

DGDC Meeting Minutes
March 10, 2011
9:00 a.m.
Room 220, Kent Co. Admin Building
555 Bay Rd. Dover, DE

Attendance List:

Mike Mahaffie.....	OSPC
George Yocher.....	DHSS
Sandy Schenck.....	DGS
Lillian Wang.....	DGS
Miriam Pomilio.....	DGS
Dick Sacher.....	UD/RDMS
John Laznik.....	UD/CADSR
Josh Thomas.....	DeIDOT
Matt Laick.....	DeIDOT
Darrin Dell.....	DeIDOT
McKelvin Gilbert.....	DeIDOT
Mollie Raley.....	DeIDOT
Mike Krumrine.....	DNREC
Brian Bloch.....	DNREC
Rich Phifer.....	DNREC
Terry Whitham.....	DSHS
Rick Sherwood.....	DEMA
Megan Nehrbas.....	Sussex Co.
Danielle Lamborn.....	Kent Co.
Mark Nowak.....	City of Dover
Jocelyn Beland.....	Artesian Water Co.
Roger Barlow.....	USGS
Arthur Walker.....	USDA/NRCS
Kevin Holmes.....	Census Bureau
Steve Elliot.....	ESRI
Rachel Wheeden.....	ESRI
Matt Martini.....	ESRI
Bill Burgess.....	NSGIC

Welcome

Mike Mahaffie started the meeting at approximately 9:10 a.m. with a welcome. He used a PowerPoint presentation ([attached](#) and online at slidesha.re/fl3XHC) to organize the meeting.

Announcements

Terry Whitham announced that the Department of Safety and Homeland Security has hired a new GIS Coordinator to meet a need identified some years ago to assist the state's nine 911 PSAPs in sharing and organizing geospatial data. The new coordinator is scheduled to begin work next week and the name will be announced later that week by the cabinet secretary.

Roger Barlow announced that the latest update to the National Land Cover Dataset (NLCD) was released in February.

Roger also announced that the 2010 orthophotography for New Castle County is now expected to be available in April. It is in-house at USGS and undergoing quality control tests.

Mike Mahaffie announced the availability of 2010 Census redistricting data for Delaware. The data are available on the Census Bureau's American FactFinder web site (factfinder2.census.gov) and by FTP from the Census Bureau (www2.census.gov/census_2010/01-Redistricting_File--PL_94-171/Delaware). Mike noted that he has begun to post data extracts from this release on the web site of the Delaware Census State Data Center (stateplanning.delaware.gov/census_data_center) and plans to post a version of a Microsoft Access database that includes the data in a readily query-able format.

Kevin Holmes added that the Census Bureau will release block-level group quarters data in May. This is data that specifies population living in group housing, such as dorms, prisons and shelters.

Mike Mahaffie announced a series of free webinars from the NOAA Coastal Services Center that will provide information on using GIS to plan for impacts of climate change and to look at economic data, and about a series of fact sheets profiling coastal counties. Webinar information and more is found at www.csc.noaa.gov/digitalcoast/training/webinar.html.

Mike Mahaffie announced the release of the third episode of the Geospatial Revolution Project, a web-based documentary series on GIS tools and technology. It is found at geospatialrevolution.psu.edu.

Approval of December 9, 2010 Meeting Minutes

Terry Whitham made a motion to approve [the December 9, 2010 meeting minutes](#) (PDF) as presented.

Darren Dell seconded the motion and it passed, unanimously.

Reports

Executive Council Report

Mike Mahaffie gave a brief report on activities at the January 6, 2011 meeting of the DGDC Executive Council. He noted that there had been a discussion of the strategic plan and the idea of a GIS Office, for which there is support on the Executive Council. He noted that while it does not seem that that idea will bear fruit yet, the group continues to work in that direction. Mike added that two action items from the Executive Council meeting – changes to the Data Standards Committee and need for a list of authoritative data sources – would appear later in the DGDC meeting agenda.

USGS/Federal Report

Roger Barlow reported on his efforts to spur a project to collect shoreline locations and establish a “V-datum” along the coastline. He has made progress in learning what is possible, but has not been able to attract any funding yet.

Arthur Walker reported on a project by USDA that is looking at carbon amounts in farm field soil samples. This project involves digging soil sample pits at a series of locations around the state.

Transportation Subcommittee

Bernie Gilbert reported on his progress in developing a project to combine DelDOT centerline data with road and addressing data from the counties to create a new statewide centerline dataset. He continues to refine the project and has piloted it with Sussex County. He will begin working with Kent County next and then New Castle County. There was a general discussion of the outcomes expected from this project and how the new data will be added into the Delaware Spatial Data Framework. He reported that he expects the project to be complete in the fall. There will likely be at least one, if not more, Transportation Subcommittee meetings over the next few months.

The new data set will replace the TeleAtlas files now available on the DataMIL and will finally establish the process by which the counties can push changes, as needed, to the master DelDOT centerline file. The counties will not have to change their work processes to coordinate with the state. Bernie explained that the new data set will be routable and will include impedances such as speed limits, turns, road direction and other factors. This process will also benefit the 911 system and will be tracked closely by the new GIS Coordinator in Safety and Homeland Security.

NSGIC 2011 MidYear Meeting

Mike Mahaffie gave a brief recap of the midyear meeting of the National States Geographic Information Council (NSGIC), which was held in Annapolis. Mike, Sandy Schenck, and Kim Cloud attended from Delaware. Mike has posted his notes and other items from the meeting at bit.ly/nsgic_midyear_2011.

Mike noted that addressing issues dominated the NSGIC meeting and that there are now more and more federal agencies coming to the table to work with the states on GIS Issues. NSGIC is taking a strong position with the federal government in opposition to duplication of efforts such as the several agencies in the federal system involved in collecting and organizing addressing data.

Other areas of discussion at NSGIC were the FCC's project to map broadband access around the nation, crowd-sourcing of data, and mapping state budgets. There was a proposal that states contract with private sector firms to track changes on the landscape and do targeted ortho updates only of those areas that have undergone change. And Mike an interesting idea from open.mapquest.com for public sharing of data. There will be more information on that idea at a later DGDC meeting.

John Laznik noted that in his work reviewing addresses for the 2010 Census for Delaware, he found that only Delaware and Vermont had statewide point address data. This led to some discussion of the approach to take to manage addresses at the state and county levels.

There was a discussion of the potential for licensing orthophotography data from Google or other on-line mapping vendors. ESRI staff expressed an interest in making a presentation to the group on that idea.

Old Business

2011 Orthophotography Project

Mike Mahaffie reported that an agreement has been reached between DTI and USGS to contract for orthophotography collection this spring for Kent and Sussex Counties. The project is funded by a federal grant to DTI and by DNREC and DelDOT. Mike reported some challenges in moving the paperwork through various agencies but that the project is now in the hands of the USGS contracting office. Roger Barlow explained that that office is now taking bids for the work and that he hopes to report more progress in the next few weeks.

Enterprise GIS Strategy

Mike Mahaffie announced plans for a "Delaware Enterprise GIS Strategy Workshop" to be held on Thursday, March 24, at 1:00 p.m., in Room 133 of the Haslet Armory. He explained that with DataMIL's servers and software configuration approaching retirement age, and with the Geospatial Data Exchange now active, it is a good time to take a step back and discuss, as a community, what might be the next steps for data-sharing tools.

New Business

Ad-Hoc Data Standards Working Groups

Mike Mahaffie explained that the Executive Council has asked for a series of working groups to suggest data standards on an as-needed basis. The first candidate standard identified is a web-mapping standard, based on the work already done by Michael Townshend (see the [minutes from the 12/9/10 DGDC meeting](#) [PDF]). Mike asked for volunteers for such a group and several members indicated some interest. Anyone else interested should contact Mike Mahaffie at mike.mahaffie@state.de.us.

Executive Council Representative Nominations

Mike Mahaffie asked for nominations (by e-mail) for the three representatives from the DGDC to the Executive Council. These are for the academic community, the municipalities, and an at-large representative. Mike asked for nominations by May 12 and noted that the vote will be held at the June 9 DGDC meeting.

Learning Things

RAMONA GIS Inventory (Bill Burgess, NSGIC)

Bill Burgess gave a presentation ([attached](#)) on the latest version (Version 4) of the “Ramona” GIS Inventory developed by the National States Geographic Information Council (NSGIC). It is found at www.gisinventory.net.

The Inventory was designed to help track the status of GIS coordination and data holdings in state and local governments and to improve the level of coordination among all levels of government. The Inventory is now used by several federal agencies in their data-discovery efforts and may become linked to several others in the near future. It provides a single, national inventory tool but is not intended to be a metadata tool.

The system is designed to inventory users, their organizations, the systems they use, the policies that govern them, the geography they cover, and which of a list of some 500 data layers they publish. From this information, very basic metadata records are created and linked to the Geospatial One-Stop for broader data discovery.

There was a discussion of whether or not Delaware and the DGDC should again become active in the Inventory and use it as another way to organize data and authoritative sources of data. There was some interest and Mike Mahaffie will work with Sandy Schenck and others to encourage key data publishers (as a start) to join the Inventory.

USGS 21st Century Quad

Roger Barlow gave a presentation ([attached](#)) on the “next generation” version of the USGS Topologic Maps. Called “US Topo,” the new maps are a top priority of the National Geospatial Program at USGS. They will be a source for all other products and derivatives for mapping layers. The US Topo maps use National Map Data and are published digitally in the GeoPDF format. They are available for free on the internet. There is a three-year revision cycle for the whole nation. US Topo maps for Delaware are due to be updated this June.

Roger noted that not all of the features that were on the historic topographic maps will be on the new US Topos. Many of these can’t be verified. If states provide statewide “authoritative” data for these sorts of features, though, they can be added.

The transportation data will come from USGS’ contract with TeleAtlas, which will include some data restrictions. The maps will include the US National Grid and UTM grid ticks and will have NAIP imagery as a basis.

Roger explained that the map creation process is highly automated and may create some errors, which should be reported by data users to USGS. He added that the US Topo project also includes the scanning of all historic topographic maps back to 1896 and serving those as well. All of the PDF maps will be available at on the USGS web site.

Open Comment Period

John Laznik asked if the Census redistricting data is available to everyone. Kevin Holmes said that it is and is available from the US Census Bureau web site as well as from Delaware census data center web site. John also spoke about the usefulness of the internal point latitude and longitudes data that are included in the census data extracts, which allow some geospatial analysis even without linking the data to the TIGER shapefiles.

Roger Barlow noted that 2010 leaf-off orthoimagery for the Eastern Shore of Maryland is now available from Michael Scott, at Salisbury University.

Bill Burgess said that he understands that the US Postal Service plans to produce zip code GIS data for the country. In the past, most have used the Census Bureau's "ZIP Code Tabulation Areas" (ZICTAs) as a substitute.

Roger Barlow made a motion to adjourn at approximately 11:35 p.m. Dick Sacher seconded it and the motion passed, unanimously.

DGDC Meeting



3/10/2011

9:00 A.M.

ROOM 220

KENT COUNTY ADMIN. BUILDING

555 BAY ROAD

DOVER, DE

Agenda



- Welcome and Introductions
- Announcements
- Minutes
- Reports
- Business (old and new)
- Learning Things
- Comments

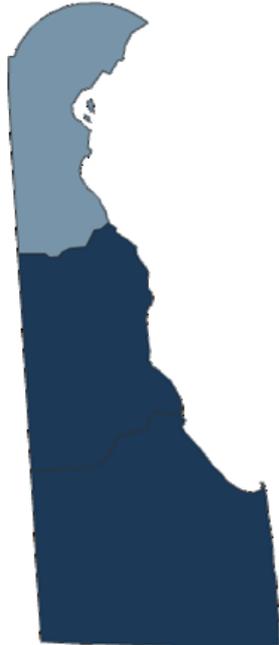
2010 Census Redistricting Data Released

2010 CENSUS RESULTS

Delaware STATE POPULATION: 897,934

POPULATION CHANGE BY COUNTY: 2000-2010

LOSS 0-5% 5-15% 15-25% 25% +



SELECT ANOTHER STATE



HIDE FULL SCREEN

STATE POPULATION BY RACE DELAWARE: 2010

PERCENT OF POPULATION	CHANGE 2000-2010
White alone 68.9%	5.8% ↑
Black or African American alone 21.4%	27.3% ↑
American Indian and Alaska Native alone 0.5%	53.1% ↑
Asian alone 3.2%	75.6% ↑
Native Hawaiian and Other Pacific Islander alone -	41.3% ↑
Some Other Race alone 3.4%	92.5% ↑
Two or More Races 2.7%	83.0% ↑

STATE POPULATION BY HISPANIC OR LATINO ORIGIN DELAWARE: 2010

PERCENT OF POPULATION	CHANGE 2000-2010
Hispanic or Latino 8.2%	96.4% ↑
Not Hispanic or Latino 91.8%	10.5% ↑

Digital Coast Webinar Series



- From the NOAA Coastal Services Center
- Last Thursday of each month, 2 to 3 p.m.
 - Using Geospatial Techniques to Plan for Climate Change Impacts on Coastal Habitats (4/28/11)
 - Using ENOW Data to Help Monitor Economic Health in Coastal Counties (5/26/11)
 - How Has Your County Changed? (6/30/11)
- Free <=!
- www.csc.noaa.gov/digitalcoast/training/webinar.html

The Geospatial Revolution Project



- Episode Three is now out



- geospatialrevolution.psu.edu/

Minutes



Approval of December 9, 2010 DGDC Minutes

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Mike Mahaffie.....OSPC
 Mary Harper.....Cultural Affairs/
 Dept. of State
 Ed McNeely.....GIC/Dept. of State
 Barbara Gladders.....DHSS/DPH
 George Yocher.....DHSS
 Sandy Schenck.....DGS
 Lillian Wang.....DGS
 Miriam Pomilio.....DGS
 Ben Mearns.....UD/RDMS
 Nicole Minni.....UD/IPA
 John Laznik.....UD/CADSR
 Kim Cloud.....DTI
 Boskey Kamboj.....DTI
 Bruce Allen.....DeIDOT
 Josh Thomas.....DeIDOT
 Matt Laick.....DeIDOT
 Darrin Dell.....DeIDOT
 Jay Gerner.....DeIDOT
 Peggy Bacon.....DeIDOT
 Mike Krumrine.....DNREC

Approval of September 23, 2010 Meeting Minutes

Matt Laick made a motion to approve [the September 23, 2010 meeting minutes](#) (PDF) as presented. Darren Dell seconded the motion and it passed, unanimously.

Rick Steffers.....City of Wilmington
 Brook Sanders.....City of Wilmington
 Sandy Spence.....League of Women
 Voters
 ES Shelton.....League of Women
 Voters
 Roger Barlow.....USGS
 Art Walker.....USDA/NRCS
 Kevin Holmes.....Census Bureau
 Michael Hanna.....Tidewater Utilities
 Phil Day.....Pictometry
 Tim Miller.....Miller-Lewis, Inc.
 Steve Elliot.....ESRI

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 Bruce Allen.....DeIDOT
 Josh Thomas.....DeIDOT
 Matt Laick.....DeIDOT
 Darrin Dell.....DeIDOT
 Jay Gerner.....DeIDOT
 Peggy Bacon.....DeIDOT
 Mike Krumrine.....DNREC
 Michael Townshend.....DNREC
 Carl Yetter.....Coastal Programs
 Rick Sherwood.....DEMA
 Doyle Tiller.....OMB/DFM
 Megan Nehrbas.....Sussex Co.
 Mike Ward.....Kent Co.
 Danielle Lamborn.....Kent Co.
 Kevin Curtis.....Kent Co.
 Mark Nowak.....City of Dover
 Patrick Susi.....New Castle Co.
 Julie Neff.....New Castle Co.
 Rick Steffers.....City of Wilmington
 Brook Sanders.....City of Wilmington
 Sandy Spence.....League of Women
 Voters
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DGDC Meeting Minutes
 December 9, 2010
 9:00 a.m.

Room 220, Kent Co. Admin Building
 555 Bay Rd. Dover, DE

Welcome

Mike Mahaffie started the meeting at approximately 9:05 a.m. with a welcome. He used a "prezi" on-line presentation (prezi.com/sm6onhdpr7vn/dgdc-1292010) to work through the agenda.

Announcements

DGDC Meeting Schedule

Mike Mahaffie announced a [tentative schedule of DGDC meetings](#) for 2011, as follows: March 10, June 9, September 8, and December 8. This schedule sets a DGDC meeting on the second Thursday of every three months. He didn't say this, but the meetings will all be from 9:00 a.m. to noon in room 220 of the Kent County Administration Building, in Dover.

ESRI Delaware Users' Group (DUG)

The next DUG meeting will be on the afternoon of March 10, following the DGDC meeting in the Kent County building. Anyone with content ideas should contact [Debbie Sullivan](#). (See attached presentation)

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Reports

GIS Day Subcommittee

Subcommittee co-chair Danielle Lamborn gave a brief report on the GIS day field trip activity which attracted around 270 students and brought together many volunteers from the GIS Community. The GeoEducation in Delaware subcommittee web site (MyGeoWorld.org) includes a [write-up of the event](#).

Transportation Data Subcommittee

Bruce Allen gave an update on the project to create a single, statewide, routable centerline file. DeIDOT staff are working now on a data architecture document, based on a successful pilot with Sussex County.

Executive Council Report



- January 6, 2011
- The usual updates and reports
- Lots of discussion about the idea of a GIS Office and how to move it forward
- Changes to the Data Standards Committee
 - In New Business
- Needed: A List of Authoritative Sources
 - The GIS Inventory Discussion in Learning Things

USGS/Federal Report



- Roger Barlow

Transportation Subcommittee



- Bernie Gilbert

NSGIC 2011 MidYear



- Notes & other materials: bit.ly/nsgic_midyear_2011
- More federal agencies are getting involved
- Addressing data is going to be very important
- FCC and broadband mapping
- Volunteered information? Crowdsourcing?
- Mapping the State Budget
- Change-detection rather than statewide orthos?
- Of this, more later: open.mapquest.com

2011 Orthophotography Project



- We struggled to get the paperwork done in time
- But we seem to have done so
- DTI leads the effort
 - Help from DNREC and DelDOT!
 - Yeoman's work from R. Barlow and Kim Cloud
- USGS contracting takes over
- Think “not quite spring, but no snow”

Enterprise GIS Strategy



- A Delaware Enterprise GIS Strategy Workshop
 - Thursday, March 24, 1:00 p.m., Room 133 Haslet Armory
- DataMIL is nearing retirement age
- Delaware Geospatial Data Exchange is up and running
- What do we need next?
- We need your input, first...

Ad-Hoc Data Standards Working Groups



- The standards committee has served us well, but had a challenge choosing next targets
- The DGDC Executive Council has voted for a series of ad-hoc working groups, targeted at specific needed standards
 - As voiced by the DGDC membership as a whole
 - First up: Web-mapping standard
- Who is “in”?

Executive Council Representatives



- Time for nominations for
 - Municipal Representative
 - Academic Community Representative
 - At-Large Representative
- For a vote at the next meeting (June 9, 2011)
- Send nominations to mike.mahaffie@state.de.us by May 12, 2011

Learning Things



- The RAMONA GIS Inventory
Bill Burgess, NSGIC
- The USGS 21st Century Quad
Roger Barlow, USGS

GIS INVENTORY



Powered by the Ramona System
Beta Version 4.0



Delaware Geographic Data 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

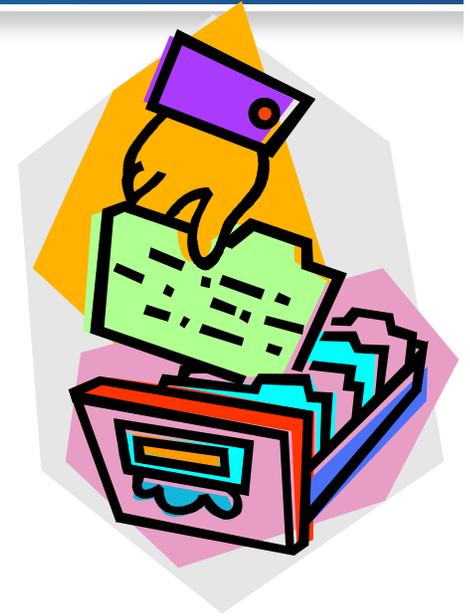
GIS INVENTORY





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

GIS INVENTORY





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
	Provider
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
	Provider
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

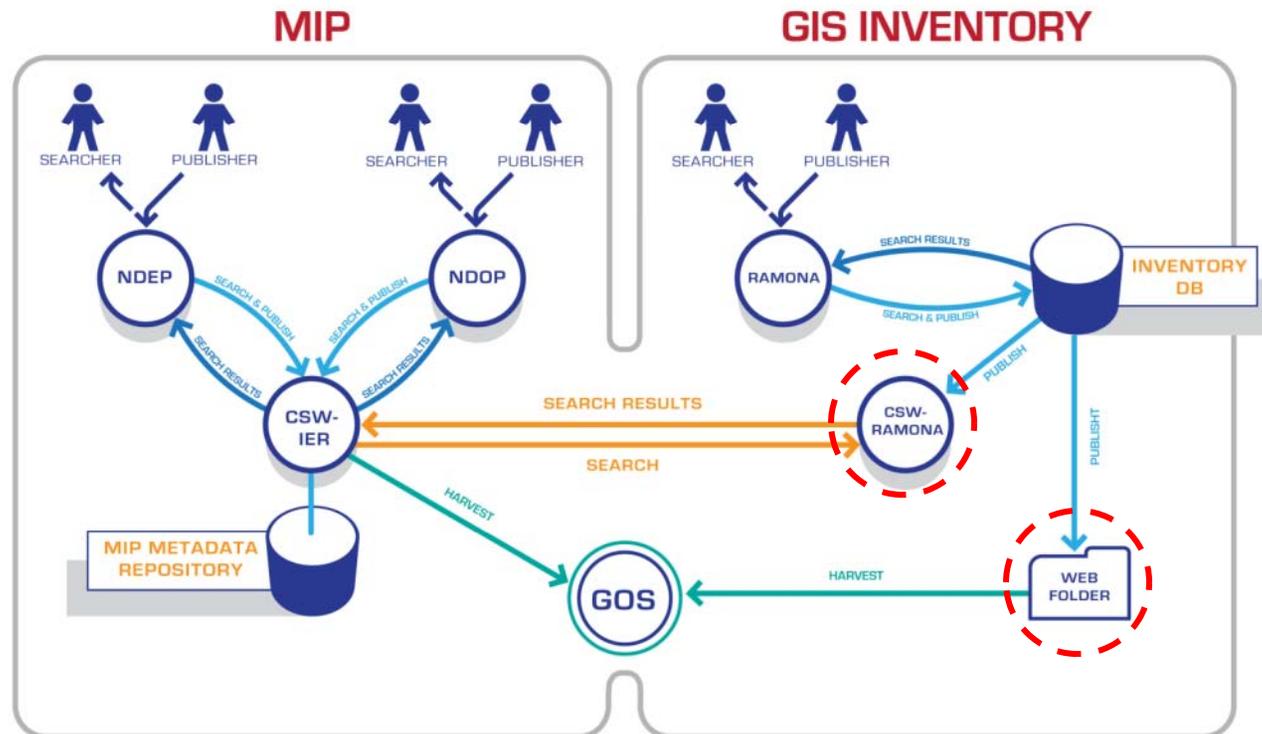
Leading States

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





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>

The screenshot shows the geodata.gov website interface. At the top, there's a navigation bar with 'Home', 'Search', 'Maps', 'Marketplace', 'Communities', 'Statistics', and 'Help Center'. Below this is a search bar and a 'Search geodata.gov' section. The search results are displayed in a list format, with the first result selected. The selected result is titled '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))'. The abstract for this result is highlighted in a red box. The abstract text is: 'Abstract: This starter metadata was automatically generated through the Ramona GIS Inventory System....'. Below the abstract, there is a 'Content Description' section that provides more details about the dataset, including its title, content type, publisher, and publication date. The website also features a map of Utah and a 'My Geography' section. The bottom of the screenshot shows the taskbar with various open applications and the system tray.

Abstract: This starter metadata was automatically generated through the Ramona GIS Inventory System....

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.

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



GIS INVENTORY





What do we Inventory?

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



NSGIC



GIS INVENTORY





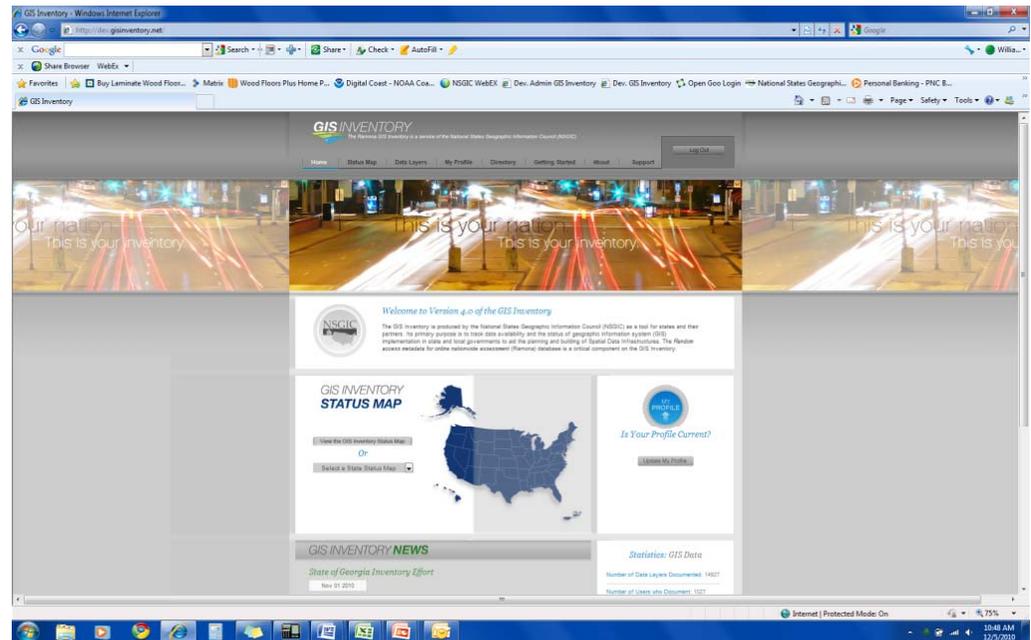
Components

- 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>





Home Page

Tabs >

News >

< Visual Reminders and Entry Points

< System Statistics

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

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

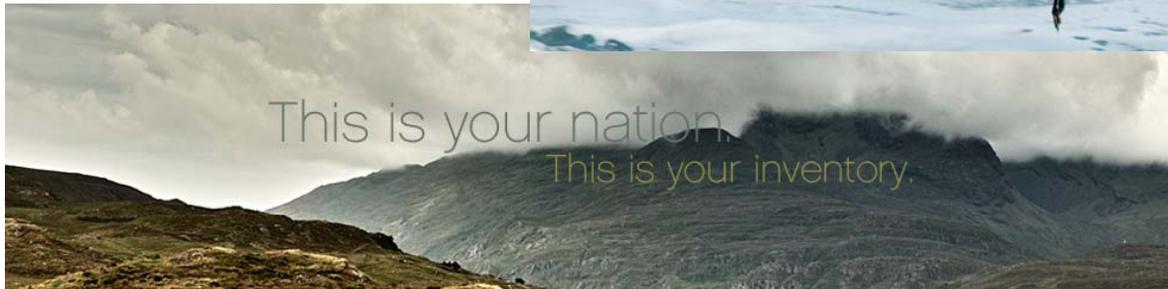


Maintain Interest & Appeal



Rotating Graphics

User Application Areas



Various Geographies





Status Maps

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

GIS INVENTORY
The National 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

Data Categories
Imagery/Base Maps/Earth Cover

Data Layers
Digital Orthophotography/Orthoimagery
Can't find your data layer?

Legend
City/Town
County
Statewide
Tribal
Coastal Areas
Nationwide
No Response

State Names
County Names
City Names
Tribal Area Names
County Outlines
Tribal Area Outlines
Coastal Water Outlines

National View

Download This Image

Statistics: Digital Orthophotography/Orthoimagery

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 Atlanta RDC Scott Jackson	Complete	1:4800 (1in=400ft)	2007

Description: HOGARDC has MDSI MNP Aerial Imagery by Appling, Bleckley, Camden, Dodge, Emanuel, Evans, Jeff Davis, Johnson, Laurens, Montgomery, Talbot, Talbot, Toombs, Treutlen, Wayne, Wheeler, and Wilcox Counties

No tribal query results

Statewide

Organization	Status	Scale	Production Date
Mulkey Jeff Tolarczyk	Complete	1:500 (1in=50ft)	





User Profile

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

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 Out

Overview
My Profile
Organizational Profile
Policies Profile
Systems Profile
My Geography
My Data Layers
Reports
Log Out

MY PROFILE

Save * Denotes a required field

Name Information

1. Preferred Salutation
Mr.

2. First Name * William
3. Middle Name S.
4. Last Name * Burgess

5. Preferred Suffix

Professional Contact Information

6. Name of your organization
BurGIS, LLC

7. Organization Web Site (format http://www.example.com/)
http://www.forget.this

8. Which of these titles most closely describes your position?
Director/Coordinator
if 'Other' please specify:

GIS INVENTORY





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

Digital Orthophotography/Orthoimagery

Progress * Source * Production Date * Approx. Scale * 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. At the top, there is a navigation menu with links for Home, Status Map, Data Layers, My Profile, Directory (which is highlighted), Getting Started, About, and Support. To the right of the menu are buttons for Log In and Create New Account. Below the menu, there is a search bar with a 'Search' button and a 'Browse Alphabetically' link. The main search area is titled 'ENTER SEARCH TERMS' and contains several input fields: First Name, Last Name, Burgess, Organization Name, and County. There are also dropdown menus for Application Area and Organization Type. Below these fields is a security image with the text 'BEMX46' and a corresponding input field. A 'Search' button is located at the bottom of the search area.

The screenshot shows the search results page for the GIS INVENTORY website. It displays two results for the search term 'BEMX46'. The results are organized into two columns: CONTACT INFORMATION and ORGANIZATION INFORMATION.

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





Getting Started Guide and User Support

Online

E-Mail

The screenshot shows the 'GETTING STARTED GUIDE' page on the GIS INVENTORY website. The page includes a navigation menu with 'Getting Started' highlighted. The main content area contains an introduction to the GIS Inventory, its purpose, and a list of introductory topics:

- 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**

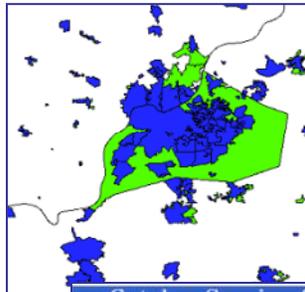
The screenshot shows the 'NEW SUPPORT TICKET' form on the GIS INVENTORY website. The form includes fields for 'Your Name', 'Your Email', 'Your Phone Number (optional)', 'Subject', and 'Questions or Comments'. A security image with the characters 'MTUW28' is displayed below the text: 'To submit your support request, please type the characters in the security image.' A 'Save' button is located at the bottom of the form.



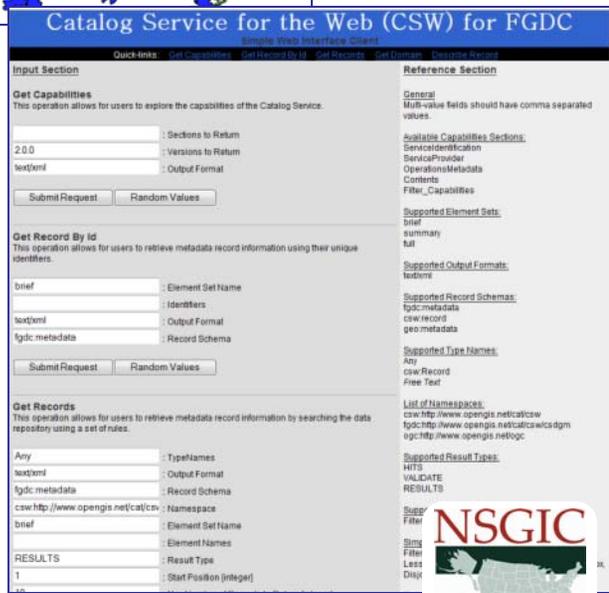


New in Version 4

- 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)



Green areas are growth from 2005 to 2009



The screenshot shows the 'Catalog Service for the Web (CSW) for FGDC' interface. It features a navigation bar with links like 'Quicklinks', 'Get Capabilities', and 'Get Record By Id'. The main content area is divided into 'Input Section' and 'Reference Section'. The 'Input Section' includes sections for 'Get Capabilities', 'Get Record By Id', and 'Get Records', each with various input fields and buttons. The 'Reference Section' lists various metadata and schema information. The NSGIC logo is visible in the bottom right corner of the interface.





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 29th

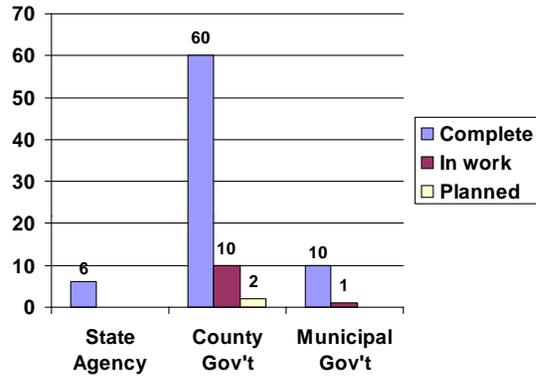


GIS INVENTORY



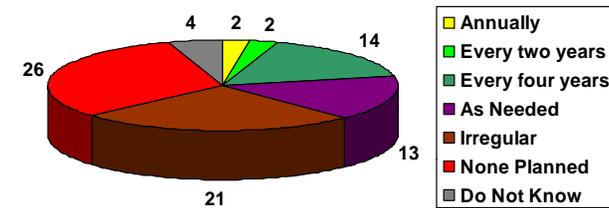
Management information in North Carolina

Orthoimagery Completeness



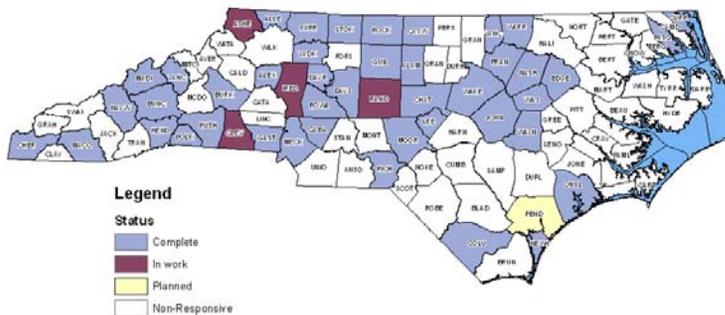
Total number of responses: 88

Orthoimagery Data Update Frequency

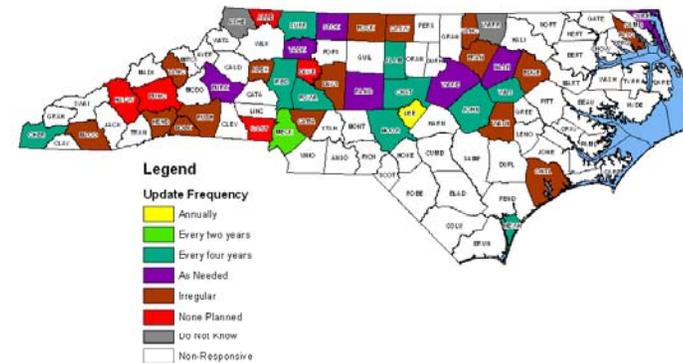


Total number of responses: 82

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.

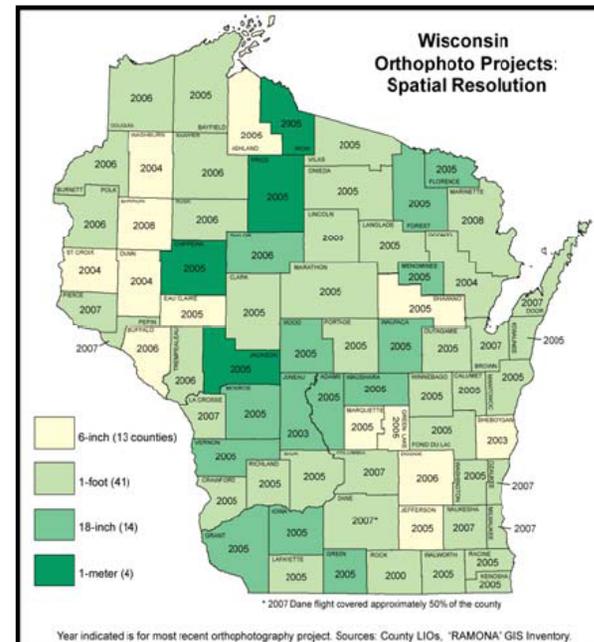


Figure 16 – Orthophoto Spatial Resolution



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.

GIS INVENTORY





National Geospatial Program Office

US Topo

The Next Generation of Topographic Maps

U.S. Department of the Interior
U.S. Geological Survey

Foundation: *The National Map*

- Base topographic data
 - ✓ Seamless
 - ✓ Continuously maintained
 - ✓ Nationally consistent
- Developed and maintained through partnerships
- Available on line
- **Source for products and services**

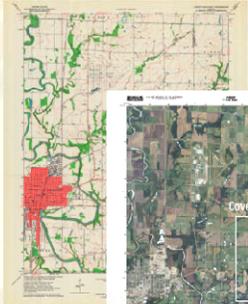


Topographic Maps for the Nation

US Topo is the next generation of topographic maps from the U.S. Geological Survey (USGS). Arranged in the familiar 7.5-minute quadrangle format, US Topo digital maps are designed to look, feel and perform like the traditional paper topographic maps for which the USGS is so well known. In contrast to paper-based maps, US Topo maps provide technical advantages that support faster, wider public distribution and enable basic, on-screen geographic analysis for all users.

US Topo maps are available free on the Web. Each map quadrangle is constructed in GeoPDF® format from key layers of geographic data (orthoimagery, roads, geographic names, topographic contours, and hydrographic features) found in *The National Map*.

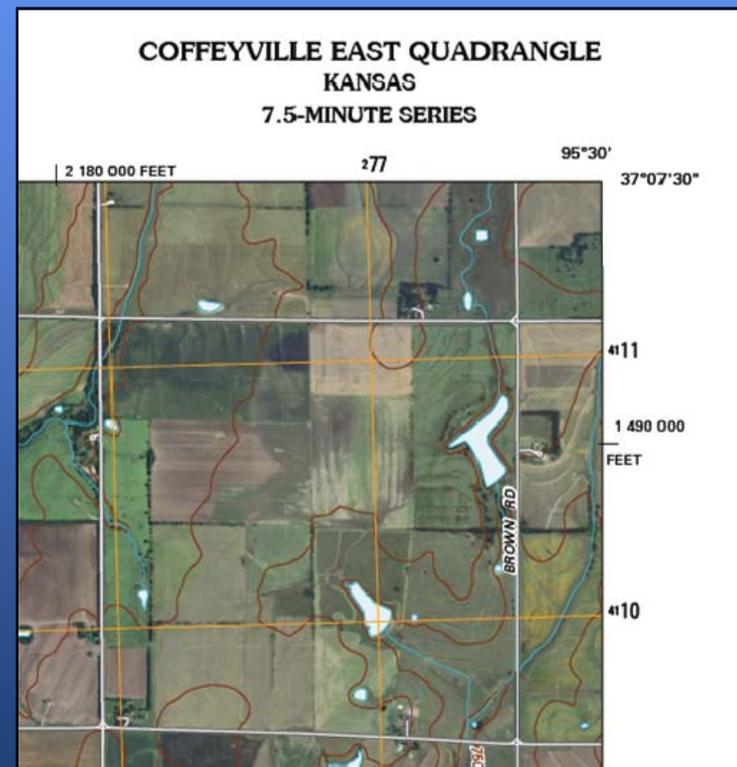
US Topo maps can be printed from personal computers or plotters as complete full-sized maps, or in customized sections, in a user specified format. Paper copies of the maps can also be purchased from the USGS Store.¹ The US Topo Web site² features downloadable links and a users guide.



US Topo

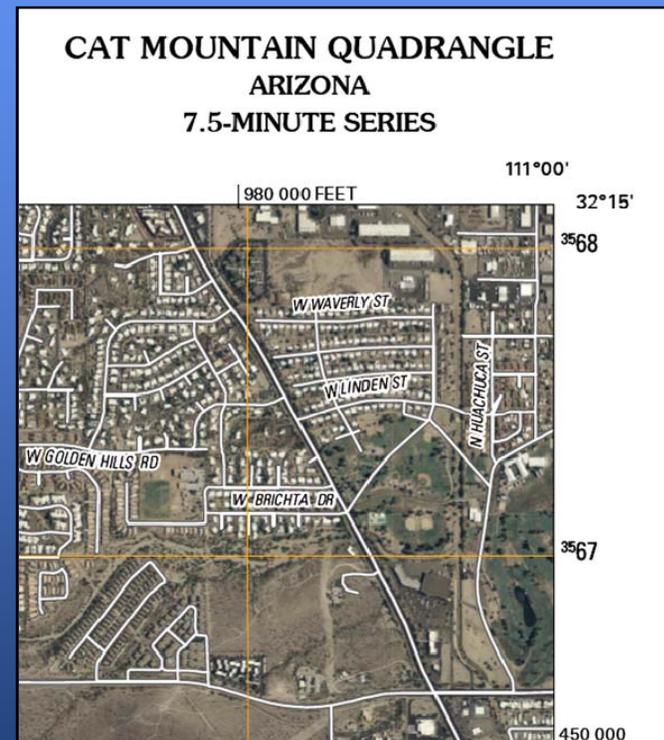
- *A new USGS topographic map product*

- ✓ Built from *The National Map* data
- ✓ Digital
- ✓ GeoPDF Format
- ✓ Available free on the Web
- ✓ Image base
- ✓ Core feature layers
- ✓ Regular update



“Digital Map – Beta”

- *Initial version of US Topo*
 - ✓ More than 14,000 produced in 2009
 - ✓ Content limited to image base, roads, and names
 - ✓ Will be revised starting 2012 to include contours, hydrographic features, State and county boundaries, and vegetation (US Topo)
 - ✓ Revised maps will include US Forest Service lands



US Topo Strategy and Program

Part 2

Revised August 8, 2010

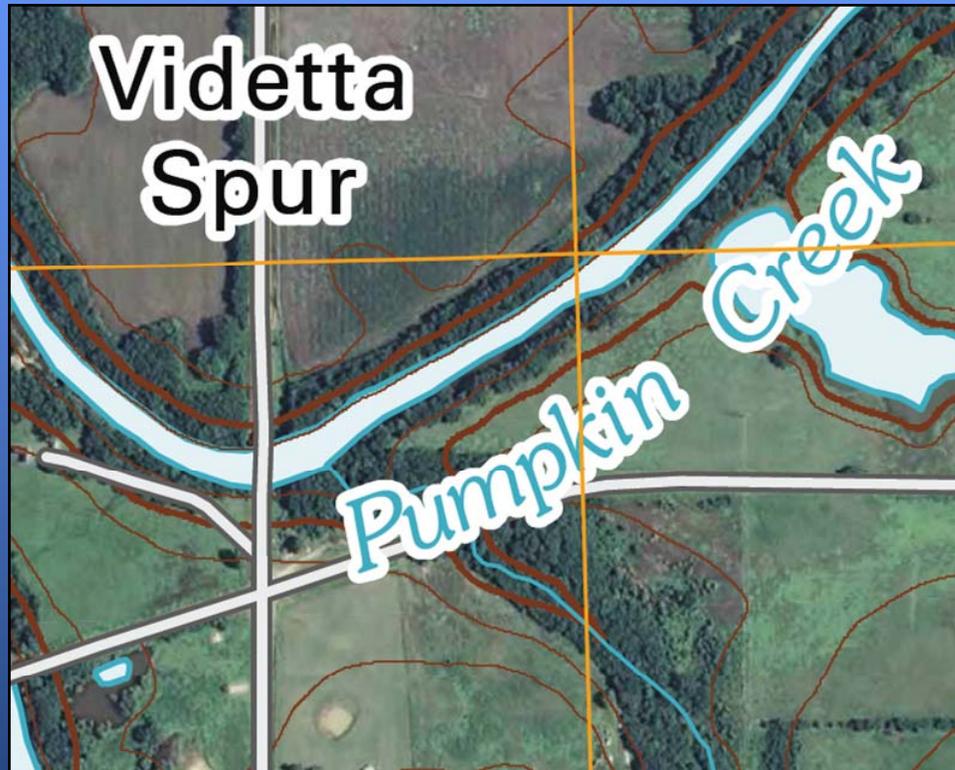
Strategy

- US Topo Content

- ✓ Orthorectified image
- ✓ Roads
- ✓ Names
- ✓ Contours
- ✓ Hydrography

- Coming Soon

- ✓ State and county boundaries
- ✓ Vegetation



Data Sources

■ *The National Map*

- ✓ Transportation – Tele Atlas (2011)
- ✓ Boundaries – National Boundaries Dataset
- ✓ Names - Geographic Names Information System
- ✓ Orthoimage – National Agriculture Image Program (NAIP)
- ✓ Elevation – National Elevation Dataset
- ✓ Hydrography – National Hydrography Dataset
- ✓ Structures – National Structures Dataset
- ✓ Vegetation – National Landcover Dataset

■ Other Sources

- ✓ Grids and quadrangle level metadata - generated
- ✓ High-resolution historic maps - scanned

Product Characteristics

- Traditional USGS 7.5-minute topographic quadrangle format
- Nationally consistent
- Can be used electronically or plotted
- Reference systems:
 - ✓ Latitude/Longitude
 - ✓ National Grid and Coordinates (Military Grid Reference System)
 - ✓ Universal Transverse Mercator

Product Characteristics

- **GeoPDF format**
 - ✓ A TerraGo Technologies published extension to the Adobe PDF file format
- **File size varies - about 15 to 25 Mb**
- **Georeferenced**
 - ✓ Locations defined in terms of map projection and coordinate systems
- **Layered (select layers, turn layers on/off)**
- **Limited interactive capabilities, free tools**

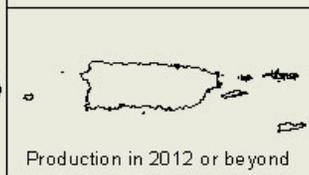
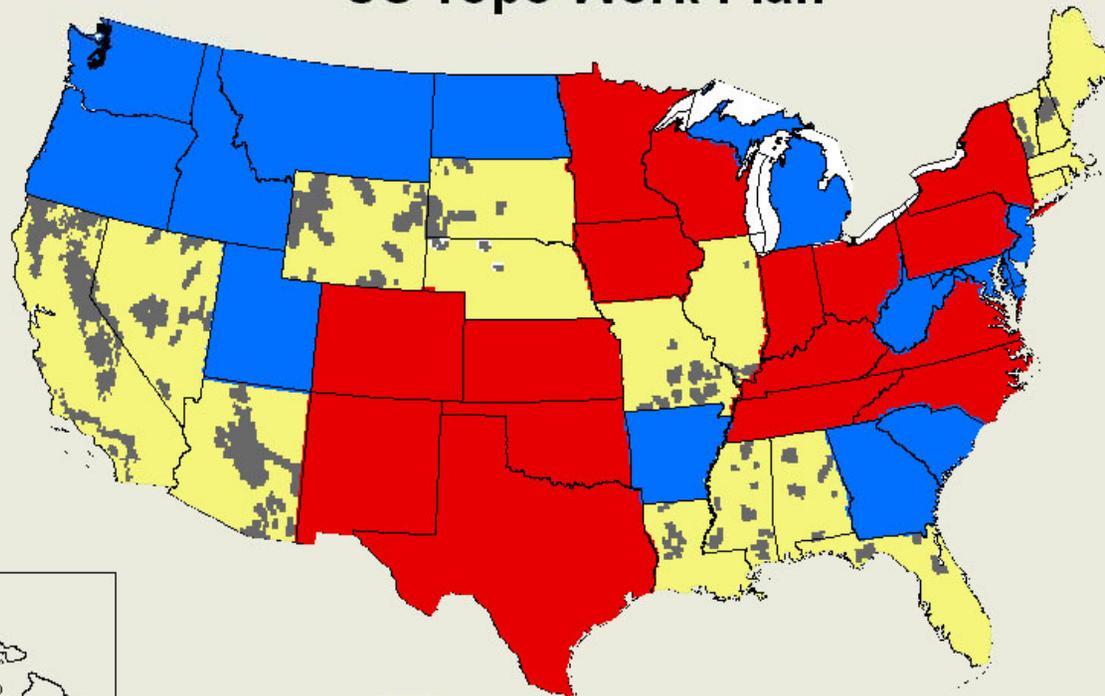
Key Advantages

- Accessible on line from a personal computer
- Interactive & enhanced
- Functionally superior to a Digital Raster Graphic (DRG)
- Will evolve & improve over time
- Plot / print ready
- Authoritative content
- Quality assured to standards
- Public domain (except Tele Atlas roads)
- Free download (except Tele Atlas data)

Future Goals

- Each year produce/revise maps covering at least 1/3 of the lower 48 States using the latest imagery and *The National Map* data
- Add coverage of Alaska, Hawaii, Puerto Rico and the US Virgin Islands
- Add additional integrated data layers from *The National Map*
- Bundle each US Topo with scanned prior edition of corresponding printed quadrangle map
- Update standard with major improvements including enhanced quality requirements

US Topo Work Plan



- "Digital Map - Beta" quadrangles produced in 2009*
- US Topo quadrangles scheduled for production in 2010
- US Topo quadrangles scheduled for production in 2011
- US Forest Service areas**

* Preliminary version of US Topos without contours and hydrographic features. US Topos for these quadrangles will be produced in 2012 and beyond.

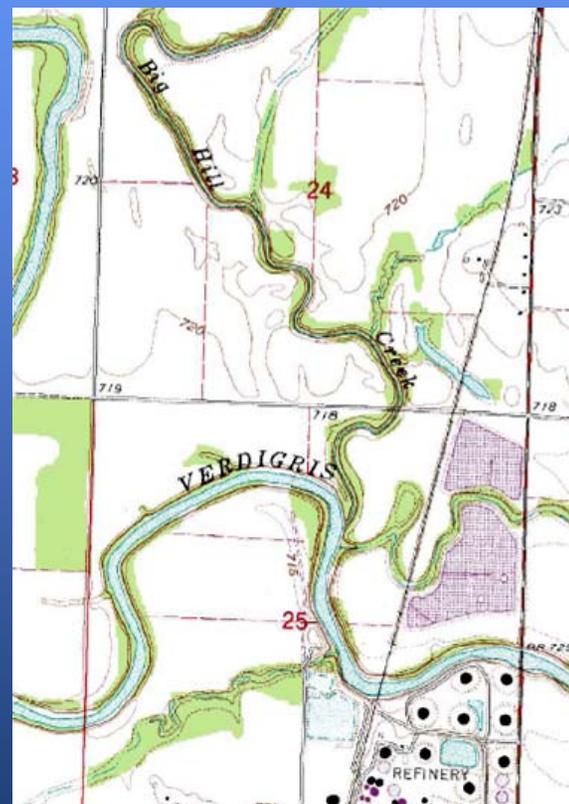
** Quadrangles including US Forest Service (USFS) lands were not included in the 2009 work plan. Under an agreement with the USFS, US Topos for those quadrangles, derived in part using USFS data, are included in the 2010 work plan and beyond.

April 29, 2010

Scanned Historical Topographic Maps

■ Goals

- ✓ Scan approximately 250,000 printed quadrangles – all maps, all scales
- ✓ Use consistent, high quality specifications
- ✓ Scan State coverages in the same order as US Topo maps are released – approximately 40,000 maps by the end of 2010
- ✓ Georeference maps and provide metadata
- ✓ Release through the USGS Store and *The National Map Viewer*



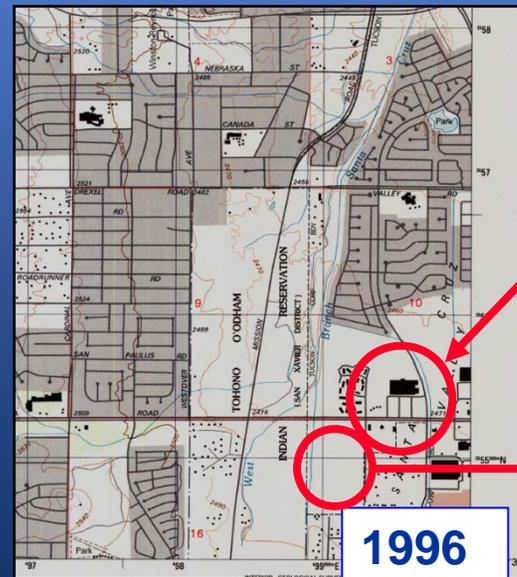
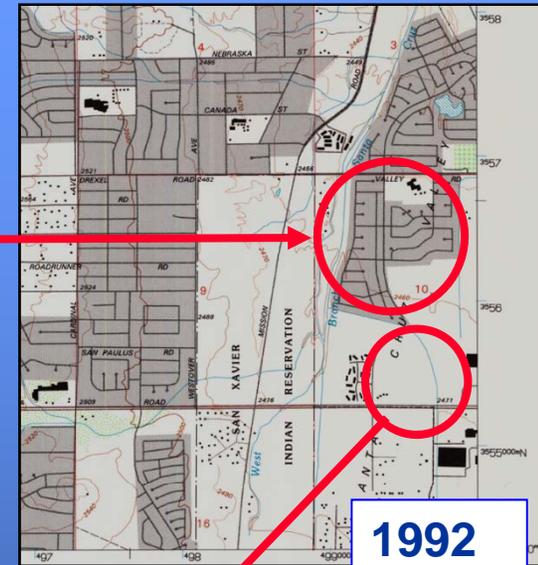
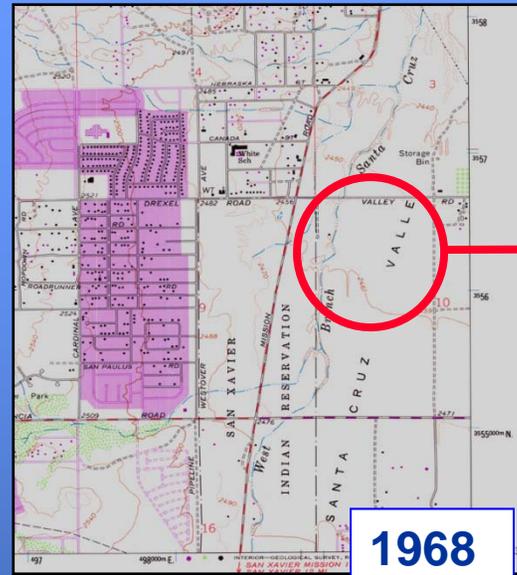
Scanned Historical Topographic Maps

■ Strategies

- ✓ Facilitate collaborative scanning projects to eliminate duplication of effort
- ✓ Archive 400 DPI resolution scans
- ✓ Make scanned maps available for free download through the USGS Store
- ✓ Improve applications methods including change detection and time series capabilities
- ✓ Develop transparency overlay tools for use with the geoPDFs

Map Time Series

An historical perspective of changes to the Nation's landscape



US Topo

Viewing and Using the Maps

Part 4A

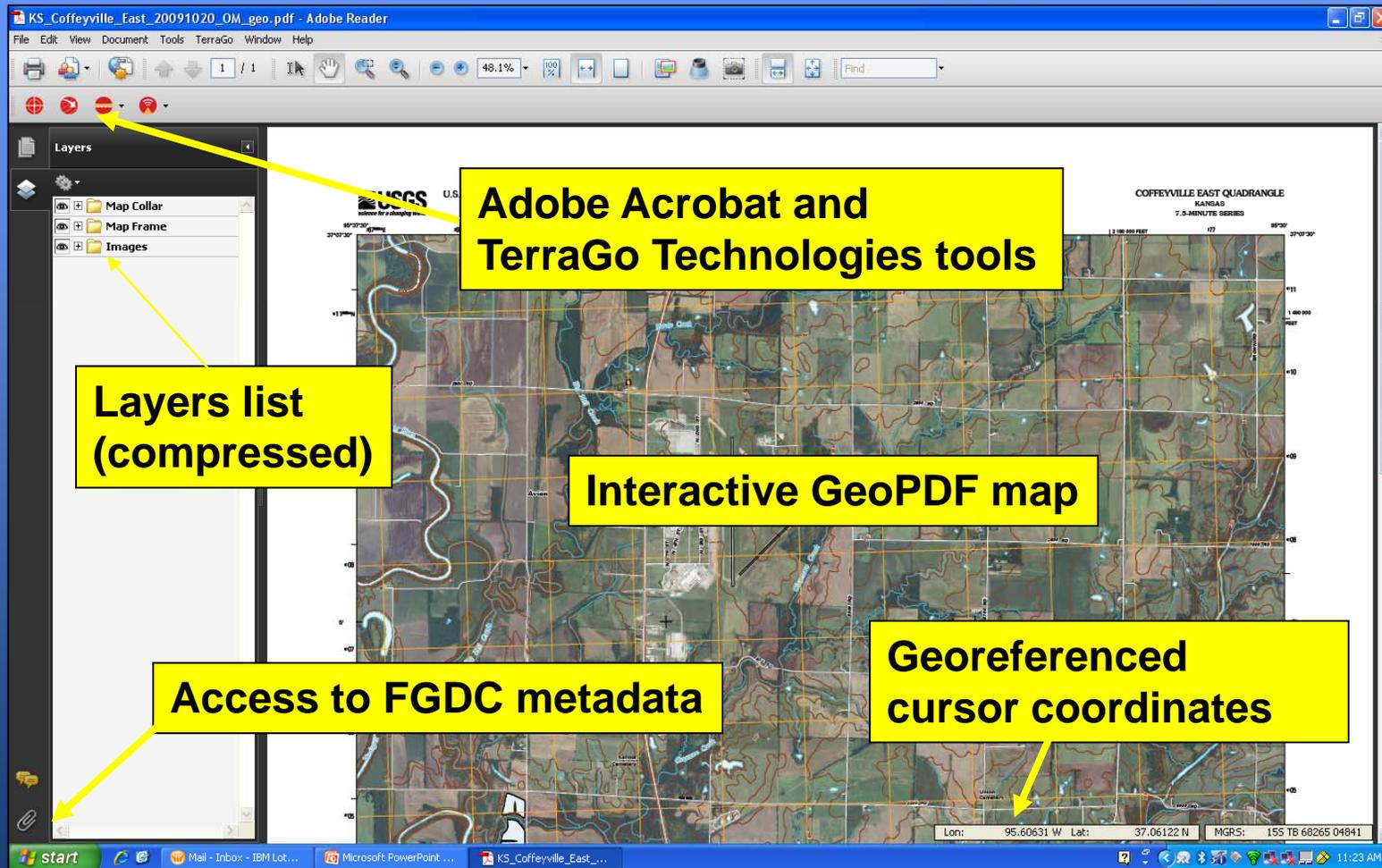
Revised August 8, 2010

System Requirements

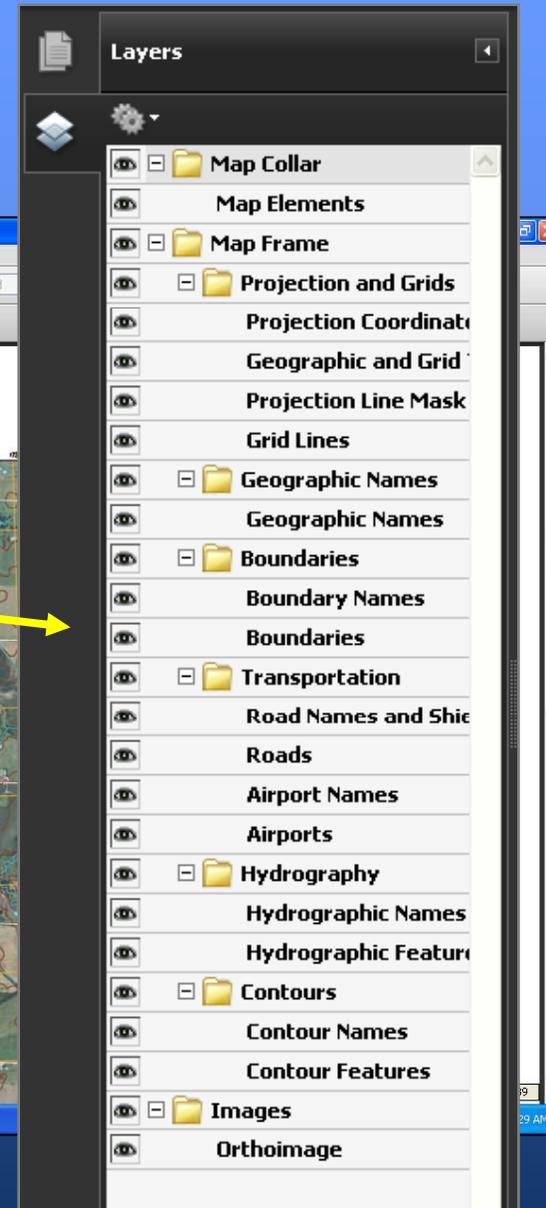
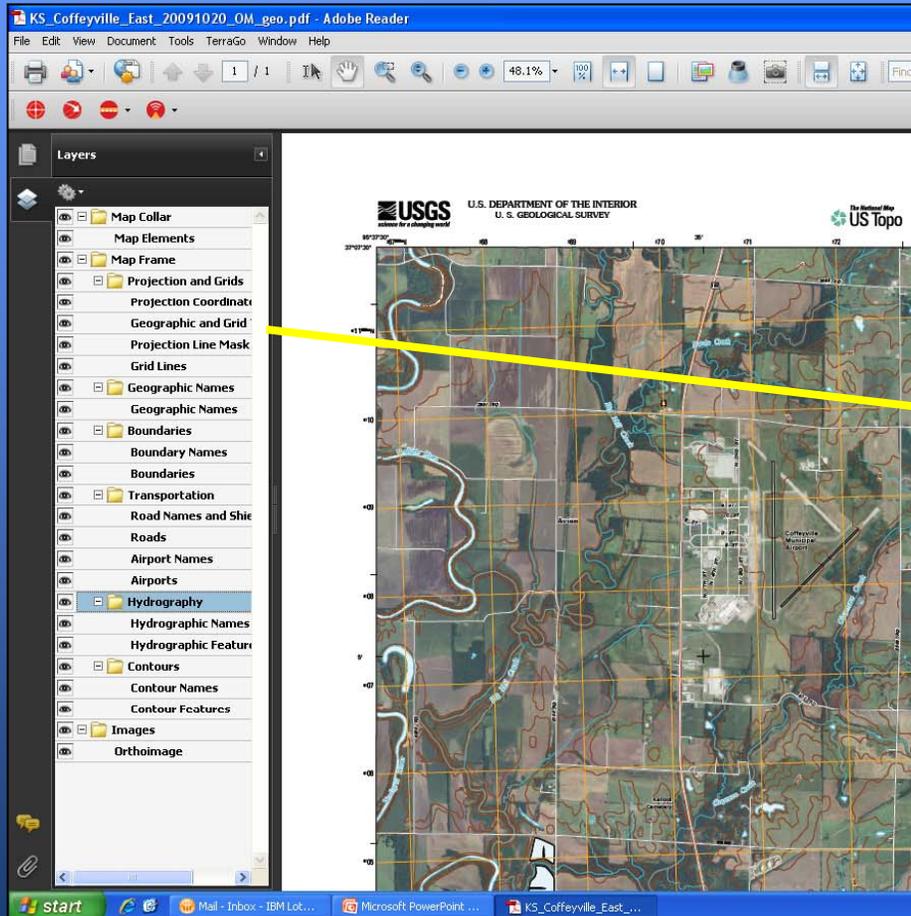
- **Windows operating system**
 - ✓ Windows 7, XP, Server 2003, or Vista
- **Broadband Internet access**
 - ✓ Highly recommended
- **Adobe Reader software**
 - ✓ Free download on Internet
 - ✓ Will also work with Adobe Acrobat (\$\$)
 - ✓ Latest three versions of either are acceptable
- **TerraGo Technologies Toolbar**
 - ✓ Not required, but recommended for enhanced functions
 - ✓ Free download

Downloaded Map

Adobe Reader with GeoPDF Tools



Downloaded Map Layer List (expanded)



Metadata Access



The screenshot displays a software interface with a map at the top and a metadata table below. The map shows a geographical area with various features and a coordinate grid. The metadata table has the following columns: Name, Description, Modified, Size, and Compressed size. A yellow arrow points from a paperclip icon in the bottom left corner to the 'metadata.xml' entry in the table.

Name	Description	Modified	Size	Compressed size
metadata.xml	Metadata for the map	10/20/2009 12:00:00 AM	47 KB	14 KB

Metadata Reader

US Topo 7.5-minute map for Coffeyville East, KS - Windows Internet Explorer

C:\Documents and Settings\kogrosky\Local Settings\Temp\A9RFC94.tmp\metadata.xml

File Edit View Favorites Tools Help

AT&T Free AOL & Unlimited Internet Free Hotmail Microsoft Update MSN.com RealPlayer Wikipedia, the free encyclo... Web Slice Gallery

The USGS Store - One stop s... US Topo 7.5-minute map ... X

To help protect your security, Internet Explorer has restricted this webpage from running scripts or ActiveX controls that could access your computer. Click here for options...

US Topo 7.5-minute map for Coffeyville East, KS

FGDC Metadata
Show Definitions
Description | Spatial | Data Structure | Data Quality | Data Source | Metadata

Description

Citation

Title: US Topo 7.5-minute map for Coffeyville East, KS
Originators: U.S. Geological Survey
Publisher: USGS - National Geospatial Technical Operations Center (NGTOC)
Publication place: Rolla, MO and Denver, CO
Publication date: 20091020
Data type: map, raster digital data

Description
Data Type
Time Period of Data
Status
Key Words
Data Access Constraints

Horizontal Coordinate System
Spatial Domain

Overview

General
Attribute Accuracy
Positional Accuracy

Citation

Title: US Topo 7.5-minute map for Coffeyville East, KS
Originators: U.S. Geological Survey
Publisher: USGS - National Geospatial Technical Operations Center (NGTOC)
Publication place: Rolla, MO and Denver, CO
Publication date: 20091020
Data type: map, raster digital data

Done

start My Computer 100% 11:08 AM

KS_Coffeyville_East_... Microsoft PowerPoint... US Topo 7.5-minute ...

US Topo Product Information

Part 5
Revised August 8, 2010

Web Site – Home Page

USGS science for a changing world

The National Map
US Topo

USGS Home
Contact USGS
Search USGS

The National Map

About US Topo Maps

Download Maps (Map Store)

Frequently Asked Questions

User's Guide-Quickstart (1.4 MB pdf)

Fact Sheet

Brochure (5 MB pdf)

History of USGS Topographic Maps

The National Map

Contact Us

A New Generation of Maps

US Topo is the next generation of digital topographic maps from the [U.S. Geological Survey](#). Arranged in the [traditional 7.5-minute quadrangle](#) format, digital US Topo maps are designed to look and feel like the traditional paper topographic maps for which the USGS is so well known. At the same time, US Topo maps provide modern technical advantages that support wider and faster public distribution and enable basic, on-screen geographic analysis for all users.

US Topo maps are available free on the Web. Each map quadrangle is constructed in GeoPDF® format from key layers of geographic data – [orthoimagery](#), [roads](#), [geographic names](#), [contours](#) and [hydrographic](#) features - found in [The National Map](#), which is a nationwide collection of integrated data from local, State, Federal, and other sources.

US Topo [users](#) can turn geographic data layers on and off as needed; zoom in and out to highlight specific features or see a broader context; and print the maps, in their entirety or in customized sections, on a wide variety of printing devices. Additional analytical tools are available free for [download](#). File size for each digital 7.5-minute quadrangle is about 15-20 megabytes.

The prototype of US Topo, "Digital Map-Beta," has been available since June 2009 and currently covers 17 states. US Topo maps include all of the content of the earlier "Digital Map-Beta," plus integrated [contours](#) and [hydrographic](#) features.

As the US Topo product evolves, the USGS will provide digital versions of earlier edition topographic quadrangle maps and will incorporate additional geographic data layers from [The National Map](#).

The USGS values your [comments and suggestions](#) about the new US Topo.

Coverage

[See current US Topo map coverage.](#)

As of October 2009, the USGS began to load US Topo maps to the [USGS Store](#) distribution point where the maps will be available for free download. Existing "Digital Map-Beta," will continue to be available for free download. As available, they will be eventually replaced by revised and enhanced US Topos produced by the USGS [National Geospatial Technical Operations Center](#).

What Makes the USGS US Topo Different from Other Electronic Maps?

- Richer content, multiple layers of data, more than a street map
- Can be used on the computer or printed to scale
- Looks and feels like legacy paper USGS topographic maps but has technical advantages
- Nationally consistent data quality assured to high standards
- Downloadable free from the USGS Store
- Free, downloadable user tools
- Users can select from various reference systems: Latitude/Longitude, UTM (Universal Transverse Mercator), and MGRS (Military Grid Reference System)
- Direct "mash-up" capabilities with Google Maps®
- Continuous evolution and incorporation of additional data layers

enlarge

Coffeyville East Kansas
Coffeyville Quad with image turned off
[Download the full Coffeyville East Kansas Geo PDF \(16 MB\)](#)

USGS Store - Download

USGS
science for a changing world

The USGS Store Log on | No Items in Basket | Help

Search
Map Locator >>
or Enter Search Term:
Advanced Search

Product Catalog
USGS Store Home
Back-2-School Specials!
Recreation Passes
Education Products
Featured & New Products
Maps
Books & Reports
Other Products

Other Items of Interest
Other USGS Links
Find a USGS Map Dealer in your area.

Tips For Using This Site
This website will time out after 30 minutes of inactivity, if you cannot complete your order please "SAVE YOUR BASKET" for later, otherwise your shopping basket will be lost.
Some products have a detailed PDF version, download Adobe Reader to view them.
Get ADOBE READER

We want to know
If you encounter any problems or have questions please call 1-888-ASK-USGS (1-888-275-8747)
Select Option 1 or email us at: usgsstore@usgs.gov.

Don't see the Map Locator? [Help](#)
Map Locator
Having trouble? Call: 1-888-ASK-USGS (1-888-275-8747) or Write: usgsstore@usgs.gov for help.

Map Satellite Hybrid Topo

Clear Markers Reset Map
Hide US Topo and "Digital Maps - Beta"

US Topo "Digital Maps - Beta"

STEP 1.
SEARCH: [\[Search Help\]](#)
Go
Search Type:
Address or Place
OR FIND A PLACE ON THE MAP
[\[Navigation Help\]](#)
FIRST, NAVIGATE around the map:
double click to re-center, click and drag to pull the map around, zoom in and out.
THEN, MARK POINTS on the map:
click on a place to add a marker

NOTES:
You can switch between Navigate and Mark Points at any time.
The following [map footprints](#) appear when you are in the Mark Points mode and zoomed in:
7.5 and 15 Minute

[About USGS Maps](#)
[About GeoPDF Maps](#)
[About US Topo](#)
[US Topo Quickstart](#)

terraGo Do more with GeoPDF:
• Annotate with geospatial information

USA.gov

Accessibility FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
URL: <http://store.usgs.gov>

Coverage shown as of August 13, 2010

<http://store.usgs.gov>



USGS Store - Download

The screenshot shows the USGS Store interface. At the top, there are map style buttons: Map, Satellite, Hybrid, and Topo. A search bar is present with a 'Go' button and a search type dropdown set to 'Address or Place'. Below the search bar, there are two main options: 'OR FIND A PLACE ON THE MAP' with a 'Navigation Help' link, and 'STEP 1. SEARCH: [Search Help]' with a search bar and 'Go' button. A table of map products is displayed, listing Name, Extent, Date, Map, File, and Size. Below the table, there are buttons for 'Clear Markers' and 'Reset Map', and a link to 'Hide US Topo and "Digital Maps - Beta"'. A legend at the bottom left shows 'US Topo' with a red diagonal hatched pattern and '"Digital Maps - Beta"' with a yellow diagonal hatched pattern. On the right side, there are instructions for 'STEP 1.' and 'STEP 2.', along with a dropdown menu showing '7.5 and 15 Minute'.

Name	Extent	Date	Map	File	Size
Forbes US Topo	7.5X7.5	2009	order	download	29928 KB
Forbes	7.5X7.5	1990	order	download	6062 KB
Atchison	30X60	1990	order	download	12448 KB
Kansas City	1X2	1974	order	download	9222 KB

STEP 1.
SEARCH: [\[Search Help\]](#)

 Search Type:
OR FIND A PLACE ON THE MAP
[\[Navigation Help\]](#)
 FIRST, NAVIGATE around the map: double click to re-center, click and drag to pull the map around, zoom in and out.
 THEN, MARK POINTS on the map: click on a place to add a marker

NOTES:
 You can switch between Navigate and Mark Points at any time.
 The following [map footprints](#) appear when you are in the Mark Points mode and zoomed in:

STEP 2.
SELECT AND GET YOUR MAPS

[About USGS Maps](#)
[About GeoPDF Maps](#)
[About US Topo](#)
[US Topo Quickstart](#)

Web Site - Draft Standard

About US Topo Maps

The Present

Building on the success of [125 years of USGS topographic mapping](#), the US Topo is a new kind of georeferenced map data files. While not a full-fledged [Geographic Information System \(GIS\)](#), US Topo maps are quite different from others with embedded analytical tools and theme-based layers. US Topos include an [aerial image base](#), [roads](#), [geography](#)

Ultimately, the US Topos will include layers for expanded [transportation](#), [boundaries](#), [structure features](#), and [vegetation](#)

The quality and accuracy of an individual US Topo map depends on *The National Map Accuracy Act* compatible software. The map files are available, at no cost, for digital download

[Draft Standard: US Topo - Version 0.5.10 \(November 2009\)](#)

[Draft Standard: "Digital Map - Beta" - Version 0.0.25 \(July 2009\)](#)

The Future

The USGS started production of the enhanced US Topo map in October 2009. The NAIP imagery will form the base layer of US Topo maps. As other data layers are added, high-resolution scanned files of all historical versions of the new topographic map

US Topo and "Digital Map-Beta," made to date do not include the 7.5-minute quadrangle maps available at the [USGS Store](#), or as paper copies for a fee, by using the [USGS-Store-Map-Lo](#)



National Geospatial Program

US Topo Product Standard

Draft version 0.5.10, November 2009

By Laurence R. Moore, Michael J. Cooley, Larry R. Davis, Helmut Lesinskiy

This document is a draft manuscript that has not yet been approved as a USGS publication.

Report Series XXXX-XXXX

Web Site - Quickstart Users Guide



US Topo Users Guide – Quickstart

This Quickstart guide provides information on how to use the US Topo maps. Additional information on the US Topo maps and the National Map are at <http://nationalmap.gov>.

Note: US Topo maps are available on the National Map as "Digital Map – Beta" products.

US Topos are the next generation of the National Map, which is available on the Web. You can enter the coordinates of any point on a map, display coordinates on a map, or display a map image.

Downloading US Topos and "Digital Maps – Beta"

Click "download" for the selected map, then click "Save" to save the downloaded file to a directory and file name you specify on your local hard drive. The map is delivered in compressed zip files (.zip). To access the map file contained therein, unzip and extract the file. Please note: the possibility of file corruption exists if the file is not extracted properly from the zip file.

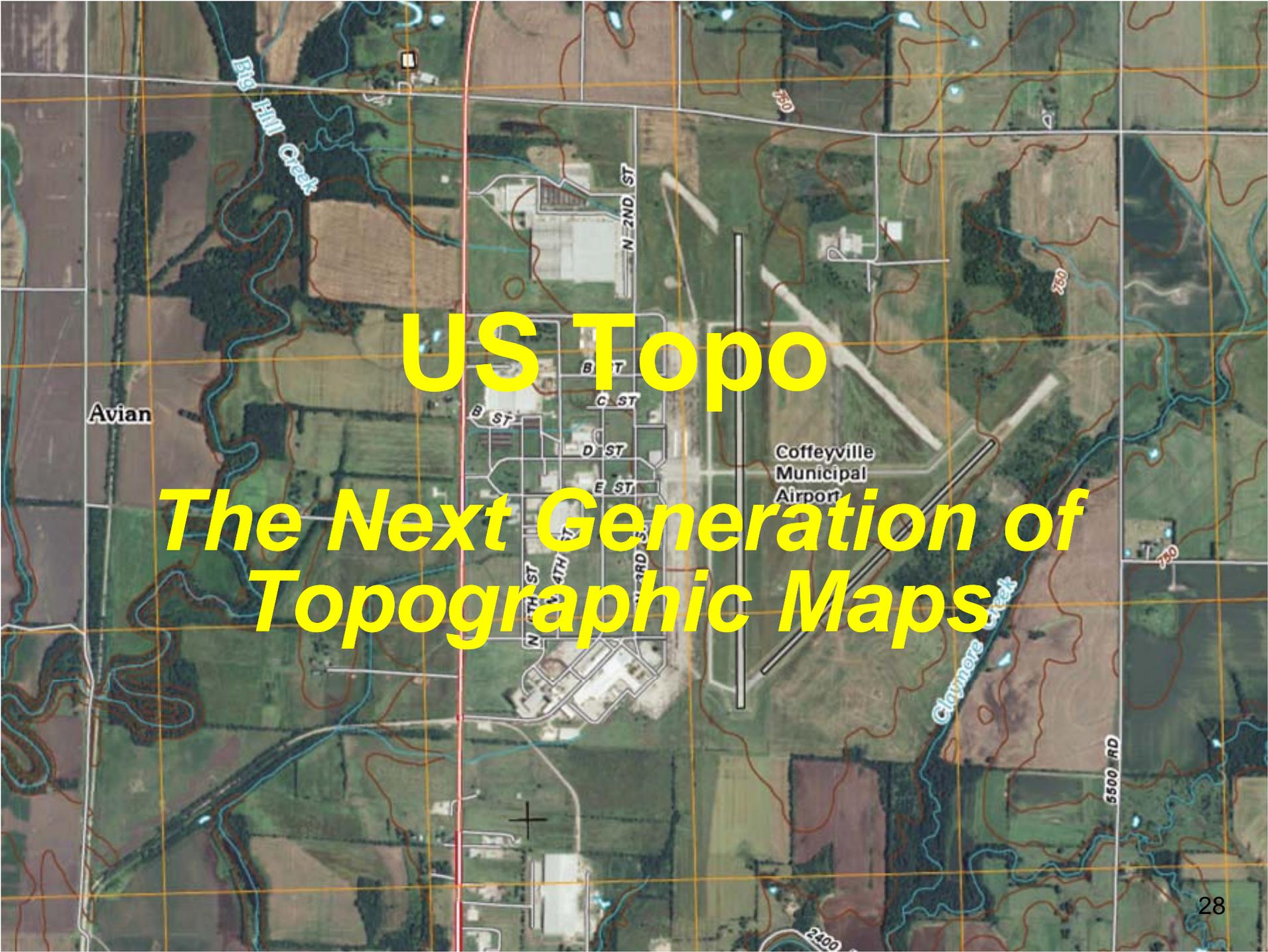
To unzip and extract the map file from a compressed zip file:

1. Locate the compressed zip file that you want to extract files or folders from.
2. Do one of the following:
 - To extract a single file or folder, double-click the compressed zip file to open it. Then, drag the file or folder from the compressed zip file to a new location.
 - To extract the entire contents of the compressed zip file, right-click the compressed zip file, click Extract All, and then follow the instructions.

You also can use your favorite third-party compression utility to unzip and extract files. Please follow their instructions on how to properly unzip and extract files.

More information about using compressed zip files in the Windows environment can be found in your Windows help or go to <http://nationalmap.gov>.





US Topo

The Next Generation of Topographic Maps