project under the guidance of the MetroGIS project team.

This project substantially expands the data download functionality currently supported on MetroGIS DataFinder (www.datafinder.org). You are one of 80 or so individuals who have been selected to participate in beta testing this new application. The official rollout is scheduled for July 10, 2002.

MetroGIS commissioned this project to address data distribution needs defined by the broad MetroGIS community – data users and producers. Each of the following desired functions has been incorporated into the application design for viewing and downloading geodata:

Data users wanted the ability to:

- View and download metadata and geodata via MetroGIS DataFinder
- Obtain data from multiple sources that are readily usable and interoperable for cross-jurisdictional use (regional datasets)
- Self-define geographic areas of interest within the seven county metro area for data download
- Select among available datasets for download
- Select among datasets attributes for download
- Select among a number of data formats for download

Data producer requirements for participating included:

- A robust and flexible security mechanism to insure security for data that are subject to access limitations.
- Less time and effort than currently required to support data distribution.

We hope you are interested in participating in our beta test. The test period will begin in early April and proceed for about a month. You will receive another notice shortly to inform you of the test URL. We will also provide an Internet-based survey for your feedback.

The reason we are writing you now about the test is that the application will include access to the regional parcel dataset. If you would like to be able to view and/or download this dataset, you will need to submit the order form and obtain the required license(s). For ordering and licensing instructions, please see http://www.metrogis.org/data/datasets/parcels/order_info_public/index.shtml

Note: For the beta test, only the regional parcel dataset produced in 1999 will be initially available. The 1999 dataset has fewer attributes than the current version but will still be adequate to test the download options. The components of the 2002 version of the regional parcel dataset will be added to the beta test when they become available. The Lawrence Group's street centerline dataset also will not be available via the test site.

Please let us know if you have any questions about this project. *If you are not interested in participating, please send a return email asking to be removed from the notification list.*

Sincerely,

Alison Slaats, Project Technical Lead and MetroGIS DataFinder Manager
Randall Johnson, MetroGIS Staff Coordinator

ATTACHMENT B

April 12, 2002

MetroGIS Stakeholders:

You are invited to participate in testing the new state-of-the-art MetroGIS DataFinder data distribution application. This application expands the data download functionality currently supported on DataFinder. The testing period is from now until May 3rd. After you have tested the application, we would like you, and each of your colleagues who also participate in the testing, to complete a short online survey to give us your feedback.

Instructions on how to download and install the application can be found at:
http://metrogis.syncline.com/metrogis_viewer

The online feedback survey can be found at:
http://www.datafinder.org/ieddm_survey/IEDDM_1.html

Our main goal of this beta test period is to test the existing functionality of the application to make sure it works as expected. While ideas for future enhancements to the functionality of this application are welcome, they will not be included in the release of this version application, but noted down for future versions. Current functionality you can try out includes:

- Browsing over 70 datasets (using pan, zoom in, zoom out, measure)
- Gazetteer functionality that allows you to zoom to the extent of a feature, such as a county or municipality
- Download of datasets extracted by 1) viewable extent, 2) using an existing polygon feature such as a county, or 3) by drawing your own polygon to define an area.
- Ability to select specific attributes to download by dataset
- Ability to download data in different geospatial formats
- Viewing of dataset metadata inside the application
- Secure access to licensed datasets [Currently this feature limited to government and academic interests. If you have not already done so you, you will need to submit a signed parcel license agreement(s), to receive the required user name and password to access these datasets. For licensing information see http://www.metrogis.org/data/datasets/parcels/order_info_public/index.shtml.]

If you have any questions or would like to provide comments in addition to the survey, please contact Alison Slaats. Also, if you would like to test out the Web Map Services functionality (with your own WMS-client), please also contact Alison for more information. (alison.slaats@metc.state.mn.us or 651-602-1561).

Sincerely,

Alison Slaats, MetroGIS DataFinder Manager
Randall Johnson, MetroGIS Staff Coordinator