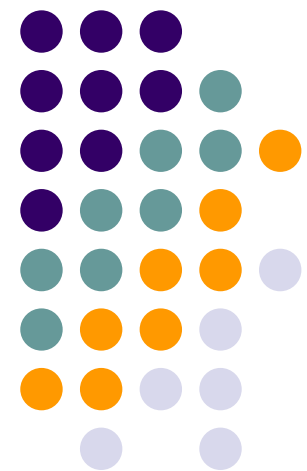


# GeoService Finder Project: Final Report & Next Steps

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Presentation to the MetroGIS Coordinating Committee  
March 27, 2008

by the Land Management Information Center  
Fred Logman  
Chris Cialek



# Steering Committee



Bob Basques	City of St. Paul
David Bitner	Metropolitan Airports Commission
Joella Givens	Mn DOT
Josh Gumm	Scott County
Randall Johnson	MetroGIS
Randy Knippel	Dakota County
Alison Slaats	Metropolitan Council

# Project Goals



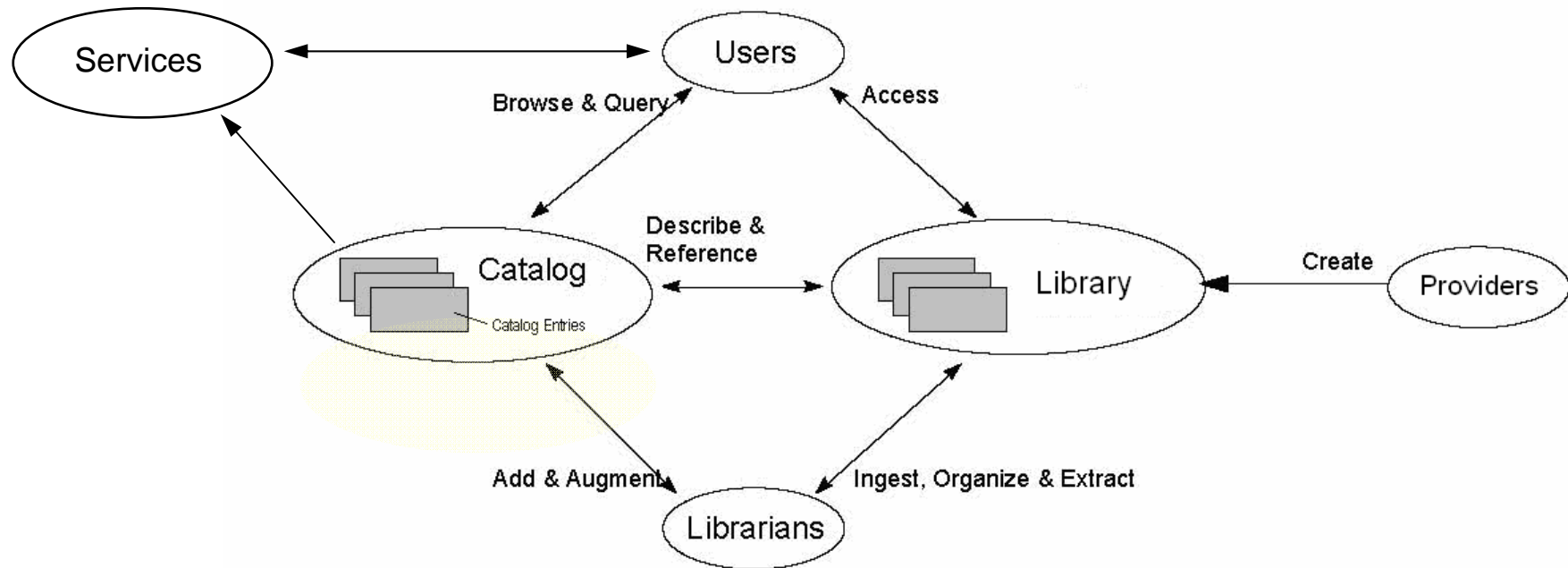
- Deliver a **catalog** architecture and application
- Demonstrate a **library** function
- Describe system **administration** roles and responsibilities
- Provide implementation **recommendations**



# Project Products

- Project Report  
[http://www.metrogis.org/teams/cc/meetings/08\\_0327](http://www.metrogis.org/teams/cc/meetings/08_0327)
- Report Addendum
- GIS/LIS Consortium Article (Spring 2008)

# Big Picture



# Home



## GeoServiceFinder

### Links

- [Home](#)
- [Browse](#)
- [Search](#)
- [Log in](#)

### Options

- [Print Friendly](#)
- [Preferences](#)
- [Help](#)

### Intranet Options

- [SQL: Show | Hide](#)
- [Menus: Show | Hide](#)



## GEOSERVICE FINDER

GeoService Finder helps you **find** existing geographic services and software relevant to Minnesota and **share** geographic services and software that you have created.

What are geographic services?

- Internet applications that display maps
- On-line services that developers can use when creating new applications (for example, a geocoding engine or an image server)
- Software components (such as a development template for Minnesota MapServer)

### FIND

The GeoService Finder database can be accessed in a number of ways.

#### Browse

- [Title](#): alphabetic listing of services in the catalog
- [Topic](#): thematic categories (i.e. Environment, Health...)
- [Type](#): Resource type (i.e. Online service, Software components...)

#### Search

- [Free text](#): Basic record search
- [Advanced](#): Search by all record fields

### SHARE

If you develop or support geographic services or software and would like to make them available to the larger community:

1. First browse or search the catalog for examples of the types of resources it contains.
2. [More information](#) is available to help you decide if your software or service is appropriate to include.

#### *Register and log in*

- [Register](#): Create your own user account in three easy steps.
- [Log in](#): Already have an account? Sign in to GeoService Finder.



GeoService Finder was created in conjunction with [Metro GIS](#)



# Browse/Search



## GeoServiceFinder Links

- Home
- Browse
- Search
- Log in

## Options

- Print Friendly
- Preferences
- Help

## Intranet Options

- \*SQL: Show | Hide
- \*Menus: Show | Hide



## GEOSERVICE FINDER BROWSE LIST

By clicking on or viewing any of the following data records, I acknowledge and agree to the terms of this [disclaimer](#).

Add your own services to this list! To contribute, you will need to create an account and fill out a brief form. See the instructions on the GeoService Finder [homepage](#).

- Limit browse by:**
- Service type ▾
  - Topic category ▾

- [AirPhotos Online](#): Airphotos Online is an Internet service providing you with direct access to the most recent color infrared aerial photographs taken by Minnesota DNR for forest management. (Remote application)
- [AniMap](#): Displays occurrence information for common animal species found in Minnesota. (Remote application)
- [dBox](#): Application development framework for use with MapServer. (Component)
- [DNR Data Deli](#): Allows users to download selected geospatial data files, with accompanying documentation. (Remote application)
- [DNR Data Deli Web Mapping Service](#): Provides access to selected spatial data layers using the OGC Web Mapping Services protocol. (Service)
- [GeoMoose](#): GeoMoose is open-source web mapping software available to anyone at no cost. (Standalone application)
- [Interactive Map on Local Ordinances Regulating Livestock](#): This interactive map provides information on local ordinances regulating animal agriculture in Minnesota's counties. (Remote application)
- [Land Management Information Center's Geospatial Image Server](#): The Land Management Information Center's Geospatial Image Server has been developed to provide versatile access to large statewide raster databases according to the Open GIS Consortium's Web Map Service (WMS) standards. (Service)
- [MACNoise Interactive Map](#): Allows residents near MSP International Airport to determine their eligibility for mitigation programs and provides access to historical flight and noise data. (Remote application)
- [MetroGIS DataFinder Café](#): The DataFinder Café is an interactive tool for viewing and downloading GIS datasets. (Remote application)
- [MetroGIS DataFinder WFS](#): DataFinder offers 17 WFS containing over 150 datasets total. (Service)
- [MetroGIS DataFinder WMS](#): DataFinder offers 18 WMS containing over 150 datasets total. (Service)
- [Minnesota Geology](#): This is a map service containing GIS layers that fall in the category of Geologic features. (Service)
- [Minnesota Grown Locations](#): Provides point locations of select entries in the Minnesota Grown directory ([www.minnesotagrown.com](http://www.minnesotagrown.com)) in an interactive map for users. (Remote application)
- [Minnesota Health](#): This is a WMS service containing GIS layers that fall into the category of Health features. (Service)
- [Minnesota Hydrography](#): This is a WMS service containing GIS layers that fall in the category of Hydrography. (Service)
- [Minnesota Social](#): This is a WMS service containing GIS layers that fall into the category of Social features. (Service)
- [MnDOT Interactive BaseMap](#): This web site provides statewide coverage depicting Mn/DOT BaseMap information, including all public roads in Minnesota, and allows you to view, save and print maps through this on-line application. (Remote application)

# Catalog Output



## GeoServiceFinder

### Links

- Home
- Browse
- Search
- Log in

### Options

- Print Friendly
- Preferences
- Help

### Intranet Options

- SQL: [Show](#) | [Hide](#)
- Menus: [Show](#) | [Hide](#)



## GEOMOOSE

**Edition:** 1.0.0

**Abstract:** GeoMoose is open-source web mapping software available to anyone at no cost. Using GeoMoose, anyone, especially city, county, or other governmental units, can create interactive mapping applications for their website or simply put basic GIS capabilities on the desktop of anyone in their organization. GeoMoose was created by the City of St. Paul and enhanced by the OpenMNND Project, a collaborative effort involving agencies in Minnesota and North Dakota funded by an FGDC grant. OpenMNND focused GeoMoose on local government needs and packaged it so it can be easily downloaded, configured, and deployed using basic web publishing skills. No programming is required. Based on open standards and open-source software, entire applications can be built without having to purchase any software. GeoMoose is designed around a services-oriented architecture, which means it can use other web servers on the Internet and distributed application components on your own servers. Map layers can come directly from web mapping services published by a variety of government agencies or by accessing your own data using MapServer. This minimizes the need to copy and process large volumes of data. Other web-based information services can be accessed to integrate associated systems dynamically based on user interaction with the application. As a result, GIS applications can be provided on most servers or workstations without requiring special performance capabilities, disk space, or database software. For more information on GeoMoose, see <http://www.geomoose.org/moose> For more information on MapServer, see <http://mapserver.gis.umn.edu/>

**Status:** Completed

**Purpose:** GeoMoose was particularly designed to meet the needs of local government to publish maps on the web. It has been packaged it so it can be easily downloaded, configured, and deployed using basic web publishing skills.

**Service type:** Standalone application

**Distributor:** Jim Dickerson, [jim.dickerson@state.mn.us](mailto:jim.dickerson@state.mn.us)

**Developer:** Randy Knippel, [randy.knippel@co.dakota.mn.us](mailto:randy.knippel@co.dakota.mn.us)

**Linkage:** <ftp://imic.state.mn.us/pub/software/GeoMoose/>

[Return to service list](#)

# Data Entry



User name: [chris.cialek@state.mn.us](mailto:chris.cialek@state.mn.us)

[Contact support](#)

Application: GeoSpatial ([change](#))

[Welcome](#) [Add content](#) [My content](#) [Search](#) [My profile](#) [Logout](#)

## GeoService Finder Entry Form



[Form settings](#)

**Title** Name by which the cited resource is known. Maximum field length is 250 characters. [?](#)

**Edition** Version of the cited resource. [?](#)

**Abstract** Brief narrative summary of the service contents. Maximum field length is 250 characters. [?](#)

**Abstract continued** A continuation of the brief abstract above. Please do not repeat text, as these fields will be displayed as a continuous paragraph in full record display mode. [?](#)

GeoMoose, anyone, especially city, county, or other governmental units, can create interactive mapping applications for their website or simply put basic [GIS](#) capabilities on the desktop of anyone in their organization."/>  
OpenMNND"/>

**Status** The development phase of the service. [?](#)  
 *Completed*  *Planned*  
 *Historical archive*  *Required*  
 *Obsolete*  *Under development*  
 *On going*

**Topic category** The main theme(s) of the dataset. [?](#)

<input type="checkbox"/> <i>Farming</i>	<input type="checkbox"/> <i>Intelligence military</i>
<input type="checkbox"/> <i>Biota</i>	<input type="checkbox"/> <i>Inland waters</i>
<input type="checkbox"/> <i>Boundaries</i>	<input type="checkbox"/> <i>Location</i>
<input type="checkbox"/> <i>Climatology meteorology atmosphere</i>	<input type="checkbox"/> <i>Oceans</i>
<input type="checkbox"/> <i>Economy</i>	<input type="checkbox"/> <i>Planning cadastre</i>
<input type="checkbox"/> <i>Elevation</i>	<input type="checkbox"/> <i>Society</i>
<input type="checkbox"/> <i>Environment</i>	<input type="checkbox"/> <i>Structure</i>
<input type="checkbox"/> <i>Geoscientific information</i>	<input type="checkbox"/> <i>Transportation</i>
<input type="checkbox"/> <i>Health</i>	<input type="checkbox"/> <i>Utilities communication</i>
<input type="checkbox"/> <i>Imagery base maps earth cover</i>	

# Data Entry



<b>Service type</b>	The service type name from a service registry <a href="#">?</a> <ul style="list-style-type: none"><li><input type="radio"/> <i>Remote application</i>: an interactive application run at a remote site that a client accesses through an internet browser. The client does not need to run any additional software.</li><li><input checked="" type="radio"/> <i>Standalone application</i>: software and data that can be downloaded and run locally</li><li><input type="radio"/> <i>Component</i>: code that can be downloaded then included in routines and executed locally</li><li><input type="radio"/> <i>Service</i>: a service run at a remote site that a client accesses through the internet; the client needs to run additional software (e.g. using ArcGIS to access photography via a WMS image server).</li></ul>
<b>Purpose</b>	Summary of the intentions for which the service was developed. <a href="#">?</a> <div><p>GeoMoose was particularly designed to meet the needs of local government to publish maps on the web. It has been packaged it so it can be easily downloaded, configured, and deployed using basic web publishing skills.</p></div>
<b>Use constraints</b>	Restrictions or limitations or warnings to protect privacy, intellectual property, or other special restrictions on the resource or the metadata. <a href="#">?</a> <ul style="list-style-type: none"><li><input type="checkbox"/> <i>Copyright</i></li><li><input type="checkbox"/> <i>License</i></li><li><input type="checkbox"/> <i>Patent</i></li><li><input type="checkbox"/> <i>Intellectual property rights</i></li><li><input type="checkbox"/> <i>Patent pending</i></li><li><input type="checkbox"/> <i>Restricted</i></li><li><input type="checkbox"/> <i>Trademark</i></li><li><input type="checkbox"/> <i>Other restrictions</i></li></ul>
<b>Extent</b>	Describes the spatial (horizontal and/or vertical and temporal coverage in the service). <a href="#">?</a> <p><b>Scope</b></p> <ul style="list-style-type: none"><li><input type="radio"/> International</li><li><input type="radio"/> Entire U.S.A</li><li><input type="radio"/> Multi-state area</li><li><input type="radio"/> Minnesota</li><li><input type="radio"/> Twin Cities Metropolitan Region</li></ul>
<b>Distributor</b>	Identification and means to contact people/organizations associated with the service. <a href="#">?</a> <p><a href="#">Add user</a></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Jim Dickerson, jim.dickerson@state.mn.us</li></ul>
<b>Developer</b>	Recognition of those who contributed to the service. <a href="#">?</a> <p><a href="#">Add user</a></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Randy Knippel, randy.knippel@co.dakota.mn.us</li></ul>
<b>Protocol</b>	The connection protocol to be used such as http, ftp, etc. <a href="#">?</a> <p>ftp</p>
<b>Linkage</b>	Internet location (address) for on-line access which uses a Uniform Resource Locator address or similar addressing scheme such as www.isotc211.org or ftp.isotc211.org. <a href="#">?</a> <p>ftp.lmic.state.mn.us/pub/software/GeoMoose/</p>

Done

# Administration



Dept. of Administration / Office of Geographic and Demographic Analysis / GeoServiceFinder

## Chris Cialek's Workspace

User name: [chris.cialek@state.mn.us](mailto:chris.cialek@state.mn.us)

[Contact support](#)

Application: [\(change\)](#)



[Welcome](#) [Add content](#) [My content](#) [Search](#) [My profile](#) [Logout](#)

### YOUR CONTENT

This is a list off all records you have created. Items are grouped by status and listed alphabetically. Records can have the status:

- **Draft:** These items are not displayed to the general public. In order for them to be seen by other users, you will need to "request publishing" by clicking on that Action link. This will send an email to a content administrator, who will review the content and then publish the record.
- **Pending:** Items awaiting publishing by a content manager
- **Public:** Items which are publicly visible.

View other's [published records](#).

Administrators: [View only your records](#).

#### GeoServiceFinder records

Id	Record status	Title	Record Creator	Actions
143	Draft	<a href="#">ArcWeb Services</a>	Stecker, Nicole	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
34	Draft	<a href="#">Business Recruitment and Site Location</a>	Koebrick, Andrew	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
132	Draft	<a href="#">cadastral layer</a>	,	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
222	Draft	<a href="#">CTU Web Service</a>	,	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
211	Draft	<a href="#">Metropolitan Council - Planned Land Use</a>	Slaats, Alison	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
139	Draft	<a href="#">Metropolitan Council Land Use Interactive Map</a>	Slaats, Alison	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
210	Draft	<a href="#">Metropolitan Council Make-A-Map</a>	,	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
144	Draft	<a href="#">Minnesota Boundaries</a>	,	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
154	Draft	<a href="#">Minnesota Grown Farmers' Markets Map Service</a>	Dolbow, Mike	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
98	Draft	<a href="#">NorthStar Mapper Website</a>	Dickerson, Jim	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
116	Draft	<a href="#">Scott County Property Information Search</a>	Gumm, Joshua	User functions: <a href="#">Edit</a>   <a href="#">Request publishing</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
227	Pending	<a href="#">DataFinder Café</a>	,	User functions: <a href="#">Edit</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]
223	Pending	<a href="#">National Hydrography Dataset (NHD) Map Service - Minnesota Implementation</a>	Maeder, Susanne	User functions: <a href="#">Edit</a>   <a href="#">Delete</a>   [Admin functions: <a href="#">Publish</a> ]

# Recommended Next Steps



- PROMOTE

- Offer articles for publishing
- MetroGIS members provide support
- Continue demonstrations and training



# Recommended Next Steps

- COMMIT
  - Keep website current
    - Updated look and feel
    - New field – *category* – added
    - Refined search capabilities
    - Updated existing records
  - MetroGIS members populate Catalog



# Recommended Next Steps

- INCUBATE
  - Continuously refine the Catalog
  - Evaluate use, benefits, issues and opportunities six months out
  - Determine direction, follow-on efforts based on evaluation

Questions?



## **GeoService Finder**

***[www.lmic.state.mn.us/GeoServiceFinder](http://www.lmic.state.mn.us/GeoServiceFinder)***