

Year End Detailed Status Report

MetroGIS Activities and Accomplishments

- 2005 -

I. Regional Information Need/Data Solutions – Data Component:

a. Addresses

A vision statement was approved by the Policy Board on April 27th for a regional strategy to capture and maintain addresses for all occupiable units (both residential and non-residential), whereby the data can be readily shared among government interests that serve the seven-county, Minneapolis-St. Paul region. A white paper was completed in September and presented at the State GIS/LIS Conference for comment. General procedures and policies needed to accomplish the vision are outlined in the white paper. It can be viewed at http://www.metrogis.org/data/info_needs/street_addresses/Occupiable_Units_Dataset_Vision.pdf.

b. Census Geography

MetroGIS staff successfully brokered an agreement between the U.S. Census Bureau and The Lawrence Group (TLG) to incorporate the TLG regional street centerline dataset into the 2010 census geography, subject to the data meeting accuracy requirements. Testing thus far has been favorable. This agreement has been sought for several years, as it is expected to result in substantial time and cost savings for local governments. Municipalities and counties will be able to “redistrict” new census boundaries using centerline data that aligns very closely with their own. Similarly, the Metropolitan Council will not have to realign the final products with accurate geospatial data, a project that cost over \$72,000 for the 1990 and 2000 Census boundaries.

c. Emergency Preparedness

The Policy Board endorsed a regional strategy for further testing, in a full production environment, through which the seven counties and others propose to collaborate to gather and maintain several data themes fundamental to each of their efforts to support emergency service mandates. A document, which provides details regarding data content and custodial role and responsibility details, can be viewed at http://www.metrogis.org/data/info_needs/emergency_prep/ep_endorsed.pdf. This endorsed regional strategy also places emphasis on outreach efforts to demonstrate the benefits of GIS technology to officials in the emergency management community. Part of the outreach initiative involved implementation of a password protected Web-based application to demonstrate GIS data currently available to the emergency management community. In May, the Emergency Preparedness workgroup hosted a seminar for emergency managers to inform them about GIS capabilities relevant to their work.

d. Existing Land Use:

In response to questions raised by the Policy Board, the Coordinating Committee decided to host a forum for community development professionals to further investigate the desirability of leveraging the American Planning Association’s LBCS scheme which integrates several aspects of land use (e.g., structure type, function, and ownership) into a single data structure. This forum is to occur following the pending Strategic Directions Workshop, assuming Existing Land Use continues to be topic for consideration of a regional solution.

e. Highways and Roads:

A vision statement was accepted by the Policy Board on April 27 to pursue enhancements to the current regional street centerline solution to address needs of the E-911 community. This statement can be viewed at http://www.metrogis.org/teams/workgroups/e911_streets/05_0420_pbreport.pdf. This endorsed regional vision seeks to integrate GIS technology into the day-to-day operations of the region’s 27 PSAPs. This strategy is expected to play an important role in the region’s efforts to deal with commonly needed information related to supporting addressing for residences, business suites, and other locations important to the broader MetroGIS community. The Metropolitan Emergency Services Board (MESB) took action in October in accordance with achieving this vision by approving an investment of specialized software to ensure Master Street Address Guide (MSAG) data records are fully synchronized with associated street centerline data managed in a GIS environment.

No substantive progress was made in 2005 on a second collaborative initiative for which MnDOT is the lead organization. The project involves operationalizing an anchor/segment database model under

development by MnDOT with consultant assistance. The goal is to create a sustainable means to integrate, as needed, data associated with street centerlines but maintained in disparate source data files with differing standards by way of a technology solution. MnDOT extended an invitation to MetroGIS in 2004 to collaborate, through a pilot project, on refining the prototype software, accompanying policies and procedures, and associated tools/applications, as needed, to achieve common objectives. Michael Dolbow, GIS Specialist with the Metropolitan Council, was the lead staff for testing in the MetroGIS environment. Mr. Dolbow left the Council and a decision has not been made whether someone with his skill set will be retired in his place.

f. Hydrology

No substantive progress made to delays in the delivery of imagery required to conduct a pilot project.

g. Jurisdictional Boundaries

- Watershed District Boundaries. Washington County initiated a project in 2004 to prototype primary data capture standards, associated custodian roles and responsibilities, and outline options for organizations that have a business need to serve as the Regional Custodian (aggregate the boundary data produced by the seven counties into a regional dataset. Due to reductions in staff resources, no progress was made in 2005.
- School District Boundaries. No work was initiated to identify an appropriate regional custodian due to budget cuts and reorganization of LMIC. LMIC had been identified as the most logical custodial option given their as contractor relationship with the Department of Education.

h. Land Cover

The extent of coverage is now up to 75 percent of the seven county region. Work is currently in progress to extend the coverage another 12 percent. A map of the coverage status can be viewed at http://www.metrogis.org/data/datasets/land_cover/mlccs_metro_progress_planned.pdf. In addition, a technical forum for current users forum was held on December 16 to share new coding and systems criteria.

i. Parcels:

▪ Government and Academic Interests

On January 31st, Version 2.0 of the regional parcel dataset was released. Three quarterly updates were also produced. The number of attributes was expanded from 25 to 66 and a parcel point database was added. (These enhancements were made possible with the execution of the 2004-2008 Parcel Data Sharing Agreement in December 2004.)

▪ Non-Profit and For-Profit Access

- 1) *Non-Profits:* A proposal was received in July from a consortium of neighborhood groups active in Hennepin and Ramsey Counties. They requested access by non-profit interests to the regional parcel dataset. A pilot project with Hennepin County was initiated to work out the specifics, since neighborhood groups currently have access to Ramsey County parcel data via the Ramsey County Users Group. This pilot project is in progress and a component of the M3D project. (See Item IIIe, below.)
- 2) *For-Profits:* The County Data Producer Workgroup ceased its efforts to streamline licensing and distribution to non-government interests. The group concluded, based upon the difficult and time consuming negotiations required to achieve a common license for government entities, that there was insufficient interest in the data from non-government interests to justify an anticipated equally, if not more different negotiations, to standardize a license for non-government access.

▪ View Only Access For Parcel Data

In November, agreement was reached with Hennepin County through which county staff are willing to evaluate implications of allowing view-only access to parcel data via a web-based application prototype to be provided by the Metropolitan Mosquito Control District (MMCD). The MMCD believes they can deliver the application prototype to county staff early in 2006.

j. Socioeconomic Characteristics of Areas

- The University of Minnesota Population Center continued to serve in its capacity as regional custodian for the MetroGIS Socioeconomic Resources Page (http://www.datafinder.org/mg/socioeconomic_resources/index.asp).

- The Metro Public Health GIS Users Group secured agreement from the metro area counties for new ways to publish vital statistics (birth and death data) that present more small area information in formats compatible with GIS, while preserving confidentiality of individuals. This action was facilitated by Policy Board's January 2004 action adopting of a regional to the Socioeconomic Information Need. Data, such as the attributes associated with births and deaths (e.g., the number of low birth-weight births, births to teenage mothers, etc.) can serve as useful indicators of community well-being. This proposal will be forwarded to the state Department of Health.
- Efforts to improve usability of two datasets cited in addition to the birth and death data, above, that were also identified in the Policy Board's January 2004 action, have been abandoned, at least for the time being, due to inability to secure a champion(s) to lead the needed work. These efforts involved County social service and First Call for Help records.

II. Regional Information Need/Data Solutions –Application Component:

- a) **Mailing Label Application:** The first regional application became fully operational in May 2005. It can accessed licensed users of the regional parcel dataset at <http://www.datafinder.org/labels/login.asp> .
- b) **Emergency Preparedness:** A prototype application was launched in April for testing and refinement. (See Item Ib.) Its primary purpose is to inform the emergency preparedness community of data resources available via the GIS community.

III. Special Studies/Projects –Leveraging Investments

- a. **MetroGIS Strategic Directions Workshop.** Efforts to prepare for this workshop were suspended spring 2005. Suspension was at the request of the Metropolitan Council until it had completed an internal evaluation of benefits received from its investment in MetroGIS and to articulate any issues or concerns that it may wish to bring to the subject Workshop. The Council's resulting Program Evaluation can be viewed at http://www.metrogis.org/teams/cc/meetings/05_1214/mc_eval.pdf. As of this writing, the details of a process had not been decided to obtain feedback from other stakeholders regarding the conclusions set forth in this document.
- b. **Beyond Government Users: Future Directions for MetroGIS.** A forum was hosted on November 15th at the direction of the Policy Board to evaluate the potential for partnerships with non-profit and/or for-profit interests to address common geospatial needs. 33 individuals representing 13 different interest categories participated. A summary document can be viewed at <http://www.metrogis.org/>. The top three themes of ideas identified were: How can we work together to reduce costs?; What innovations can we work together to develop?; and How can we promote a statewide organization? The results of this forum will be a topic of discussion at the pending, Strategic Directions Workshop (Item A, above).
- c) **ApplicationFinder Concept:** No progress was made in 2005, due to postponement of Strategic Directions Workshop (see Item IIIa). In December 2004, the Coordinating Committee endorsed a preliminary technology strategy (ApplicationFinder concept) to help MetroGIS stakeholders discover existing applications pertaining to various business needs and authorized creation of a workgroup to develop a proof of concept to demonstrate that the desired functionality can not be adequately achieved through the use of the established Goggle web-search tool.
- d) **Investigate Exchanging Parcel Data for Utility Infrastructure Data.** No progress in 2005. Representatives from three utility companies renewed their interest in reviewing the regional parcel dataset and decide whether it had value to their operations. Discussions had been suspended while negotiations were in progress renewal of the GIS Data Sharing Agreements with the counties. Two of the three expressed interest in further talks but had not had an opportunity critically evaluate the newest version of the regional dataset. Utility interests were well represented at the November 15th forum for non-government interests.
- e) **2005 Regional GIS Pilot Project Program.** Three projects received concept approval (DataFinder Café Upgrade, Common Web-based Query Design, and Fill in incomplete attributes for the Regional Parcel Dataset. As of this writing, only the DataFinder Café proposal remained positioned for funding.)
- f) **M3D Project.** The M3D project (<http://www.cura.umn.edu/M3D>) is important to MetroGIS because in addition to assisting with a resolution to the access policy for non-profit interests this project also involves development of a web-based geospatial application that will address common information needs of the broader MetroGIS community. The Staff Coordinator and several individuals active in MetroGIS

initiatives serve on the M3D Steering Committee. In October 2005, the “alpha” version of the M3D application was launched for testing at <http://map.deed.state.mn.us/m3d> - User Name: M3D Password: test.

- g) National Street Address Data Standard. MetroGIS's Address Workgroup's efforts to define workable address standards for a regional Occupiable Units Address Dataset played a substantial role in the recently released draft national standards that are being developed through the URISA under the auspices of the FGDC. Supporting organizations are NENA and the U.S. Census Bureau. The final review period for the standard ends in January. The standard is expected to be finalized in May of 2006. This standard will be evaluated for use with the proposed regional occupiable units address dataset and the E-911 compatible street centerlines dataset.
- h) The National Demonstration Project on Land Market Monitoring The Metropolitan Council is participating in a project titled The National Demonstration Project on Land Market Monitoring. The project will develop and demonstrate GIS residential capacity analysis methods used at the Metropolitan Council and at four other organizations across the county. Other participating organizations include Portland OR, Sacramento CA, Orange County FL and the State of Maryland. Lincoln Institute of Land Policy is supporting the project and the University of Maryland, National Center for Smart Growth is leading the project. The extensive GIS data available through MetroGIS was key to the Council being selected as a participant in this project.

IV. Data Discovery and Acquisition – Other than Topical Applications

a. Support MetroGIS DataFinder

- DataFinder Café: A multi-part user survey was conducted in May and June to establish the foundation for setting functional priorities for the next generation of Café. Coordinating Committee approval was received in September for design priorities and a request was made of the custodian (Metropolitan Council) to implement as many of the desired functions, as possible, with available funds with the understanding the project is dependent upon obtaining approval to purchase a new web server. As of this writing, negotiations were in process concerning purchase of the server.
- Data User Information. MetroGIS again contracted with the firm Quova to produce a report to document the geographic location of the entities that download data from DataFinder. The finding was that over two-thirds of the downloading activity is to entities located within the seven county metro area and adjoining counties.

b. Promote of DataFinder As A Common Tool – Leveraging the Investment:

- Washington County continued its use of the web server that supports Café to provide external Internet access to the county's parcel query application activity. Use of the Café server is saving the county approximately \$10,000 annually in Application Service Provider (ASP) fees plus the cost of hardware and software and related licensing expenses.
- In addition to the Metropolitan Council, 10 organizations are utilizing MetroGIS to distribute geospatial data they maintain and 18 are using DataFinder as a search tool for discovery of their data.

IV. Outreach

a. Annual Report:

The 2004 Annual Report was distributed to over 1,900 persons and handed out at several conferences and forums. A copy can be viewed at http://www.metrogis.org/about/annual_reports/index.shtml.

b. Newsletter Articles:

Articles about MetroGIS's activities and accomplishments were submitted for publication in each of the quarterly issues of the statewide GIS/LIS newsletter.

c. General Information Web site - www.metrogis.org:

This website serves as MetroGIS's institutional memory and main vehicle for keeping participants informed. This site is averaging nearly 8,000+ visits per month.

d. County GIS User Groups:

- Quarterly updates of MetroGIS's activities are provided to each user group. Staff attended as many user group meetings as possible to encourage use of adopted best practices and answer questions about MetroGIS's activities.

- Arranged for Council facilitator to assist Scott County GIS Users Group with a strategic planning workshop.
- e. Coordination with **State (Beyond Metro)** Geospatial Activities/Information Requests:
- Staff and Coordinating Committee members served as liaisons to Governor's Council on Geographic Information committees and workgroups: Emergency Preparedness, Hydrographic Data and Standards, Geospatial Infrastructure Workgroups and served on the Council itself.
- f. Coordination with **National/International** Geospatial Activities/Information Requests:
- January: Interviewed by Geospatial One Stop / The National Map Team concerning partnering on related best practices. Resulted in a publication documenting best practices.
 - January: Interviewed by Tom Pelsoci who was working a study to define the benefits of geospatial collaboration focusing on The National Map. Resulted in a publication documenting best practices.
 - March: A book, written by Ian Masser, was published by ESRI in which MetroGIS is showcased as the only North American example of a regional implementation of NSDI philosophies – governance structure and demonstrated ability to bundle operational capacities across multiple organizations as if a single enterprise.
 - April 6: URISA invited MetroGIS to submit an update to MetroGIS's 2002 winning ESIG application for publication in a book highlighting the 15 best ESIG projects recognized by URISA. The publication is expected to go to print in December.
 - April: Interviewed by Dave Dubauskas, City of Edmonton, Alberta. Interested in institutional relationships that have been implemented to share custodial responsibilities for commonly needed data.
 - April: MetroGIS's efforts were cited as the only regional example by the Open Geographic Consortium in their publication entitled "Server Architecture Models for the National Spatial Data Infrastructure (NSDI)" (http://portal.opengeospatial.org/files/?artifact_id=9984&version=2&format=pdf).
 - May: Metropolitan Regions Spatial Information Workshop, Washington D.C. MetroGIS Staff Coordinator summarized MetroGIS's functions and accomplishments, with specific emphasis on institutional relationships that have been implemented to share custodial responsibilities to support solutions for commonly needed data. The conference host paid all travel expenses. Development of a guidebook of best practices for establishing regional data sharing collaborations was launched at this forum. The publication is expected to be published in early 2006.
 - May: Interviewed by GIS Coordinator with the University of North Carolina – Charlotte. Role of multiple custodians sharing responsibilities and method for adoption of standards.
 - November: Staff Coordinator attended the Innovations in Governance Program at the Kennedy School of Government. The focus was on governance issues related to sustaining multi-sector/multi-organizational solutions to important public needs.
- g. Formal Presentations:
- April: Miami Valley Regional Planning Commission, Dayton Ohio. MetroGIS Staff Coordinator summarized MetroGIS's functions and accomplishments, with specific emphasis on institutional relationships that have been implemented to share custodial responsibilities for commonly needed data. The conference host paid all travel expenses.
 - April 5. FEMA forum – appropriate to list here? The conference host paid all travel expenses
 - October 4. GIS/LIS Conference: (See Item Ia.)
 - November 5. Orlando Conference – appropriate here?
 - Presentations to at least five organizations regarding Emergency Preparedness:
 - Hennepin County GIS Users Group
 - Dakota County GIS Users Group
 - GIS/LIS Conference
 - Governor's Conference for Emergency Managers
 - Minnesota Association of Emergency Managers (MEMA) Conference

V. Project Management/Administration

- a. Administered Performance Measures Plan – quarterly reports to the Coordinating Committee. The 2004 Annual Report was presented to the Policy Board in January 2005. Work on the 2005 annual report was initiated.
- b. Maintained currency of information on www.metrogis.org – the primary source of a wide variety of information about MetroGIS’s mission, accomplishments, benefits, participants, meeting schedules, projects and lessons learned, and endorsed policies.
- c. Maintained currency of metadata and data accessible via www.datafinder.org - MetroGIS’s primary data distribution mechanism.
- d. Maintained licensing records for access to street centerline data (169) and parcel data (66).
- e. Secured a time extension for the unused \$15,800-plus portion of a federal grant received to upgrade DataFinder Café, conducted a user survey, identified functional priorities, researched options to achieve the desired functional priorities, and prepared a recommendation that was under consideration at the time of this writing.
- f. Provided a variety of information about MetroGIS to the Metropolitan Council’s team for preparation of a Program Evaluation and Audit of MetroGIS. The document describes how the Council benefits from its investment in MetroGIS and outlines several suggestions for further study.
- g. Significant documents produced:
 - 2004 Annual Report (www.metrogis.org/about/annual_reports/index.shtml)
 - 2005 Performance Measurement Report (http://www.metrogis.org/benefits/perf_measure/index.shtml)
 - A testimonial from the City of Roseville to the benefits of MetroGIS’s efforts was prepared. It can be viewed at <http://www.metrogis.org/benefits/testimonials/index.shtml>.
 - White paper - A Regional Occupiable Units Address Dataset A Vision... (It can be viewed at http://www.metrogis.org/data/info_needs/street_addresses/Occupiable_Units_Dataset_Vision.pdf.)
 - White paper – MetroGIS Emergency Preparedness Workgroup Project Report (January 2003 to August 2005) (It can be viewed at http://www.metrogis.org/data/info_needs/emergency_prep/ep_endorsed.pdf.)
 - Summary report for the November 15th forum entitled “Beyond Government Users: New Directions for MetroGIS.” It can be viewed at <http://www.metrogis.org/>.
 - Performance Measurement Annual Report. (It can be viewed at http://www.metrogis.org/benefits/perf_measure/index.shtml.)
- h. Meetings supported by MetroGIS staff support team:
 - Policy Board (4)
 - Coordinating Committee (4)
 - Technical Advisory Team (2)
 - Business Information Needs - Workgroups, Data User Forums, Training, etc.:
 - ✓ Address Workgroup (5)
 - ✓ E911-Compliant Street Centerline Workgroup (2)
 - ✓ Emergency Preparedness Workgroup (7)
 - ✓ County Data Producers Workgroup (1)
 - Special Events: (1)
 - ✓ Non-Government Perspective Forum – Beyond Government Users: New Directions for MetroGIS (November 15)