

# GIS INVENTORY



Powered by the Ramona System  
*Beta Version 4.0*



## Maryland State Geographic Information Committee

Bill Burgess, Washington Liaison

National States Geographic Information Council (NSGIC)





# Purpose of the GIS Inventory

Track the status of GIS in state and local government to improve the level of coordination

How does the inventory help?

- Assists in the development of Strategic and Business Plans
  - Provides the status of data development
  - Characterizes the User Community
  - Can't manage what you don't understand
- Aids the planning and building of Spatial Data Infrastructures
- Works in concert with federal programs like Geospatial One-Stop for broad data discovery
- Provides a single national inventory tool
  - Reduces the need for the multiple inventories conducted by federal and state agencies

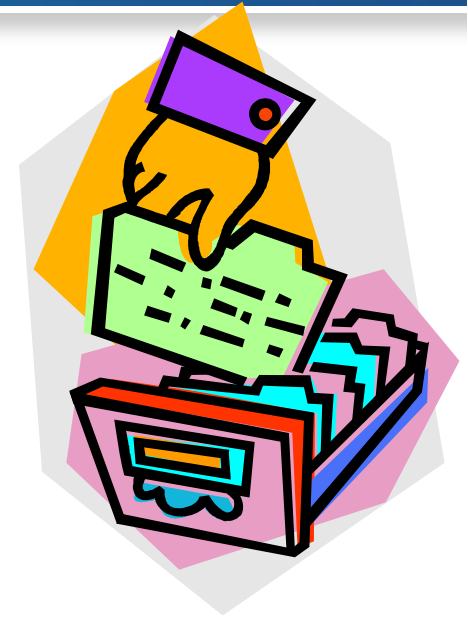
GIS INVENTORY





# It's not a Metadata tool

- Ramona is a management system
- Metadata systems produce card catalogs
- We just happen to produce compliant metadata that's used as a standard to connect to other systems
- We can't import existing metadata
  - It would destroy the quality of the database and the utility of the system

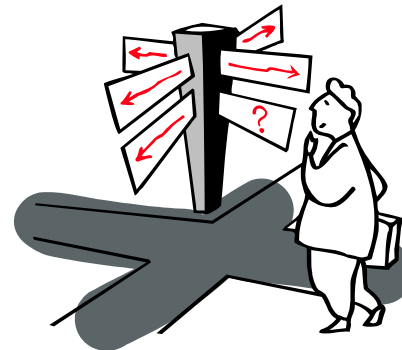




# Name Game

## Digital Orthophotography/Orthoimagery

- Digital Imagery
- Digital Photography
- Imagery
- Photography
- Aerial Photography
- Aerial Photos
- Aerial Imagery
- Satellite Imagery
- Orthoimagery
- Orthophotography
- Digital Orthoimagery
- Digital Orthophotography
- Quarter Quads
- DOQQs
- Digital Quads
- NAIP Imagery
- 133 Cities Imagery





# Customers

- State and local governments and their partners from all sectors, including private business
- Select Federal Agencies (NOAA, FEMA, DHS, NDOP, NDEP)
- FGDC Cadastral Committee
- GOS Portal
- General Public





# Currently Under Consideration

## Possibilities for integrating with and enhancing:

- U.S. Census Bureau
  - Tiger Enhancement Database (TED)
- Department of Homeland Security
  - Virtual USA
- U.S. Environmental Protection Agency
  - Data Exchange Network
- Federal Geographic Data Committee
  - Geospatial Platform



# Software Specifications

Function	Software
Operating System	CentOS Enterprise (Linux)
Application Script	PHP/Apache
Database	MYSQL
Map Service	Mapserver
Catalog Web Service	OpenGIS® Specification/Tomcat
Web Host Manager	CPanel
	<b>Provider</b>
System Administrator	Run Skip LLC
Helpdesk Support	BurGIS, LLC/Run Skip LLC

## Open Source



# Hardware Specifications

Feature	Description
Processors	Quad 2.8 GHz (Dual Core AMD Opteron)
RAM	4 GB DDR
Drives	Dual 120 GB SATA
RAID	Yes – Level 1
Remote Backup	Yes
Helpdesk Support	24/7/365
Service Monitoring	24/7/365
Uptime Guarantee	100%
Hardware Replacement	30 minutes SLA
Bandwidth	400 GB
	<b>Provider</b>
ISP and Hardware Provider	Liquid Web Inc.

## Reliable





# User Statistics

## Increased Use Over 6 Month Period

Feature	Apr. 2010	Nov. 2010	Percentage Increase
Registered Users	4,329	5,068	17%
Framework Layers	7,837	9343	19%
Other Layers	7,144	8877	24%
Published to GOS Portal	8,941	11,029	23%

## Weekly GOS Harvesting Summary

Documents Harvested	705
Documents Validated	705
Documents Published	705
Documents Added	394
Documents Updated	311
This Harvest Was On	10/30/2010 4:43
Last Harvest Was On	10/23/2010 4:43

## GOS Harvesting Report

## Leading States

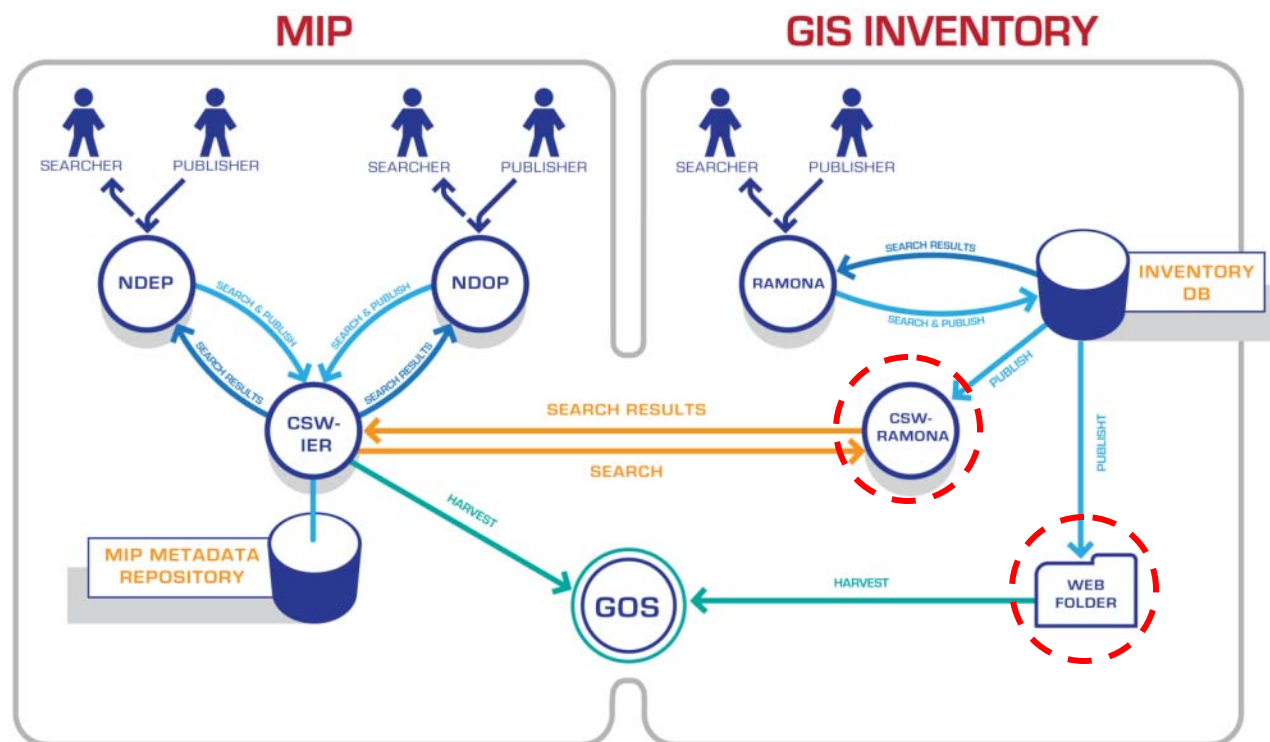
Jurisdiction	Total Users	Number of Framework Layers	Number of Other Layers
Indiana	788	1323	562
Utah	59	1235	1443
Wisconsin	232	1107	1183
Georgia	378	1084	1997
North Carolina	545	933	1434
Iowa	192	761	227
Kansas	145	647	835
South Carolina	155	205	125

GIS INVENTORY





# Interoperable



**NDEP** - National Digital Elevation Program Committee  
**NDOP** - National Digital Orthophoto Programs Committee  
**MIP** - FEMA's Mapping Information Platform  
**GOS** - Geospatial One Stop Portal  
**CSW** - Catalog Services - OGC Catalog Service 2.0.1.

**GIS INVENTORY**  
 is NOT dependant on any other system.

Function	Who Performs	Frequency
Harvesting GIS Inventory Web Folder for GOS Portal	GOS Portal	Weekly – Friday early am hours
Harvesting for MIP, NDEP, NDOP	MIP Catalog Web Service	On Demand



# Geospatial One Stop Portal

<http://www.geodata.gov>

GOS - Geospatial One Stop - Windows Internet Explorer

http://gos2.geodata.gov/wps/portal/gos/kcxml/04\_595Pykssy0xPLMnMz0vM0Y\_QjzKL944PCwwwASYGYtpb6kehCFgghX4\_83FSgRKQ5UMDQ0tdLP0TFW78gNz5j3DhdEQC3zax1

Yahool Search

GOS - Geospatial One Stop

Norton 360

Fraud monitoring is on

Options

Log In Sign up

geodata.gov  
U.S. MAPS & DATA

Your One Stop for Federal, State & Local Geographic Data

Home Search Maps Marketplace Communities Statistics Help Center

Search geodata.gov

Search Results

Refine Search Reset Download Results

1 2 3 4 5 6 7 8 9 10

Selected Types Live Data and Maps Downloadable Data Offline Data Documents Applications Geographic Services Clearinghouses Geographic Activities

Results 1 - 12 of 400 records (1.609 seconds)

**Geophysical Feature AvalanchePaths-This dataset represents snow avalanche paths in the tri-canyon area of the Wasatch Front, Utah, 2000, in Utah (Utah Automated Geographic Reference Center, 1:24000 (1in=2000ft))**

This starter metadata was automatically generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not document all of the information that may be available about this data set. This file is documented by full CSDGM metadata an...

**Publishing Organization:** Ramona GIS Inventory

**Geophysical Feature PhysiographicSubdivisions-This data set represents the physiographic subdivisions of Utah, 2001, in Utah (Utah Automated Geographic Reference Center, Smaller than 1:100000)**

This starter metadata was automatically generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not document all of the information that may be available about this data set. This file is documented by full CSDGM metadata an...

**Publishing Organization:** Ramona GIS Inventory

**Emission Facilities DSHWSmallQuantityGenerators- 2006, in Utah (Utah Automated Geographic Reference Center, 1:100000 (1in=8333ft))**

This starter metadata was automatically generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not document all of the information that may be available about this data set. This file is documented by full CSDGM metadata an...

**Publishing Organization:** Ramona GIS Inventory

**Mineral Feature TarSands-This point occurrence data set represents the current tar sand resource data set of Utah. It was derived from the Utah Mineral Occurrence, 1999, in Utah (Utah Automated Geographic Reference Center, 1:100000 (1in=8333ft))**

This starter metadata was automatically generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not document all of the information that may be available about this data set. This file is documented by full CSDGM metadata an...

**Publishing Organization:** Ramona GIS Inventory

**Oil Pipelines Pipelines-This data set represents the oil and gas transmission pipelines in Utah and portions of Arizona, Colorado,**

My Geography

Where: (Geographic Footprint, e.g. Harrison, NY)

utah

Find More... Reset

Geophysical Feature AvalanchePaths-This dataset represents snow avalanche paths in the tri-canyon area of the Wasatch Front, Utah, 2000, in Utah (Utah Automated Geographic Reference Center, 1:24000 (1in=2000ft))

http://gos2.geodata.gov/E-FW/DiscoveryServlet?uiid=[5611945-8723-45C0-0AEC-B6540A8FFD15]&omittransform=metadata\_to\_html\_t...

Norton 360

Fraud monitoring is on

Options

Log In Sign up

geodata.gov  
U.S. MAPS & DATA

Your One Stop for Federal, State & Local Geographic Data

Geophysical Feature AvalanchePaths-This dataset represents snow avalanche paths in the tri-canyon area of the Wasatch Front, Utah, 2000, in Utah (Utah Automated Geographic Reference Center, 1:24000 (1in=2000ft))

**Content Citation**

**Title:**Geophysical Feature AvalanchePaths-This dataset represents snow avalanche paths in the tri-canyon area of the Wasatch Front, Utah, 2000, in Utah (Utah Automated Geographic Reference Center, 1:24000 (1in=2000ft))

**Content Type:**Offline Data

**Publisher:**Utah Automated Geographic Reference Center [Contact](#)

**Publication Date:**2000

**Content Description**

**Abstract:**This starter metadata was automatically generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not document all of the information that may be available about this data set. This file is documented by full CSDGM metadata and posted to a clearinghouse. The following URL(s) identify the clearinghouse and a link to the full metadata record:  
ftp://ftp.agrc.state.ut.us/SGID\_Vector/MetadataHTML/SGID\_U024\_AvalanchePaths.html . Geophysical Feature is a GIS data set covering the geographic area of Utah. It is described as AvalanchePaths-This dataset represents snow avalanche paths in the tri-canyon area of the Wasatch Front, Utah.. The producer of this data set typically uses Lambert-Azimuthal Equal-Area projection and UTM coordinate system; NAD 83 horizontal datum; NAVD 88 vertical datum; Meters unit of measure; Geodatabase vector data file format and GeoTIFF raster data file format, though other settings and file formats may be available. The production date of this data set is generally 2000.

**Purpose:**The "Purpose" is a summary of the intentions with which the data set was developed. This is an incomplete metadata record and purpose is not documented through the Ramona system.

Done

Internet | Protected Mode: On

100%

Yahool Search

GIS INVENTORY

NSGIC



# Key Attributes

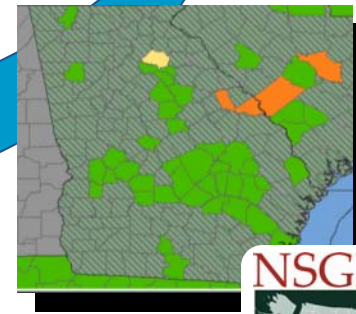
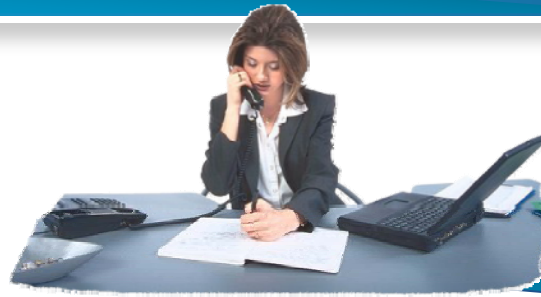
- Simple and intuitive interface
- Inexpensive to modify and maintain
  - Funded by NOAA, FEMA and DHS (Principal Funding Source)
- No cost to users (or organizations) except their time
- Training available on demand
- Help states meet their business needs
- National compatibility & capability
- Avoids duplication of effort





# What do we Inventory?

- Users
- Organizations
- Systems
- Policies
- Geography
- ~500 Distinct Data Layers



GIS INVENTORY



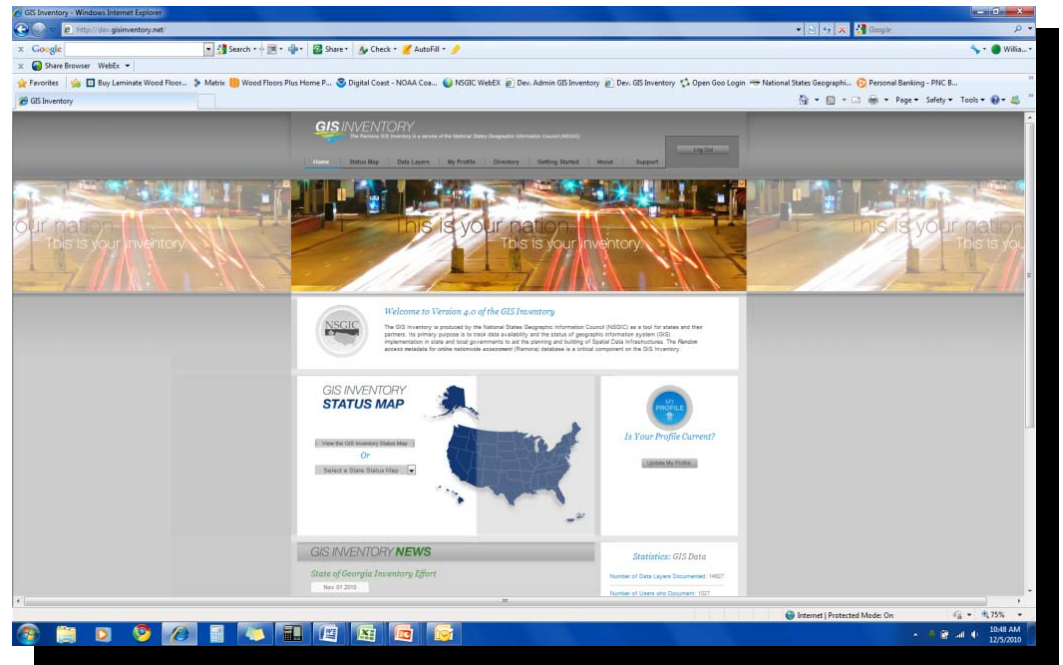
# Components

- Inventory
- Status Maps and Query Capability
- Directory of Users
- Reports
- Help Desk
- Newsletter Tool
- Administrative Tools
- Metadata Generation Tool
- Metadata Repositories (Web Folder and CSW)





# User Interface – Version 4.0



<http://gisinventory.net>

**GIS INVENTORY**





# Home Page

GIS Inventory - Windows Internet Explorer

http://dev.gisinventory.net/

Google Search Share Check AutoFill

Share Browser WebEx

Favorites Buy Laminat Wood Floor... Matrix Wood Floors Plus Home P... Digital Coast - NOAA Coa... NSGIC WebEX Dev. Admin GIS Inventory Dev. GIS Inventory Open Goo Login National States Geographi... Personal Banking - PNC B...

GIS Inventory

Log In Create New Account

Home Status Map Data Layers My Profile Directory Getting Started About Support

our nation— This is your inventory.

This is your nation— This is your inventory.

This is your nation— This is your inventory.

Welcome to Version 4.0 of the GIS Inventory

The GIS Inventory is produced by the National States Geographic Information Council (NSGIC) as a tool for states and their partners. Its primary purpose is to track data availability and the status of geographic information system (GIS) implementation in state and local governments to aid the planning and building of Spatial Data Infrastructures. The Random access metadata for online nationwide assessment (Ramona) database is a critical component on the GIS Inventory.

GIS INVENTORY STATUS MAP

View the GIS Inventory Status Map Or Select a State Status Map

MY PROFILE Is Your Profile Current? Update My Profile

GIS INVENTORY NEWS

State of Georgia Inventory Effort Nov 01 2010

Statistics: GIS Data

Data Layers Documented: 14927 Users Documenting Data: 1027

Done

Internet | Protected Mode: On 75%

2:56 PM 12/5/2010

News >

< Visual Reminders and Entry Points

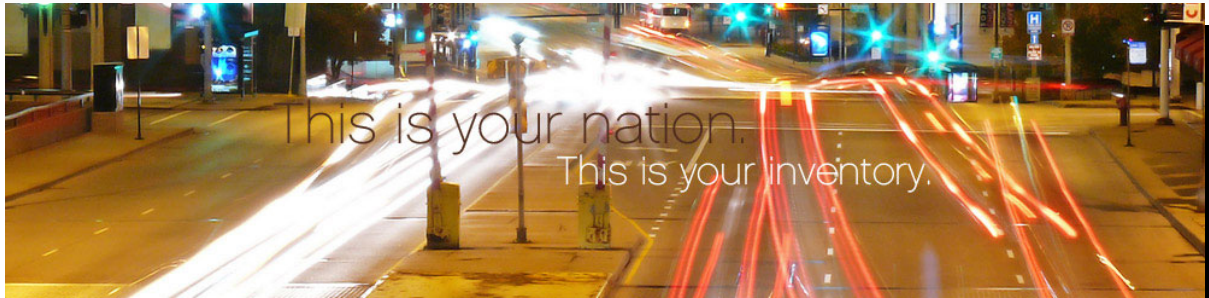
< System Statistics

Tabs >



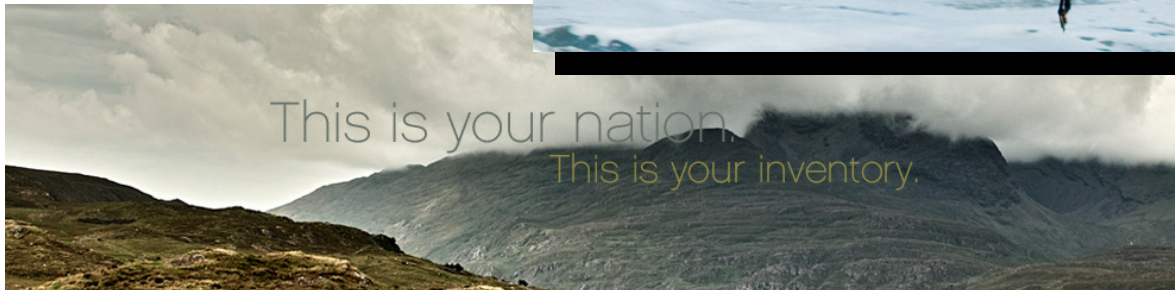
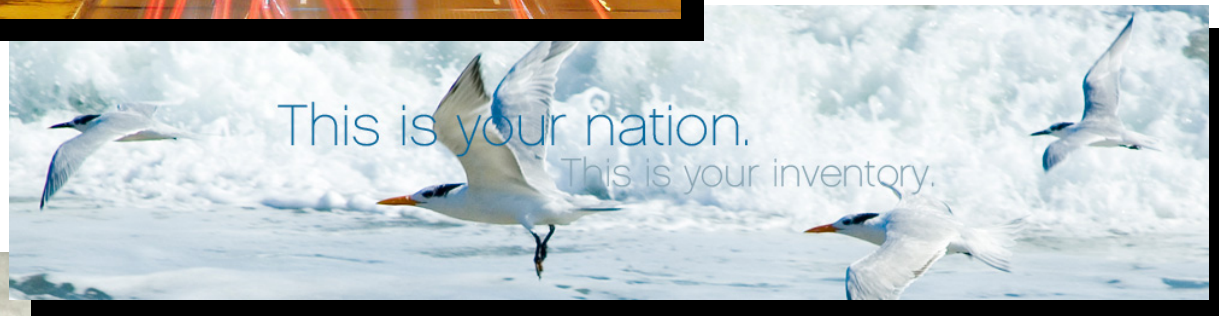


# Maintain Interest & Appeal

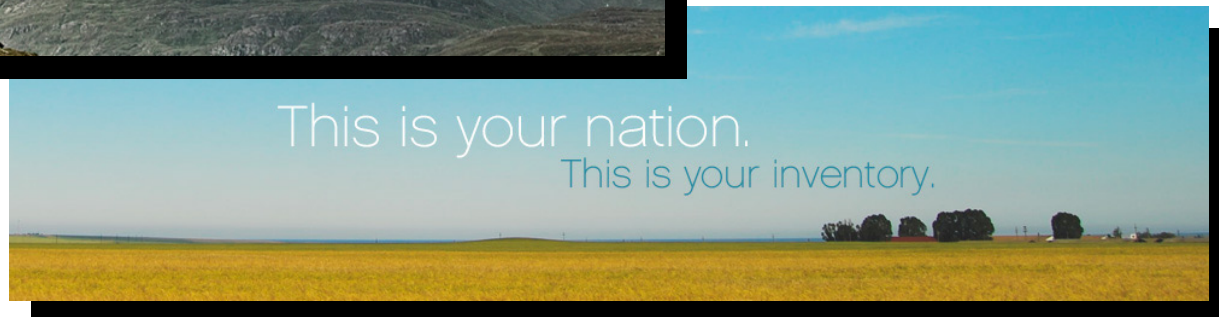


Rotating Graphics

User Application Areas



Various Geographies



**GIS INVENTORY**



# Status Maps

- Visualize status of particular data layers
- Map can be customized
- Information reports on all data layers

The screenshot shows the GIS INVENTORY website interface. At the top, there's a navigation bar with links: Home, Status Map, Data Layers, My Profile, Directory, Getting Started, About, and Support. A 'Log In' button and a 'Create New Account' link are also present. The main map area displays a map of the United States with various data layers overlaid. A red circle highlights the 'Info' button in the map toolbar. To the right of the map, there's a sidebar with the NSGIC logo and sections for 'Places That Produce', 'Data Categories', 'Data Layers', and a 'Legend'. The 'Data Layers' section is currently selected, showing 'Digital Orthophotography/Orthoimagery'. Below the map, there's a 'Download This Image' button.

Digital Orthophotography/Orthoimagery

Close Window

County	County Fips	State	State Fips
Laurens County	13175	GA	13

No city query results

**Laurens County**

Organization	Status	Scale	Production Date
Heart of Georgia Altamaha RDC Scott Jackson	Complete	1:4800 (1in=400ft)	2007

Description: HOGARDC has McSID NHP Aerial Imagery for Appling, Bleckley, Candler, Dodge, Emanuel, Evans, Jeff Davis, Johnson, Laurens, Montgomery, Tattnall, Teffar, Toombs, Treutlen, Wayne, Wheeler, and Wilcox Counties.

No tribal query results

**Statewide**

Organization	Status	Scale	Production Date
Mulkey Jeff Tokarczyk	Complete	1:600 (1in=50ft)	





# Data Layers

GIS Inventory - Windows Internet Explorer

http://dev.gisinventory.net/pages/data\_layers.html?action=set\_page&page=1&search\_action=1&advanced\_search=0&page\_key=publayerpage&keywords=address+points&layer\_id=8&status=&production\_date=

Search Data Layers Browse Data Layers

Keywords Including Theme or Place Names

address points

Advanced Search

Search Reset Search Form

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Next | Next 10 | Last

Layer Name	Status	Production Date
metadatas Address Points	Complete	2008
metadatas Address Points	Complete	2008
metadatas Address Points	In work	2010
metadatas Address Points	In work	2009
metadatas Address Points	Complete	2006
metadatas Address Points	Complete	2007
metadatas Address Points	In work	2009
metadatas Address Points	In work	2008
metadatas Geodetic Control Points	Complete	1995
metadatas Address Points	Complete	2008
metadatas Address Points	Complete	2008
metadatas Address Points	Complete	2008
metadatas Address Points	Complete	2008
metadatas Address Points	Complete	2008

GIS INVENTORY

GIS Inventory XML Record - Windows Internet Explorer

http://dev.gisinventory.net/pages/xml\_viewer.html?result\_id=14272

GIS Inventory XML Record

### Ramona GIS Inventory Starter Metadata

Title	Address Points, Jefferson County Address points depicts points for addressable structures within the county, Published in 2010, 1:600 (1in=50ft) scale, Jefferson County.
Origin(origin)	Jefferson County
Publication Date(pubdate)	2010
Publication Info(pubinfo)	Rigby, ID Jefferson County
Other Citation(othecit)	This starter file is http://runskip.gisinventory.net/gisinventory/metadata/gis-inventory-metadata-4848-14272.xml Additional metadata available at http://www.co.jefferson.id.us/publicgis/
Online Link(onlink)	http://www.co.jefferson.id.us/publicgis/
Description	
Abstract(abstract)	This Address Points dataset, published at 1:600 (1in=50ft) scale, was produced all or in part from Orthoimagery information as of 2010. It is described as 'Jefferson County Address points depicts points for addressable structures within the county'. The extent of these data is generally Jefferson County, ID. This starter metadata was auto-generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not represent all information about this data set.
Purpose(purpose)	This is an inventory-level metadata record documented through the GIS Inventory system. Please refer to the data set contact or publisher for original intent and appropriate use information.
Time Period	
Calendar Date(caldate)	2010
Currentness Reference(current)	Publication Date
Status	
Progress(progress)	In work

Done Internet | Protected Mode: On

1:2400 (4in=200ft) Done

Internet | Protected Mode: On

NSGIC

12/5/2010



# User Profile

- User completes information
- Categories
  - User
  - Organization
  - Systems
  - Policies
  - Geography
- 25 to 30 minutes to complete a profile

The screenshot shows the 'MY PROFILE' page of the GIS INVENTORY system. The header includes the logo and navigation links: Home, Status Map, Data Layers, My Profile (active), Directory, Getting Started, About, and Support. A 'Log Out' button is in the top right. The left sidebar contains a menu with 'Overview', 'My Profile' (selected), 'Organizational Profile', 'Policies Profile', 'Systems Profile', 'My Geography', 'My Data Layers', and 'Reports'. The main content area is titled 'MY PROFILE' and includes a 'Save' button and a note '\* Denotes a required field'. It is divided into two sections: 'Name Information' and 'Professional Contact Information'. The 'Name Information' section contains fields for '1. Preferred Salutation' (Mr.), '2. First Name' (William), '3. Middle Name' (S.), '4. Last Name' (Burgess), and '5. Preferred Suffix'. The 'Professional Contact Information' section contains fields for '6. Name of your organization' (BurGIS, LLC), '7. Organization Web Site' (http://www.forget.this), and '8. Which of these titles most closely describes your position?' (Director/Coordinator). A note 'If 'Other' please specify:' is present below the title dropdown.





# Data Documentation

- ~500 Layers – Only document what you produce
- 6 standard questions
- 6 layers have additional questions
- 1 to 2 minutes per layer to document
- Publish your information from this screen

GIS INVENTORY  
The National GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Digital Orthophotography/Orthoimagery

Save Cancel

Progress \* Source \* Production Date \* Approx. Scale \* What is this? Update Frequency \*

Important! Provide a concise description to properly document this layer (maximum 255 characters)

Geography  
default geography: Your Default Geography

Full metadata web address/URL (format: http://www.example.com) What is this?

Web Map Service URL (format: http://www.example.com) What is this?

Do you archive this layer for long-term preservation? What is this?

No

Additional Questions for Digital Orthophotography/Orthoimagery Layer

What is the approximate ground resolution of this product?

What is the horizontal accuracy?

What is the image type?

What are the leaf cover conditions of these data?

My Digital Orthophotography/Orthoimagery Data Layer:  
Created: Thursday Nov 11 2010 12:48 pm | Last Updated: Thursday Nov 11 2010 12:48 pm

View in Map Update this Layer Delete this Layer

Progress	Source	Production Date	Scale	Update Frequency
Complete	LIDAR	2010	1:2400 (1in=200ft)	Daily

Geography: default geography

Published to GOS? Yes

Metadata: gis-inventory-metadata-29-14939.xml

Layer Description: Test Layer

Persistent URL: http://www.nsgic.org/300

Web Map Service URL: http://www.nsgic.org/400

Archived Layer: Yes

Archival Frequency:

Archival Format: ECW

Archival Facility:

Archival Location URL: http://www.nsgic.org/500

What is the approximate ground resolution of this product? 3 inches

What is the horizontal accuracy? 8 feet

What is the image type? Natural Color

What are the leaf cover conditions of these data? Leaf-on





# Directory of Users

- Search tool to find any user registered in a state
- Listings are graphics to prevent data mining on the site
- Links to E-mail and Organization Web Address

The screenshot shows the GIS INVENTORY website's search interface. The header includes the logo and navigation links: Home, Status Map, Data Layers, My Profile, Directory (selected), Getting Started, About, and Support. A 'Log in' button and a 'Create New Account' link are also present. The main search area is titled 'ENTER SEARCH TERMS' and contains input fields for First Name, Last Name (pre-filled with 'Burgess'), Organization Name, and County. There are also dropdown menus for Application Area and Organization Type. A security image with the text 'BEMX46' is displayed, and a search button is at the bottom.

The screenshot shows the search results page for the user 'William S. Burgess'. It displays two results, each with contact and organization information.

CONTACT INFORMATION	ORGANIZATION INFORMATION
<b><i>William S. Burgess</i></b> Work Phone: 410.544.2005 E-Mail: <a href="mailto:william.burgess@comcast.net">william.burgess@comcast.net</a>	<b><i>BurGIS, LLC</i></b> 396 Stanford Court Arnold, MD 21012 County: Anne Arundel
<b><i>William S Burgess</i></b> Work Phone: 410-544-2005 E-Mail: <a href="mailto:wsb1951@comcast.net">wsb1951@comcast.net</a>	<b><i>BurGIS LLC</i></b> 396 Stanford Court XX, MD 21012 County: XX





# Getting Started Guide and User Support

Online

E-Mail

The screenshot shows the 'Getting Started' page of the GIS INVENTORY website. The header includes the logo and a navigation menu with links: Home, Status Map, Data Layers, My Profile, Directory, Getting Started (highlighted), About, and Support. A 'Log In' button and a 'Create New Account' link are also present. The main content area is titled 'GETTING STARTED GUIDE' and contains introductory text about the service. Below the text is a list of seven numbered links: 1. Overview, 2. User Accounts, 3. My Profile, 4. State Questions, 5. My Geography, 6. My Data, and 7. Starter Metadata.

**GIS INVENTORY**  
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Home | Status Map | Data Layers | My Profile | Directory | **Getting Started** | About | Support

Log In  
Create New Account

**Getting Started**

### GETTING STARTED GUIDE

The GIS Inventory is produced by the National States Geographic Information Council (NSGIC) as an online engagement tool for States and their partners. Its primary purpose is to track the status of geographic information system (GIS) characteristics and data production in U.S. state and local governments to aid the planning and building of State Spatial Data Infrastructures (SDIs).

There are two main types of users who benefit from the GIS Inventory: a) regional, state and local GIS data producers/publishers who register a profile and record their authoritative GIS data holdings; and b) partners from state, federal, private and non-profit agencies as well as the general public who are interested in viewing reports on the status of GIS data across a State or region.

Below is a list of introductory topics to help users get the most out of the GIS Inventory:

1. **Overview**  
General Overview On Using The GIS Inventory
2. **User Accounts**  
Creating An Account/ Logging In
3. **My Profile**  
Providing And Updating Your Profile
4. **State Questions**  
State-specific Profile Questions
5. **My Geography**  
Managing Your Geography Profile(s)
6. **My Data**  
Inventorying Your GIS Data
7. **Starter Metadata**

The screenshot shows the 'New Support Ticket' form on the GIS INVENTORY website. The header is identical to the previous screenshot. The main content area is titled 'NEW SUPPORT TICKET' and contains a form with fields for 'Your Name', 'Your Email', 'Your Phone Number (optional)', 'Subject', and 'Questions or Comments'. Below the form is a security image with the text 'MTUW28' and a 'Save' button.

**GIS INVENTORY**  
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Home | Status Map | Data Layers | My Profile | Directory | Getting Started | About | **Support**

Log In  
Create New Account

Open A Support Request

### NEW SUPPORT TICKET

Your Name \*

Your Email \*

Your Phone Number ( optional )

Subject \*

Questions or Comments \*

To submit your support request, please type the characters in the security image. \*

MTUW28

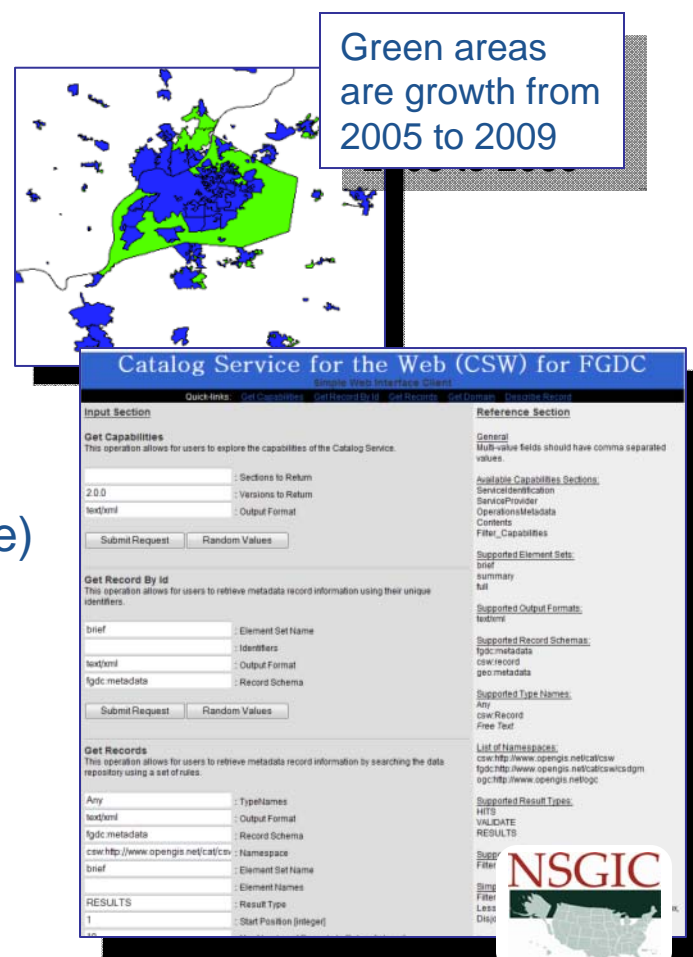
Save





# New in Version 4

- Converted to MySQL geospatial database – Improved Speed
- New National Start Page
- Simplified user inputs and interface
- Validating User Accounts
- Updated MCD file to 2009
  - (e.g. Louisville, KY growth shown above)
- Improved reports and access to system information
  - (e.g. KML and Shape file exports and access to CSW shown at right)



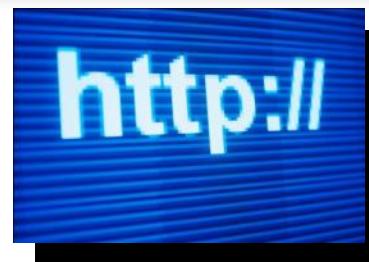
GIS INVENTORY





## New Version 4 (continued)

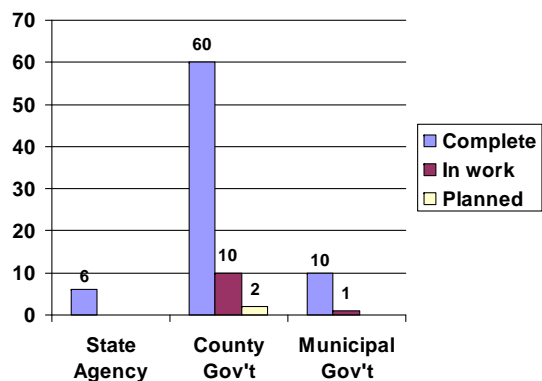
- Added web map services (URLs)
- Added data archive information
- Incorporated suggestions from Administrators and Users
- Converted to Content Management Interface
- Better validation of metadata exports
- Release date is January 29<sup>th</sup>





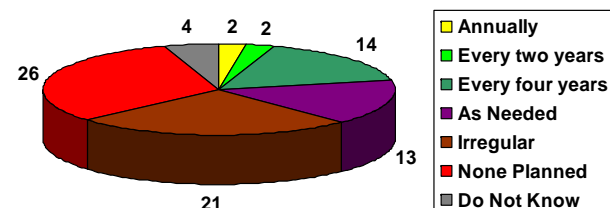
# Management information in North Carolina

Orthoimagery Completeness



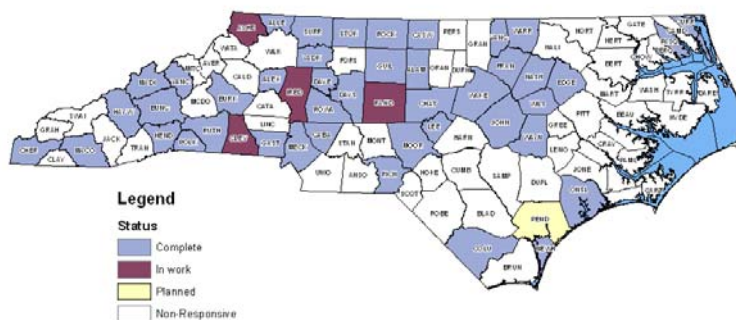
Total number of responses: 88

Orthoimagery Data Update Frequency

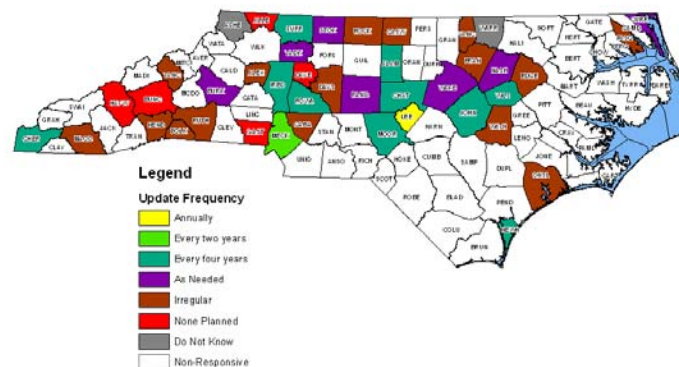


Total number of responses: 82

Counties Only



Counties Only





# Example from Wisconsin report based on the GIS Inventory

## Orthoimagery

**Foundational Element:** Geographic Reference Frameworks

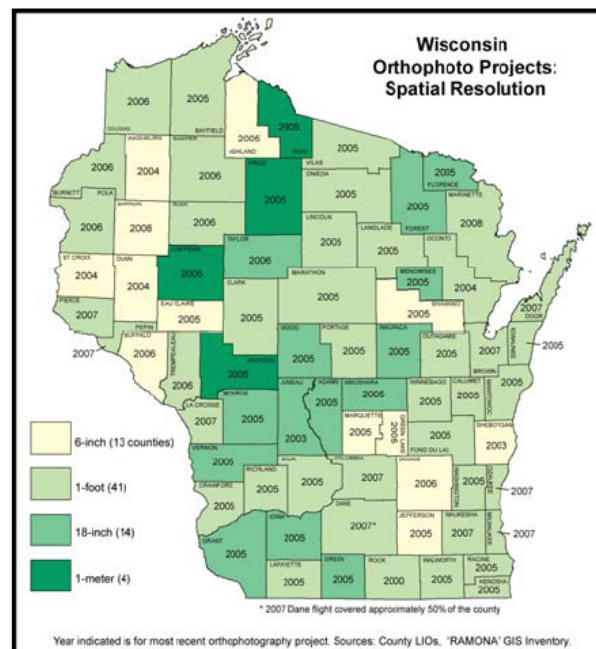
**Framework Data Category:** Orthoimagery

### Statistics:

- 100% county-based coverage
- 4-5 year iterative planning cycle for many counties
- > 15 counties indicated “planned” imagery in 2010 – the actual number is suspected to be 2-4 times that number.
- Oblique imagery is rising in popularity, as well as in current and future investment.

### Related Information:

With little ambiguity, it is clear that 100% of Wisconsin counties have invested in locally-funded orthoimagery sometime over the last 15 years – in some cases, in 4 or 5-year iterations. This aerial imagery rectified to ground control for integration in GIS systems has great value in collection, registration, and quality assurance of other foundational GIS layers.



**Figure 16 – Orthophoto Spatial Resolution**



# Parting Thoughts

**It's painless** - 30 minutes to create a complete profile and 2 minutes to inventory each data layer. A typical data producer spends 60 to 90 minutes that can be spread over a week or two.

**Professional competency** - A basic professional competency is documenting the data that you produce and making this information on your data available to others.

**It connects your community** - By leading the way in your community, you encourage surrounding jurisdictions to participate. This will help ensure that you know about their information when you need it for emergencies or routine work.

**It connects you nationally** - You can use the system to locate others in your community of practice to get help with tough applications.

**It prevents more pesky surveys** - When states adopt the GIS Inventory, there is no need for the routine surveys conducted by Federal and state agencies – they will go right to the GIS Inventory for their answers.





# Questions ?

**GIS INVENTORY**



**NSGIC**







# Administrator's Panel

GIS INVENTORY  
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC).

Separate Web Service <http://gisinventory.net/rdiadmin/login>

Users | Data Layers | Surveys | Reports | Page Content | News | National CAD | Newsletter | Support Forum | User Guide | Home | Logout

**USERS**  
View All Users  
Add New User  
Alphabetic Listing  
Search  
My Account

**GROUPS**  
View All Groups  
Add New Group

3209 results PAGE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |  
Export these Users

				First Name	Last Name	Position	Organization	Organization Type	E-Mail
<a href="#">view profile</a>	layers	geography	Standard User	John	-	-	-		jnewton@purdue.edu
<a href="#">view profile</a>	layers	geography	Standard User	Angela	Abbatiello		Southern Carolina Realty		afuchs@carolina.rr.com
<a href="#">view profile</a>	layers	geography	Standard User	Randy	Abbey	EMA Director	Starke County	Countywide	scemaems@hotmail.com
<a href="#">view profile</a>	layers	geography	Standard User	Mike	Abitz	Data Processing Coordinator/Land Information Off	Wauhara County	Countywide	mikea.courthouse@co.wa
<a href="#">view profile</a>	layers	geography	Standard User	Lisa	Abner	GIS Technician	Delaware County Office of Geographic Information		labner@co.delaware.in.us
<a href="#">view profile</a>	layers	geography	Standard User	Sandra	Abouibrahim				snader@cbunited.com
<a href="#">view profile</a>	layers	geography	Standard User	Harvey	Abramowitz	Professor	Purdue University Calumet	Educational Institution	harveya@calumet.purdue
<a href="#">view profile</a>	layers	geography	Standard User	Eric	Abrams	Spatial and GIS Coordination	Iowa Department of Transportation	Single State Agency	eric.abrams@dot.iowa.gov
<a href="#">view profile</a>	layers	geography	Standard User	babrell@dnr.in.gov	abrell	Ecologist	Nature Preserves		babrell@dnr.in.gov
<a href="#">view profile</a>	layers	geography	Standard User	donald	abrell	ecologist	idnr nature preserves		babrell@dnr.in.gov
<a href="#">view profile</a>	layers	geography	Standard User	Jesse	Acosta	Fire Prevention Forester	Department of Land and Natural Resources		jesse.d.acosta@hawaii.gov
<a href="#">view profile</a>	layers	geography	Standard User	Adair	Adair				county@county.org
<a href="#">view profile</a>	layers	geography	Standard User	Adams	Adams				adams@county.org
<a href="#">view profile</a>	layers	geography	Standard User	mary	adams	Utility Information Tech	utility information group	Utility	nams@indiana.edu
<a href="#">view profile</a>	layers	geography	Standard User	Tela	Adams	Chief Dispatcher	Clay County	Countywide	tad@leo.gov
<a href="#">view profile</a>	layers	geography	Standard User	John	Adams	Utilities Analyst	Pulaski County Assessor		john@pulaski.kentucky
<a href="#">view profile</a>	layers	geography	Standard User	Sam	Adams	Bank officer	First Citizens Bank		sam@firstcitizens.com
<a href="#">view profile</a>	layers	geography	Standard User	John	Adams	Sales Associate			jadan@cherco.com
<a href="#">view profile</a>	layers	geography	Standard User	Madhuri	Adapala	GIS Analyst			ids.com
<a href="#">view profile</a>	layers	geography	Standard User	Malcolm	Adkins	Client Services Director			adkins@shakercorp.com
<a href="#">view profile</a>	layers	geography	Admin User	testcalifornia	admin				testcalifornia@test
<a href="#">view profile</a>	layers	geography	Admin User	testalaskaadmin	admin				testalaskaadmin@test
<a href="#">view profile</a>	layers	geography	Admin User	test	admin				askaadmin02@test
<a href="#">view profile</a>	layers	geography	Admin User	test	admin				askaadmin03@test
<a href="#">view profile</a>	layers	geography	Standard User	Judith	Affolder	Assessor			older@ramona.org
<a href="#">view profile</a>	layers	geography	Standard User	Ken	Agey	GIS Manager			kagey@co.polk.ia.us
<a href="#">view profile</a>	layers	geography	Standard User	Johnson County	AIMS				
<a href="#">view profile</a>	layers	geography	Standard User	Scott	Aja	Vice President			

Internet | Protected Mode: On

NSGIC



# Administrator Functions

## Users Tab

- List all users
- Various Search Functions
- Add Users
- Reassign Profile to a New User
- Modify User Accounts
- Set Administrative Privileges

## Data Layers Tab

- Similar to User Interface

## Surveys Tab

- Each Administrative Entity (states) can create their own unique questions
- Expanded capability over previous version

## Newsletter Tab

- Administrators can create and send newsletters to their user communities

## Support Forum Tab

- Super Users get automated alerts on support requests and respond through this tab

## National Cad Tab

- Data entry and manipulation for the National Cadastral System

## Page Content Tab

- Super Users can modify content of each page at any time





# Reports Tab

GIS Inventory - Windows Internet Explorer

http://dev.gisinventory.net/rdiadmin/reports/?view=user\_search\_form

http://gisinventory.net/rdiadmin/reports/exports/ramona\_report\_1172949141.xls - Windows Internet Explorer

http://gisinventory.net/rdiadmin/reports/exports/ramona\_report\_1172949141.xls

GIS Inventory

Links

- Microsoft Web...
- eBay
- MSN.com
- Radio Station ...
- WD - Service &...
- USGS Phonebo...
- Ramona\_Adm...
- Development...
- ZoomInfo.com...
- Ramona Admin...
- The NSGIC Blog
- The NSGIC Blo...
- Indiana Page o...
- National\_User...
- Ammo Direct A...
- The Armory A...
- Collectors Fire...
- Council of Publi...
- Cute Overload!
- Explore Inform...
- Google Geo Gr...
- Federal Premi...
- Annapolis Bank...
- National States...
- GIWIS\_Deptar...
- California GIS...
- Oglethorpe Uni...
- Friends of Blac...
- Friends of Blac...
- Farm & Ranch...
- Train Schedule...
- Custom Coins...
- Coins for Anyt...

**REPORTS**

- Full User Report
- Report by Search
- Statistics

A1	User ID	First Name	Middle Name	Last Name	Organization Name	Layer Name	Status	Source	Scale	Production Date
1	2626	Randy		Abbey	Starke County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
2	2626	Randy		Abbey	Starke County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
3	1937	Judith		Affolder	Adams County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
4	1663	James		Alexander	Jefferson County E 911	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
5	1663	James		Alexander	Jefferson County E 911	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
6	1811	Linda		Altherr	County Assessor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
7	1811	Linda		Altherr	County Assessor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
8	1713	Matt		Anvay	Vanderburgh County/City of Evansville Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
9	1713	Matt		Anvay	Vanderburgh County/City of Evansville Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:1,200 (1in=100ft)	
10	1713	Matt		Anvay	Vanderburgh County/City of Evansville Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:7,200 (1in=600ft)	
11	2639	Roger		Axe	Greene County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
12	2639	Roger		Axe	Greene County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
13	1804	Karen		Bamhill	Office of the Warrick County Surveyor	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
14	1804	Karen		Bamhill	Office of the Warrick County Surveyor	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
15	2629	Kieth		Bias	Union County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
16	2629	Kieth		Bias	Union County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
17	2625	Phillip		Bisel	Randolph County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
18	2625	Phillip		Bisel	Randolph County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
19	2634	Ken		Boruff	Warren County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
20	2634	Ken		Boruff	Warren County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
21	2457	Brenda		Brittain	Morgan County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
22	2457	Brenda		Brittain	Morgan County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
23	1672	James	R	Brown	Shelbyville-Shelby County G.I.S.	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
24	1672	James	R	Brown	Shelbyville-Shelby County G.I.S.	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
25	1785	Gregory	Weaver	Brown	Scott County Emergency Management	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
26	1785	Gregory	Weaver	Brown	Scott County Emergency Management	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
27	2633	Robert		Brown	Wabash County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
28	2633	Robert		Brown	Wabash County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
29	1668	Michael		Bruce	Brown County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
30	1668	Michael		Bruce	Brown County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
31	29	William	S.	Burgess	BurGIS, LLC	Digital Orthophotography/Orthoimagery	Complete	Uncorrected Imagery	1:2,400 (1in=200ft)	
32	1748	Nancy Jane		Cale	Blackford County EMA	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
33	1748	Nancy Jane		Cale	Blackford County EMA	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
34	1582	Brent		Campbell	GIS Product Solutions, INC.	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
35	1582	Brent		Campbell	GIS Product Solutions, INC.	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
36	1658	John		Carlson	St. Joseph Surveyor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
37	1658	John		Carlson	St. Joseph Surveyor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
38	1658	John		Carlson	St. Joseph Surveyor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
39	1658	John		Carlson	St. Joseph Surveyor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:1,200 (1in=100ft)	
40	1658	John		Carlson	St. Joseph Surveyor's Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:1,200 (1in=100ft)	
41	1579	Janet		Chadwell	Decatur County Auditors Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery		
42	1579	Janet		Chadwell	Decatur County Auditors Office	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	
43	2631	Ramon		Colombo	Vermillion County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
44	2631	Ramon		Colombo	Vermillion County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
45	2607	James		Comerford	Miami County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:4,800 (1in=400ft)	
46	2607	James		Comerford	Miami County	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
47	2458	Freda		Corwin	Jay County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:12,000 (1in=1,000ft)	
48	2458	Freda		Corwin	Jay County Government	Digital Orthophotography/Orthoimagery	Complete	Orthoimagery	1:2,400 (1in=200ft)	

Unknown Zone

NSGIC

Error on page.



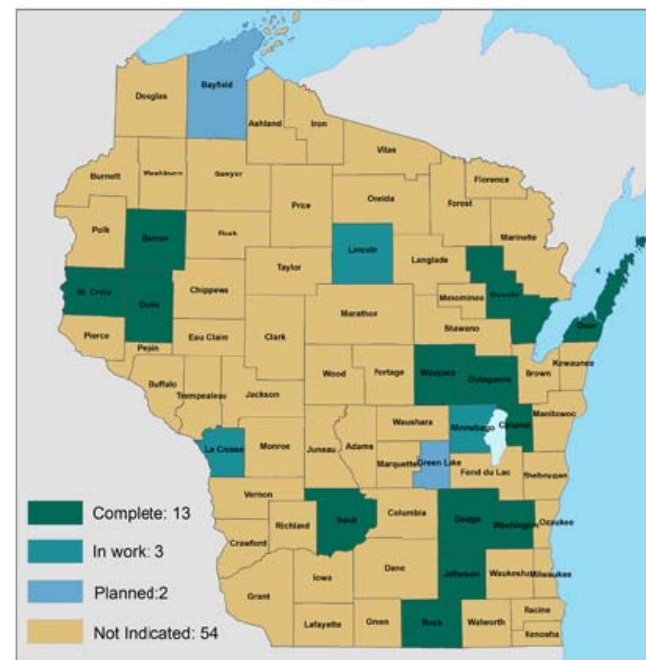


# Example from Wisconsin report based on the GIS Inventory

## Statistics

- 58% of counties inventoried DEM data with another 10% either in work or planned.
- Of these DEM data, 18 counties reported a supported contour interval of 4 feet or better.
- For LIDAR data, 18% of counties have it with another 7% in work or planned.
- LIDAR data acquisition appears primarily in counties with existing, more dated elevation data.
- In counties not reporting locally-produced DEM data, there are federal data products available through the National Elevation Dataset (NED) at either 30-meter or 10-meter resolution – but these products may be insufficient for many local modeling applications including updated floodplain mapping and stormwater modeling.

## 2008-09 GIS Inventory Survey - County Results: Lidar



Source: Wisconsin GIS Inventory Survey: <http://wi.gisinventory.net/> Results as of March 9, 2009

Figure 19 – LIDAR



# Marketing Materials

**GIS INVENTORY** POWERED BY RAMONA

VISIT: <http://az.gisinventory.net>

Even Page Header

**ARIZONA GIS INVENTORY**  
HELP US COMPLETE AND MAINTAIN ARIZONA'S GIS INVENTORY

What is the GIS Inventory?

- An Inventory of Existing & Planned Data
- A Simple Query Tool for Information About Users and Data Availability
- A Directory of GIS Users
- Provides Key Information for Collaborative Strategic and Business Planning
- A Tool for Use During Emergencies
- Minimizes the Need to Respond to Pesky Data Surveys
- Helps Create Partnership Opportunities

Data Organized by:

- Data Theme
- City, County, Tribal, Regional, Statewide or Nationwide Areas
- Completed, in-work, or Planned

User Directory Searchable by:

- Name
- Organization
- Location
- Application Area
- Organizational Type

Data Entry is Quick-n-Easy

- Most Datasets Require Only Six (6) Questions to Complete
- Minimal "Starter" Metadata Automatically Created for Each Dataset
- Option to "Publish" Starter Metadata to National Catalog Sites or Not
- Contact Information Entered Once for All Datasets, Yet Editable for Automatic Updates
- "Miming" of Contact Information Blocked

Help Strengthen Our Geospatial Community by Completing Your Part  
Arizona GIS Inventory. You are the Key to Making the Arizona  
GIS Inventory an Effective Tool.

Even Page Footer

**GIS INVENTORY** POWERED BY RAMONA

ARIZONA GIS INVENTORY  
VISIT: <http://az.gisinventory.net>

Odd Page Header

**INTEROPERABILITY**

NDP: National Digital Elevation Program Committee  
NDDP: National Digital Orthophoto Program Committee  
MIP: FEMA's Mapping Information Platform  
GOS: Geospatial One Stop Portal  
CSW: Catalog Services - OGC Catalog Service (2.0.1)

**GIS INVENTORY**  
is NOT dependant on any other system.

**AGIC**  
Arizona Geographic Information Council

NAME  
Address  
Address  
City, State zip  
Phone  
Phone  
Cell  
Email

Odd Page Footer



# Testimonials



- Look at what others say about the GIS Inventory





# Availability

- System is national and open to the entire public
- Available for use by all stakeholders
- NSGIC and its State Representatives decide who will be assigned Administrative Privileges





# National Cadastral Inventory

**GIS INVENTORY**  
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Home | **Status Map** | Data Layers | My Profile | Directory | Getting Started | About | Support

Log In  
Create New Account

**NSGIC**

*Places That Produce*

- ☐ Registered Users with Data of Any Type
- ☐ GIS Data
- ☒ National Cadastral Data Infrastructure

*Choose a Category*

- ☐ Percent Parcel Completion By State
- ☐ State Parcel Stewardship Level
- ☒ County Parcel GIS Data Inventoried
- ☐ County Parcel Data Contacts

*County Parcel GIS Data Inventoried*

- ☒ 90 Percent complete or greater
- ☒ 1 - 90 Percent
- ☐ No information provided

Map controls: +, -, pan, info, home, National View

Download This Image

Statistics: County Parcel GIS Data Inventoried

**GIS INVENTORY**

- National Cadastral Inventory
- Moved to GIS Inventory in 2009
- Separate Inventory Systems
- Common Platform
- Maintained by State Cadastral Contacts





# NDOP & NDEP Systems

<http://hazards.fema.gov/metadata/NDOP/>

NDOP Project Tracking System - Search - Windows Internet Explorer

<http://hazards.fema.gov/metadata/NDOP/>

Norton 360

**NDOP** Project Tracking System

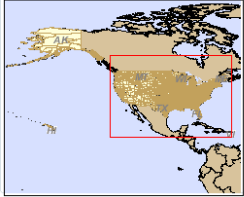
Fraud monitoring is on

FEMA

Search Projects | Enter Projects | Upload Projects | Export All Projects | Help

### Search Project Information

Overview



Zoom Controls

Select State

Bounding Box (decimal degrees)

Max Y: 57.0000

Min X: -126.3015 Max X: -64.6985

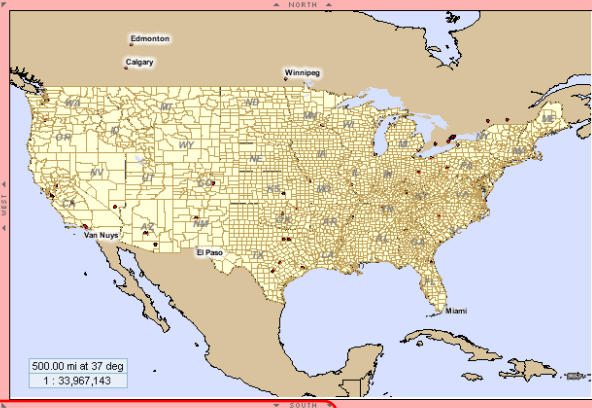
Min Y: 16.0000

Zoom Map

Map

Size Navigation Quick Zoom Selection

AK HI AS PR & VI  
GU & MP US 48



Base Layers

- ☒ County Boundary
- ☒ Interstate Highways
- ☒ Highways
- ☒ Major Roads
- ☒ Streets
- ☒ States(1)
- ☒ States(2)
- ☒ Counties
- ☒ Major Cities
- ☒ Cities

Overlay Layers

- ☒ USGS reference data
- ☒ FEMA Map Mod flood data
- ☒ JPL OnEarth satellite imagery
- ☒ NOAA hydrographic data

Search Parameters

Also Search: ☐ NDEP projects ☐ Ramona imagery projects ☐ Ramona elevation projects

Search All Fields:

Search by Content Status

Search by Agency

Search by Orthophoto Details

Progress:

Please Select

Search by Location

Lead Agency:

Please Select

Leaf Status:

Please Select

Image Band:

☐ CIR ☐ Panchromatic ☐ RGB/Natural Color

**GIS INVENTORY**

