



The MetroGIS Initiative: Lessons from a Successful Geospatial Data Collaborative

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MetroGIS's Vision

The MetroGIS vision emerged from a 1995 strategic planning retreat by a representative cross-section of GIS practitioners within the metropolitan region.

“Provide an ongoing, stakeholder governed, metro-wide mechanism through which participants easily and equitably share geographically referenced data that are accurate, current, secure, of common benefit and readily usable.”

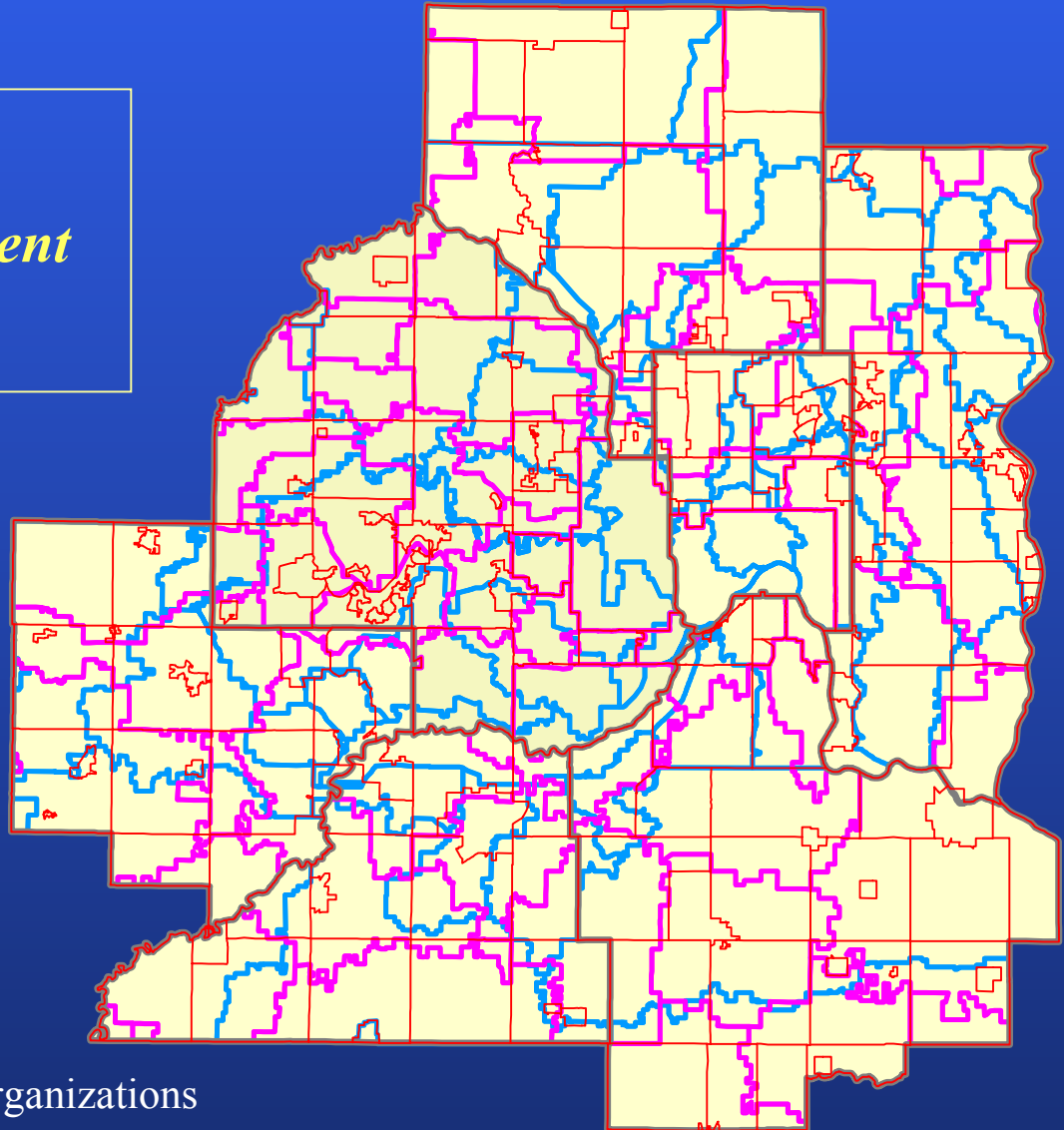


Complexity of Relationships

900,000+ parcels

300 local units of government

3000 square miles



 Metropolitan Area

 7 Counties

 190 Minor Civil Divisions

 59 School Districts

 39 Watershed Management Organizations



Factors Leading to MetroGIS

- **Six of seven counties had made large investments in GIS.**
- **Reduced start-up costs encouraged new GIS investments.**
- **Limited availability of suitable and affordable data.**
- **Similar data needs were being met independently.**
- **Data access policies varied among producers.**
- **Few data standards existed.**
- **Data documentation was rare.**



Guiding Principles

MetroGIS has been guided by principles that emphasize balance between idealism and practicality.

- **Actively Involve Policy Makers**
- **Promote Understanding**
- **Seek Consensus on Critical Decisions**
- **Represent Diverse Perspectives**
- **Focus on Common Business Information Needs**
- **Perceived Benefits Critical to Policy**
- **Align Collaborative Roles with Those who have Matching Internal Business Needs**



Who Is MetroGIS?

MetroGIS is a “community” project representing a broad base of participant organizations, including:

- **Cities**
- **Counties**
- **Metropolitan gov’t**
- **State government**
- **Federal government**
- **School districts**
- **Watershed districts**
- **Academic institutions**
- **Private sector**
- **Nonprofit organizations**



Finding Common Ground & Priority Setting

The results of five strategic initiatives have defined the desired form and function of MetroGIS:

- **Obtain Key Stakeholder Endorsement**
- **Secure Data and Cost Sharing Agreements**
- **Identify and Address Common Information Needs**
- **Develop Internet Data Search and Retrieval Tool**
(www.datafinder.org)
- **Agree on Organizational and Financial Structure**
(business planning)



Priority MetroGIS Functions

MetroGIS's Business Plan identifies eighteen functions as priorities for MetroGIS support. The top three are:

- **Foster GIS coordination among stakeholders**
- **Oversee regional solutions to common information needs**
- **Support Internet-based geodata discovery and retrieval tool (*MetroGIS DataFinder* - www.datafinder.org)**



Common Information Needs

Based upon an extensive survey of the region's data users, the Policy Board endorsed a list of top priority information needs in May 1997:

- **Jurisdictional boundaries**
- **Street addresses**
- **Land use (planned)**
- **Rights to property**
- **Parcel boundaries**
- **Lakes, wetlands, etc.**
- **Land use (existing)**
- **Census boundaries**
- **Where people live**
- **Land regulations**
- **Highway/road networks**
- **Socio-economic characteristics**
- **Parcel identifiers**



Regional Data Solutions

MetroGIS developed a process to collaboratively develop regional solutions to common stakeholder information needs.

Currently available:

- 1. Street centerlines and address ranges**
- 2. MCD/county jurisdictional boundaries**
- 3. Parcels**
- 4. Land cover**
- 5. Census geography (1990 and 2000)**
- 6. Planned land use**
- 7. Digital orthoimagery**

In progress:

- 1. Existing land use**
- 2. Lakes, wetlands, rivers**
- 3. Highways and roads**
- 4. School and watershed district jurisdictional boundaries**



DataFinder: A Data Discovery and Retrieval Tool

The Minnesota Geographic Data Clearinghouse - Microsoft Internet Explorer provided by Metropolitan Council

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Real.com

Address <http://slaats02/mg/geogateway/index.htm> Go

MetroGIS Data Finder

[Home](#) | [MetroGIS Home](#) | [Metadata Search](#) | [Theme Catalog](#) | [Online Mapping](#) | [State Data](#) | [Reference Maps](#) | [Help](#)

MetroGIS GeoGateway

NODES | **KEYWORDS** | **LOCATION** | **VIEW/PRINT** | **HELP** | **WELCOME**

Location You have the option of searching for data by specific geographic area. Select from "Search within Minnesota" or "Search by neighboring regions" or draw an area on the map.

Search by geographic area. Choose one of the options below:

Search within the Metro Area:

Search by MCD:

Select from a map: [Click to view map](#)

You have selected a geographic region with the following values:

- Anoka
- Afton
- Andover
- Anoka
- Apple Valley
- Arden Hills
- Bayport
- Baytown Twp.
- Belle Plaine
- Belle Plaine Twp.**
- Benton Twp.

Local intranet

(www.datafinder.org)



MetroGIS: Experiment in Progress

- **Forum to facilitate collaboration on variety of common geospatial program needs.**
- **More than development, documentation maintenance, and distribution of data.**
- **Unincorporated, no mandate or legal standing - *Self-organized.***
- **Elected officials comprise the Policy Board - *Unprecedented.***



MetroGIS: Experiment in Progress (Con't)

- **Cannot own data, receive or spend funds - *Rely on partners.***
- **Voluntary compliance - *Members must champion MetroGIS policies within their organizations.***
- **Consensus-based decisions on matters fundamental to success.**
- **Implementing and refining components of NSDI vision**



Summary of Benefits

- **Decision support improved**
- **Data sharing has expanded**
- **Reduced time and expenses to locate, assemble, and use needed data**
- **Commitments to metadata increased**
- **Commitments to standards increased**
- **Informal professional working relationships enhanced**
- **GIS technology is becoming widely recognized as basic business tool throughout the Metro Area**



What We Have Learned?

(About creating and sustaining geospatial collaboration)

- **Regional cooperation *will not* just happen!**
- **Coordination functions are as important as data sharing**
- **Need agreement on vision and expectations**
- **Need a champion(s) organization with resources**
- **Need champions within organizations critical to success**
- **“Fair-share” formula difficult to develop & implement**
- **Maintain a creditable institutional memory**



What We Have Learned?

(Con't)

- **Acknowledge participant contributions in form of funding, data, and/or people and equipment**
- **Overall focus maintained when priorities result through a sound research design**
- **Forum must engage variety of critical interests - *producer, user, public & private***
- **Counties key to a regional GIS**
- **County-based user groups important to achieving vision**



MetroGIS: A Micro NSDI

MetroGIS is accomplishing locally what national and global Spatial Data Infrastructure (SDI) Initiatives are striving to accomplish on much larger scales:

- **Create and sustain a reliable process to assemble and distribute commonly needed geospatial data**
- **Provide an efficient means to search for and access geospatial data for a variety of uses**
- **Leverage individual geospatial data sharing efforts**
- **Foster GIS collaborations to put principles into practice**
- **Foster opportunities to transfer knowledge**



Our Goal

When MetroGIS fully achieves its vision, government within the Twin Cities area will be measurably more effective in their efforts to achieve livable community goals, enhance the quality of life of their residents, and improve their economic competitiveness.



For Further Information About MetroGIS

General Information Web Site: www.metrogis.org

Data Resources: www.datafinder.org

Staff Coordinator: randy.johnson@metc.state.mn.us