

The Delaware DataMIL

A Pilot Project for *The National Map*

April 18, 2002
Delaware GIS Conference:
Connecting Communities

The DataMIL Team

- University of Delaware
 - Christina Callahan, Research & Data Management Services
 - John Callahan, Research & Data Management Services
 - Richard Sacher, Research & Data Management Services
- Delaware Geological Survey
 - Sandy Schenck, State Mapping Advisory Committee
- Delaware Office of State Planning Coordination
 - Mike Mahaffie, Delaware Geographic Data Committee
- United States Geological Survey
 - Shannon Bain, Mid-Continent Mapping Center
 - Robert Rinehart, Mid-Continent Mapping Center

What is DataMIL?

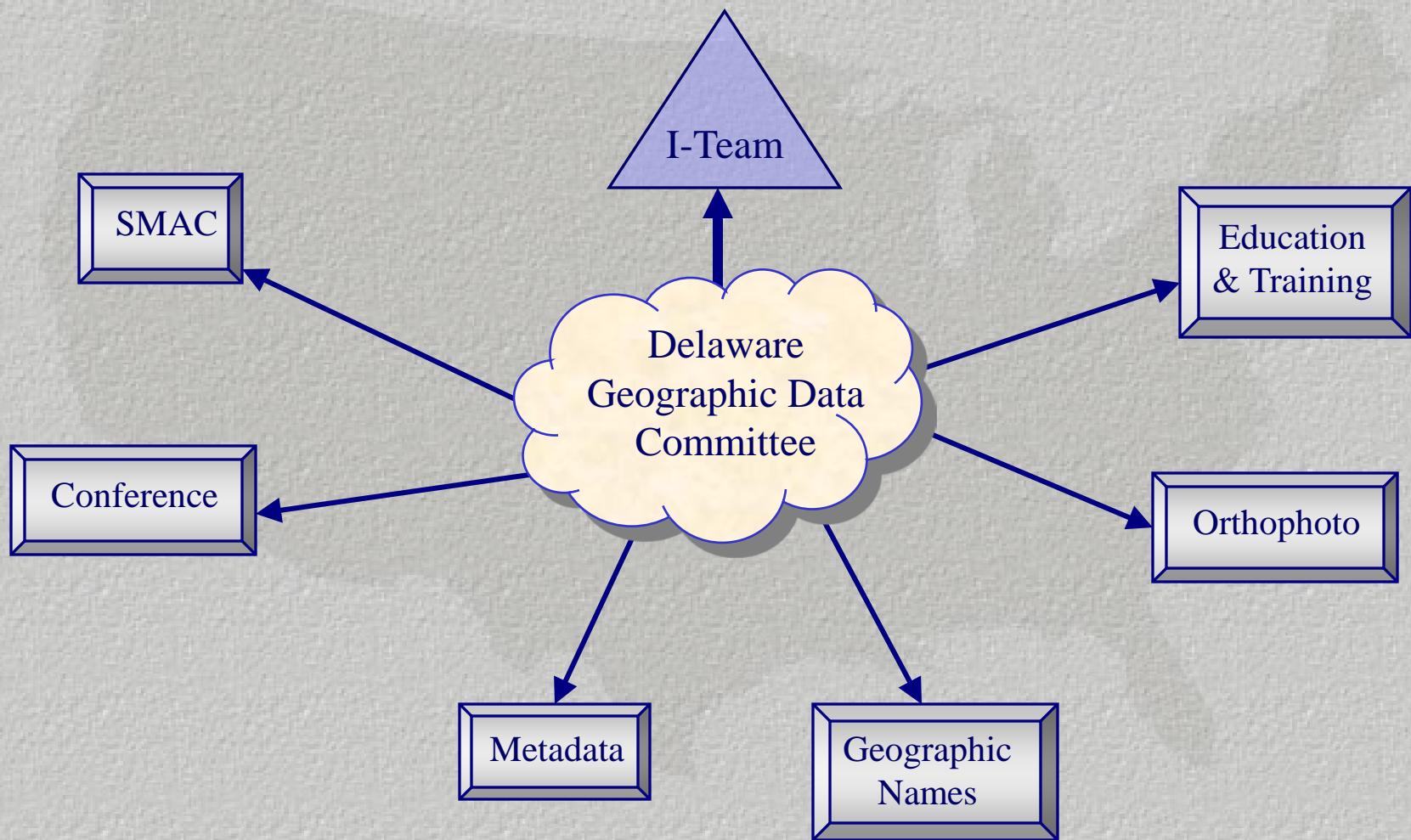
DataMIL = Data Mapping and
Integration Laboratory

Developed from conversations between Delaware Geological Survey, Delaware Office of State Planning Coordination and USGS regarding the revision of topographic maps using Delaware data (September 2000).

Need for Improvement

- Delaware topographic map series (DRGs/DLGs) produced in early 1990s
- Updated Delaware DOQQs 1997/2002, Land Use, DelDOT Transportation Network, Municipal Boundaries, Watersheds (Delaware Framework)
- Several USGS National datasets under development – GNIS, NHD, NED, Imagery, Land Cover (*The National Map*)

Delaware's GIS Community



Delaware Spatial Data Framework

- Based on one of the State Land Use Goals:
“Coordinate public policy planning and decisions among state, counties and municipalities”
- The “skeleton” that holds together a wide variety of spatial data sets
- A shared Framework standard means data sets work together
- Delaware Version 1.0 complete – Nine Layers

The Framework Is Based On...

A Livable Delaware principle:



**Good decisions are based on good information.
Good information is based on good data.**

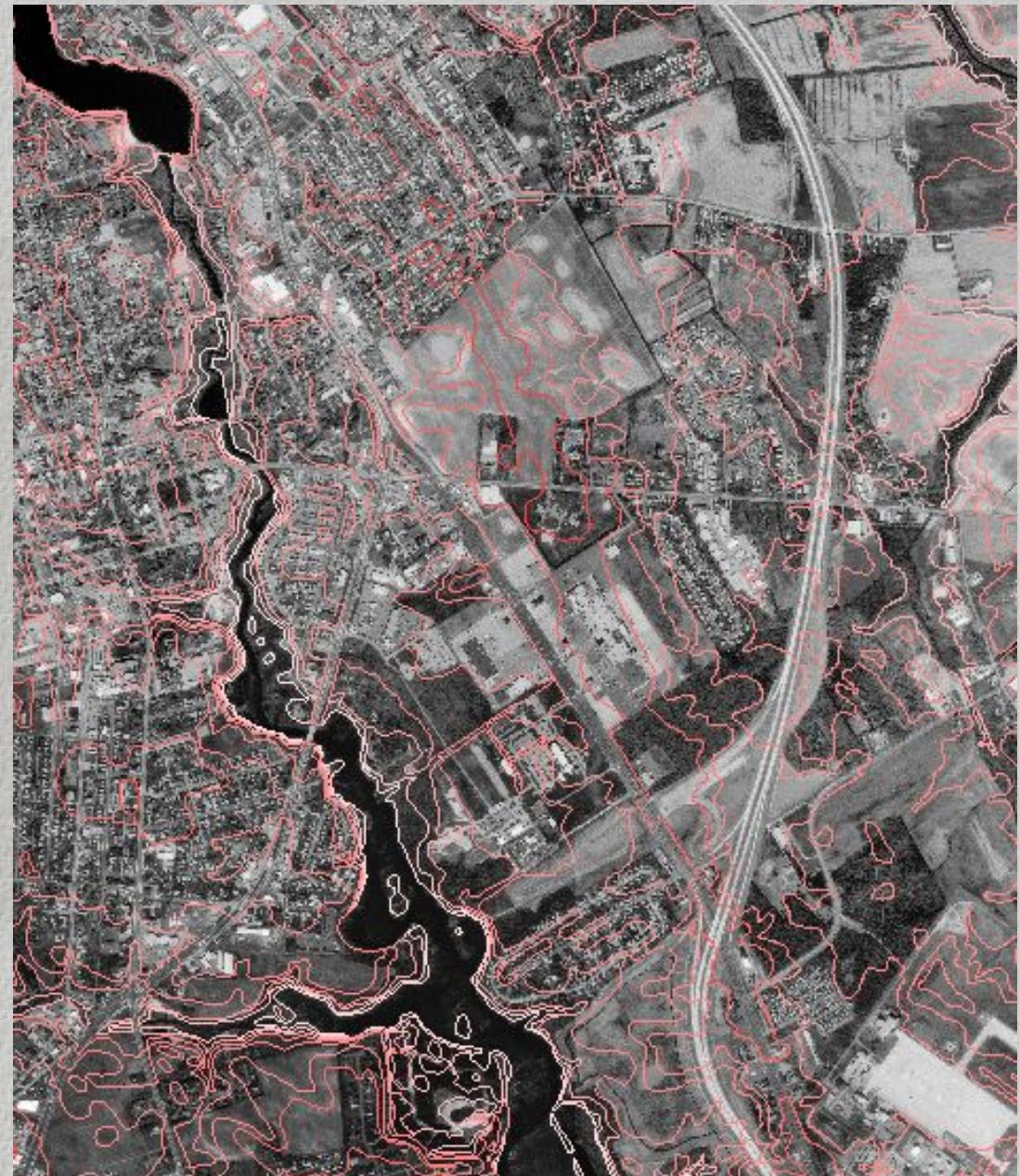
Delaware's Framework

- Geographic Names
- Land Use
- Cadastral
- Transportation
- Hydrography
- Gov. Units
- Geodetic Control
- Hypsography
- Orthoimagery



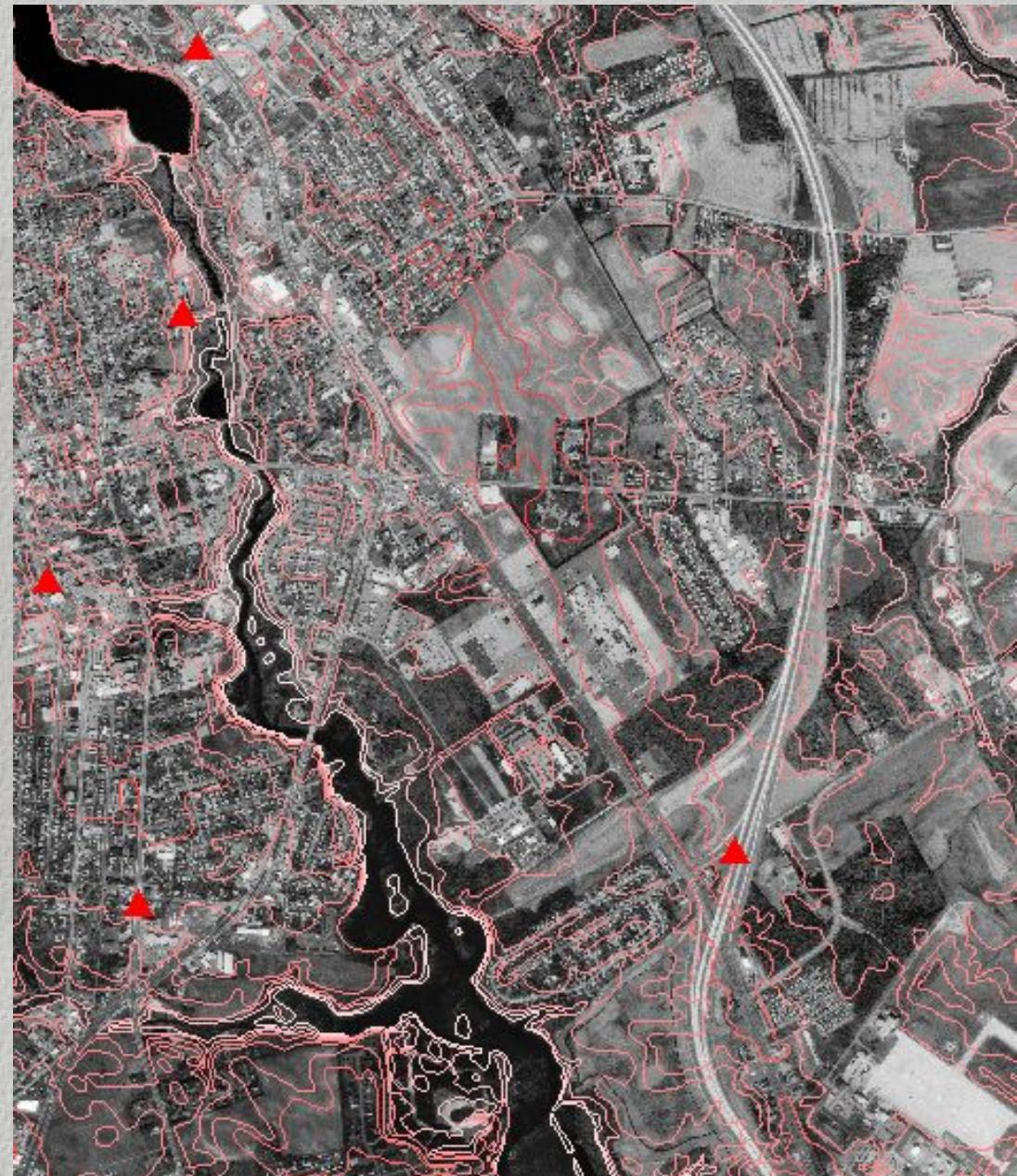
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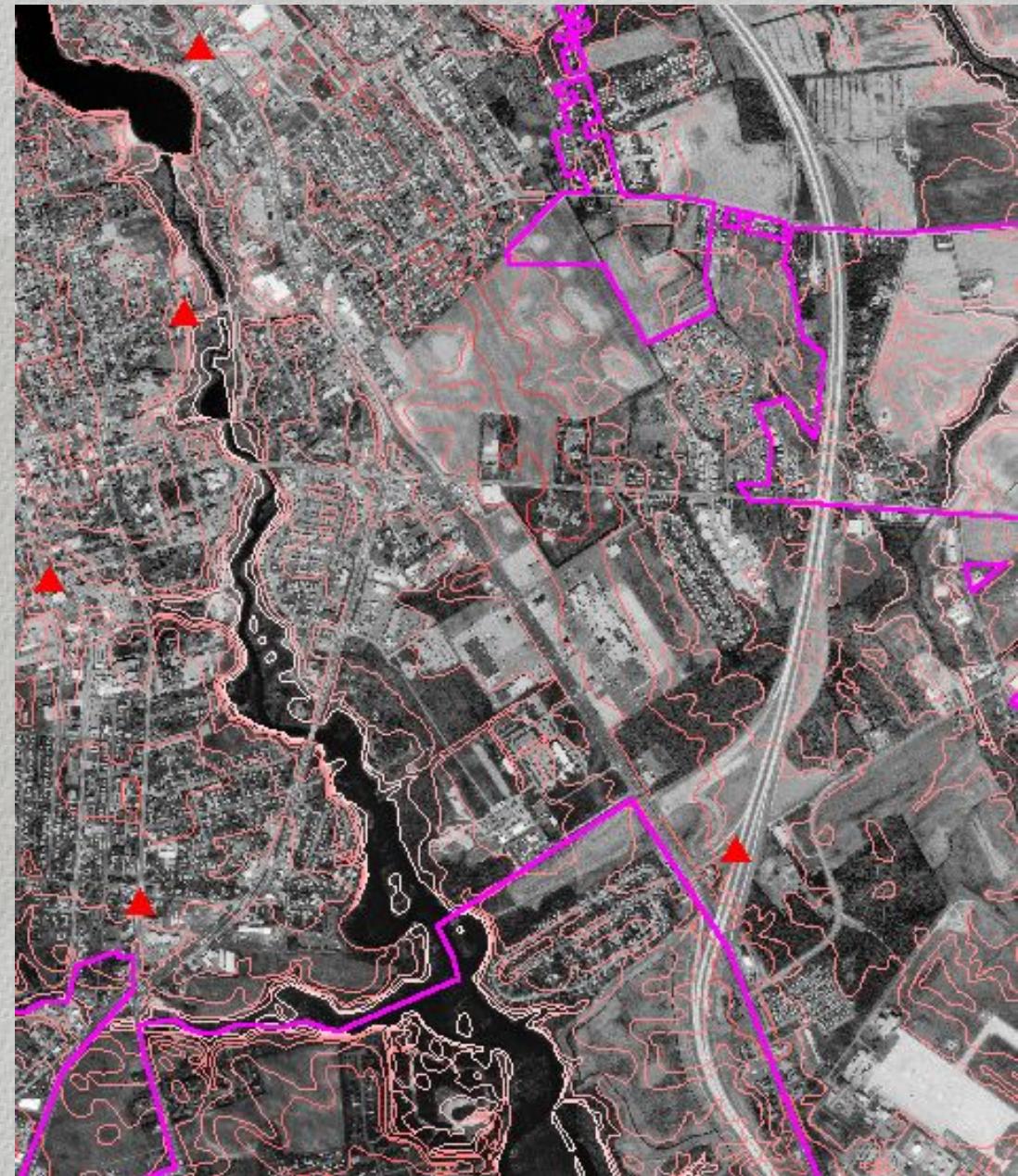
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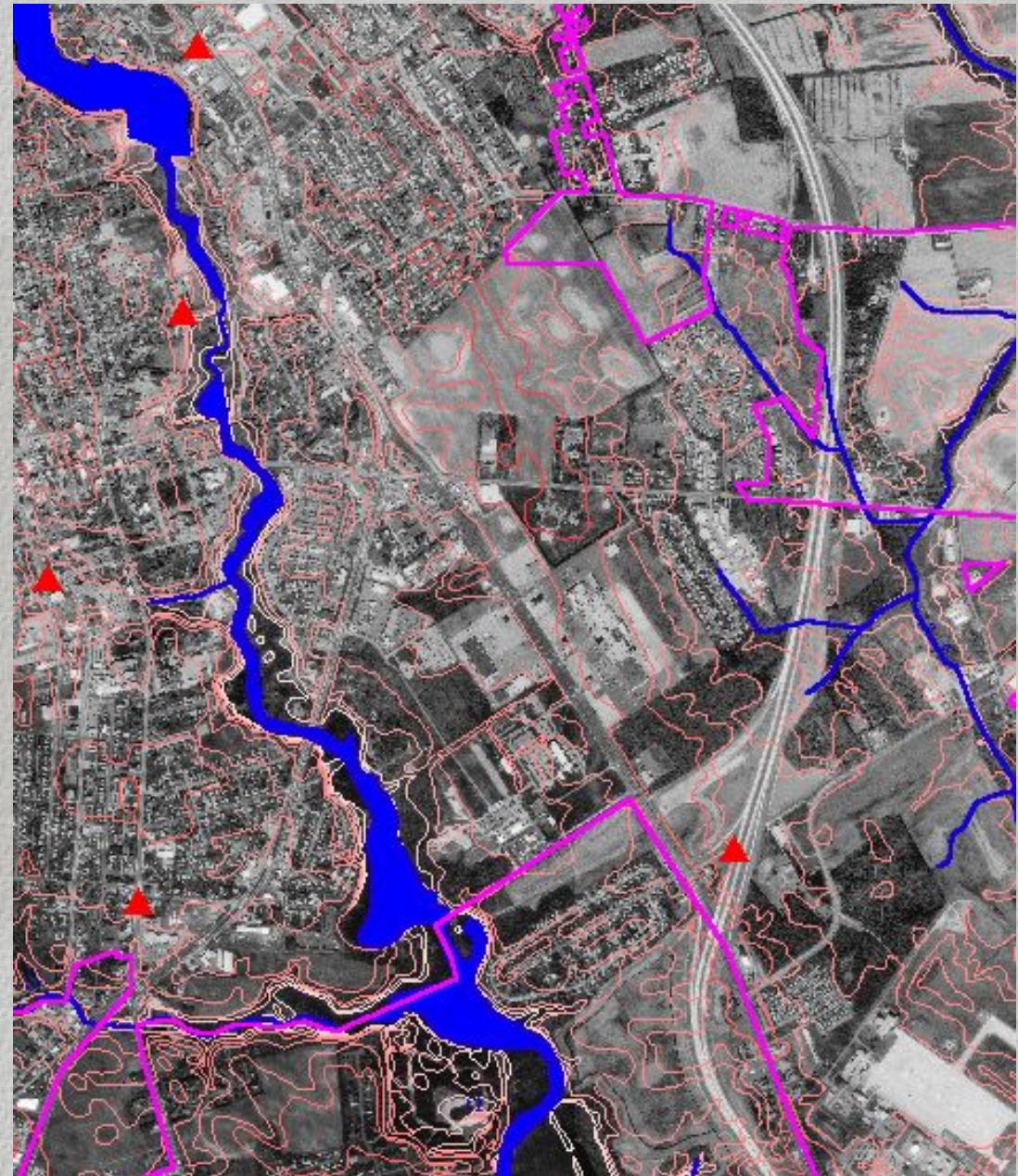
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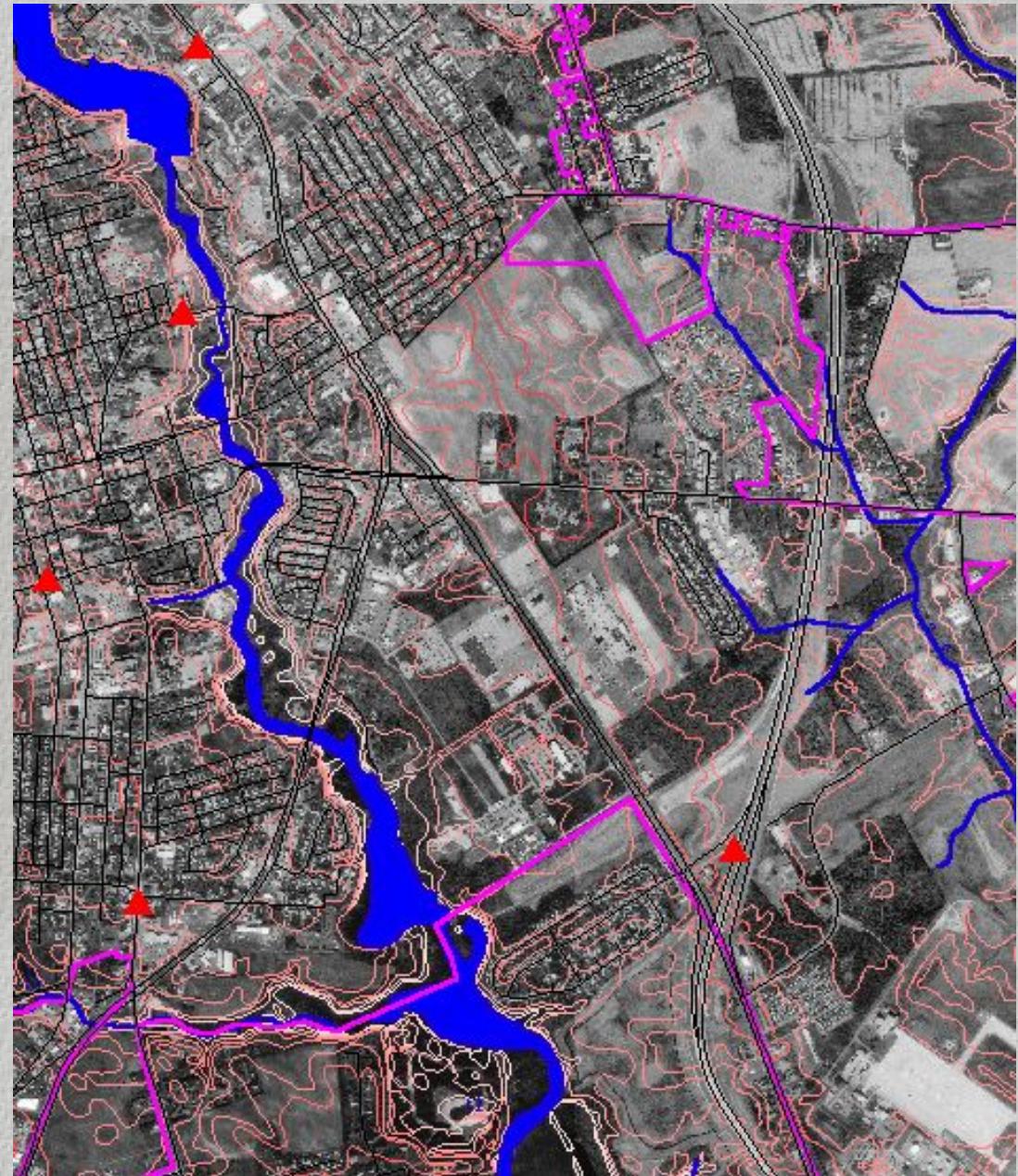
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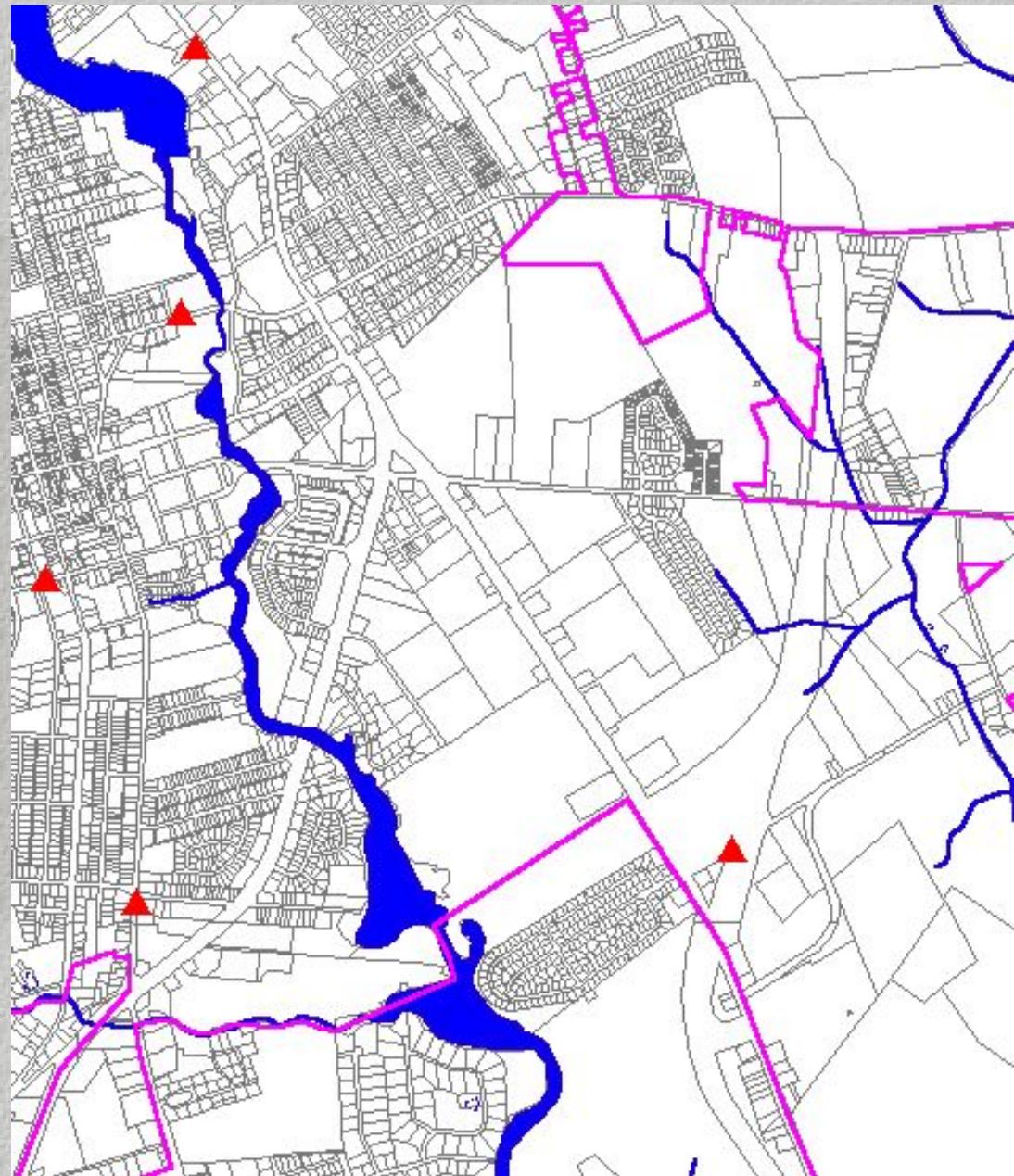
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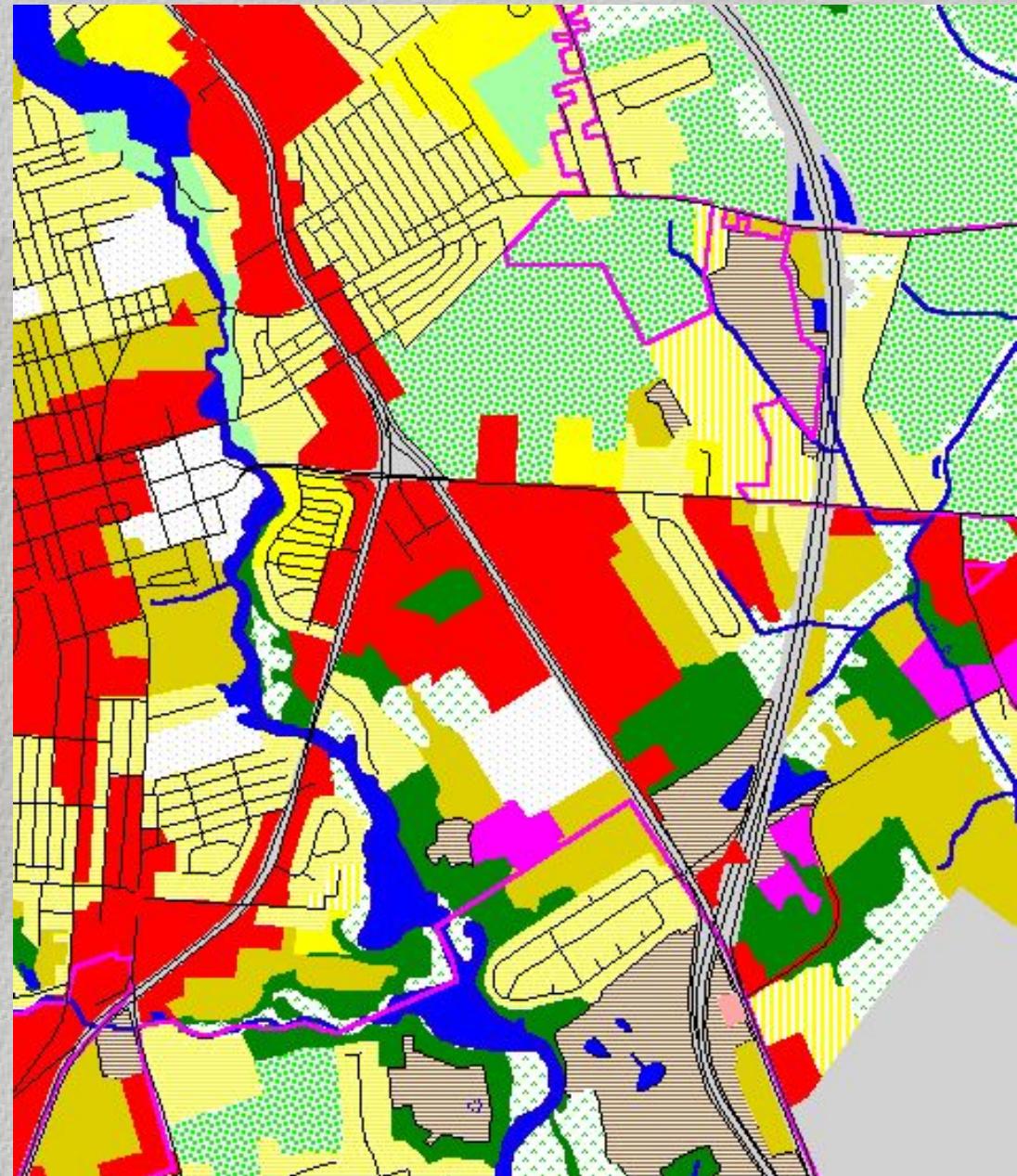
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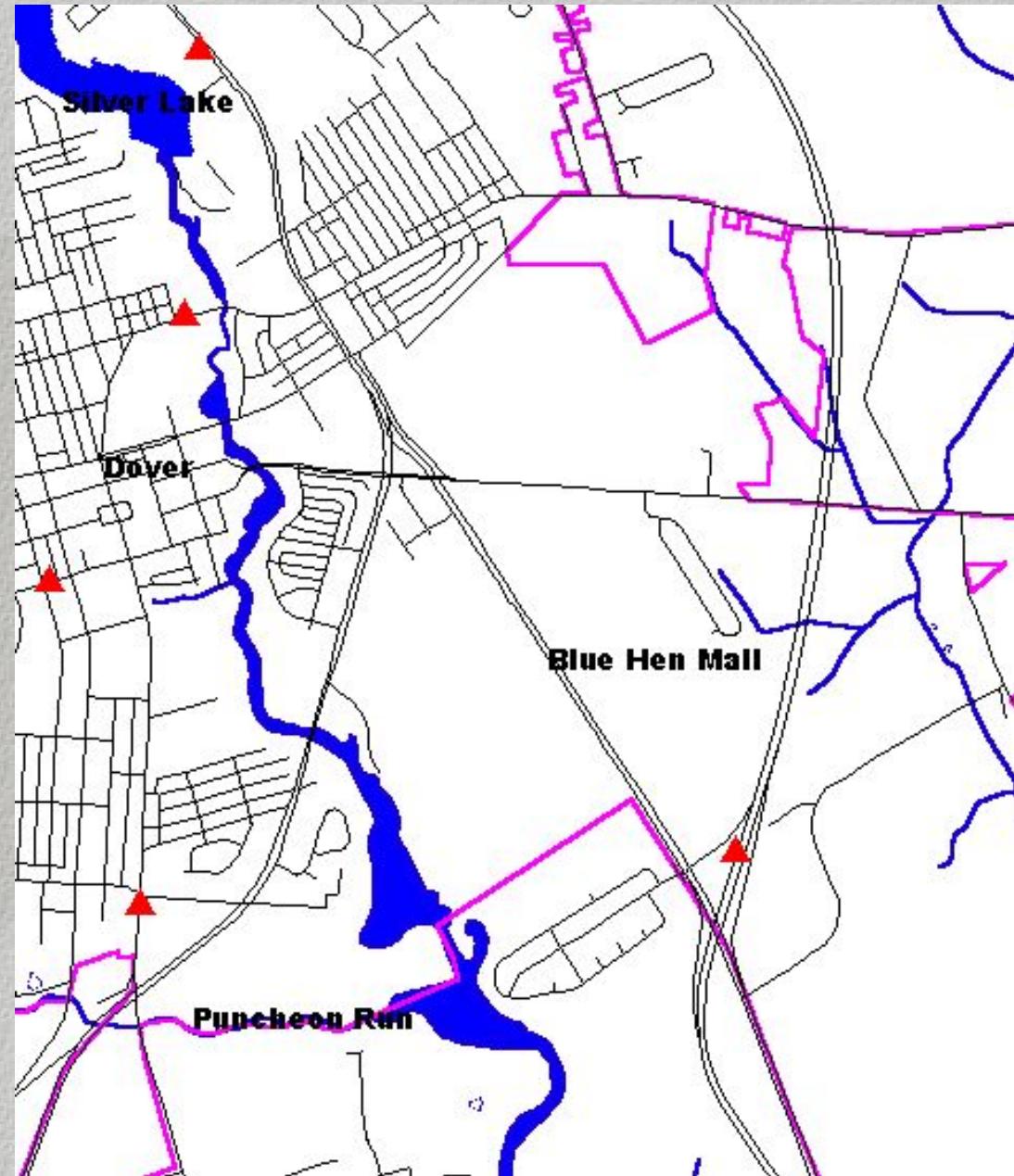
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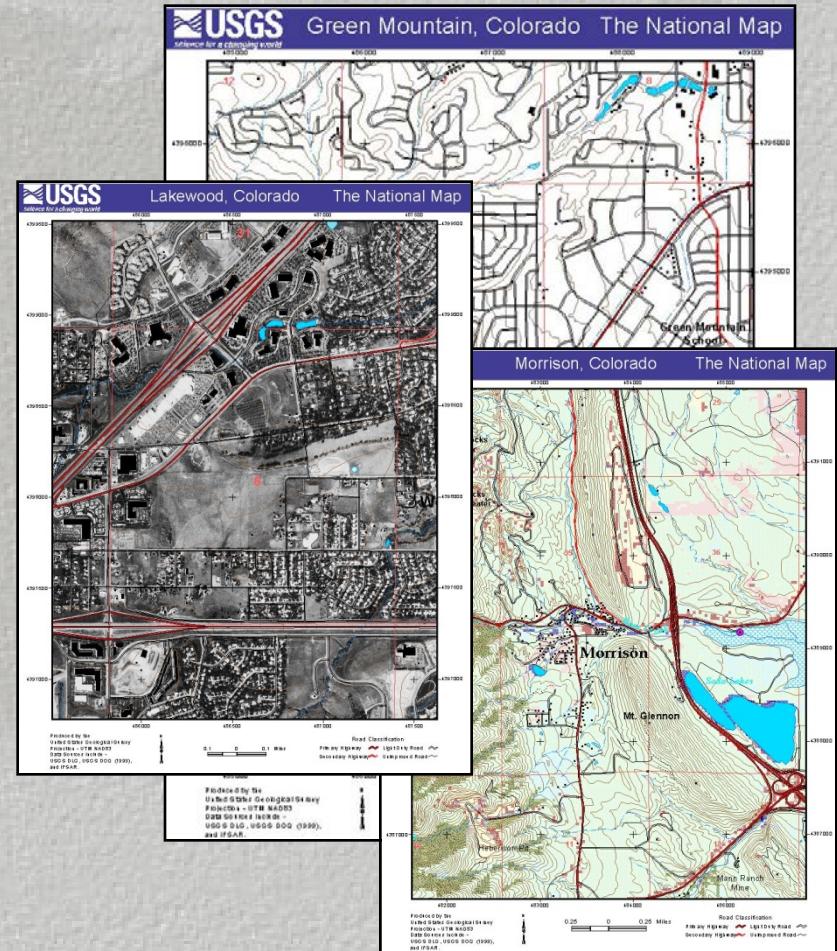


Delaware's Framework

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- Seamless nationwide
- Current
- Partnership based
- Major data themes
- Public Domain
- Online Accessibility
- 9 Pilot Projects

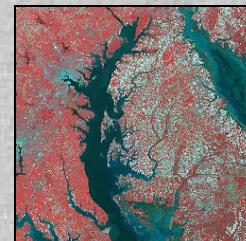


The National Map Pilot Projects



Lake Tahoe
Area

Washington-Idaho

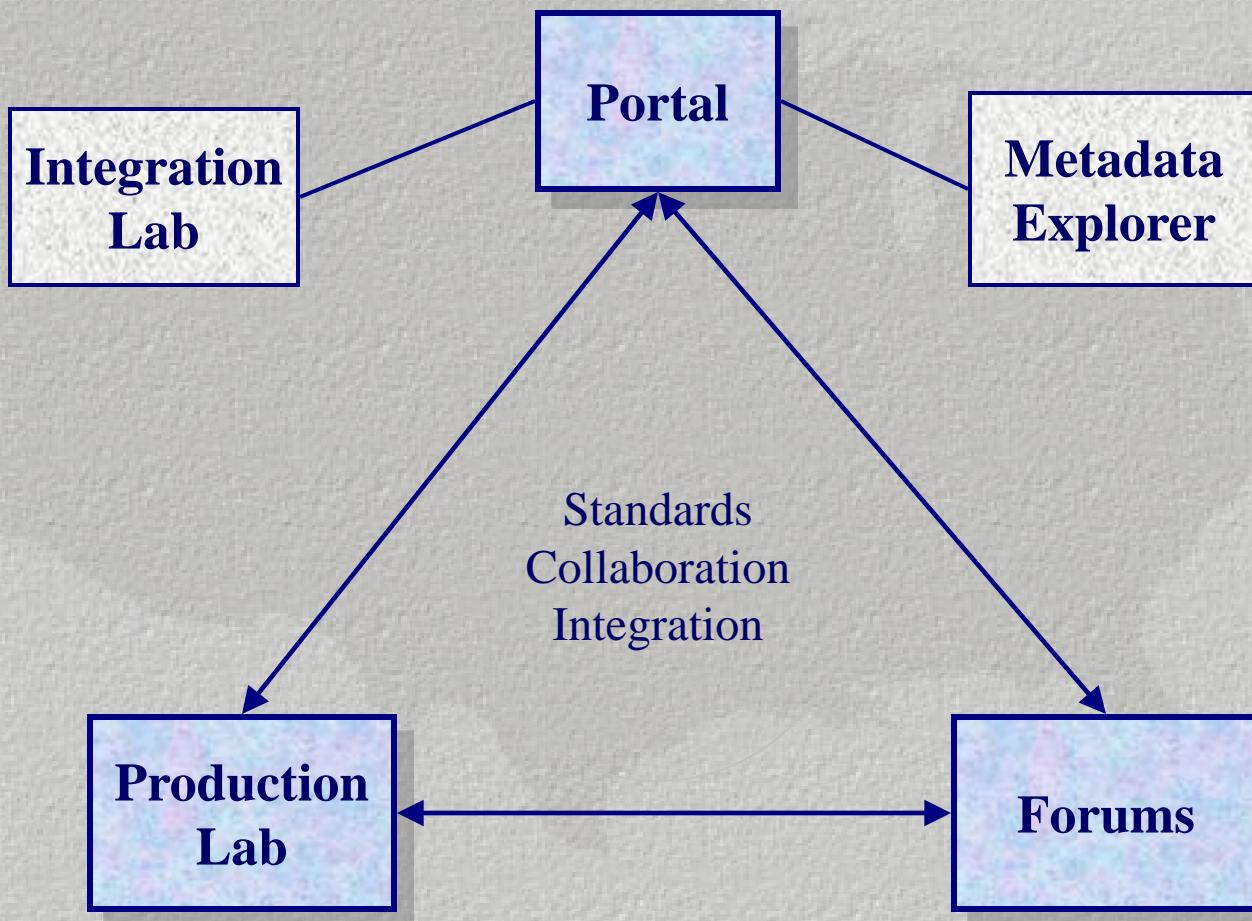


US Landsat

DataMIL - Primary Objectives

- Combine state (Delaware) and federal (USGS) geographic data to create the most up-to-date database possible
- Allow online access for the general public, state and federal agencies in the form of digital GIS data, online images, hard-copy maps, and database attribute information
- Optimize data storage, maintenance, accessibility, and archival procedures

DataMIL Architecture



The Delaware DataMIL - Microsoft Internet Explorer provided by University of Delaware

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Back Forward Stop Home Search Favorites Media Tools Go Address http://datamil.udel.edu/nationalmappilot/

Delaware DataMIL
Data Mapping & Integration Laboratory

A Pilot for *The National Map*

ABOUT DATAMIL MAPPING FORUMS METADATA RESOURCES

Quick Links

Project Summary
Map Lab
Discussion Forums
Metadata Explorer
GIS Data

Welcome to the DataMIL
A Pilot Project for *The National Map*

The Delaware Data Mapping and Integration Laboratory (DataMIL) is an interactive, on-line collaboratory to aid decision-makers at the federal, state, county, and local government levels. Delaware citizens can create maps and download GIS data of any location in Delaware as well as take part in the maintenance of our state's geographic information.

News & Announcements

A Joint Project Of:

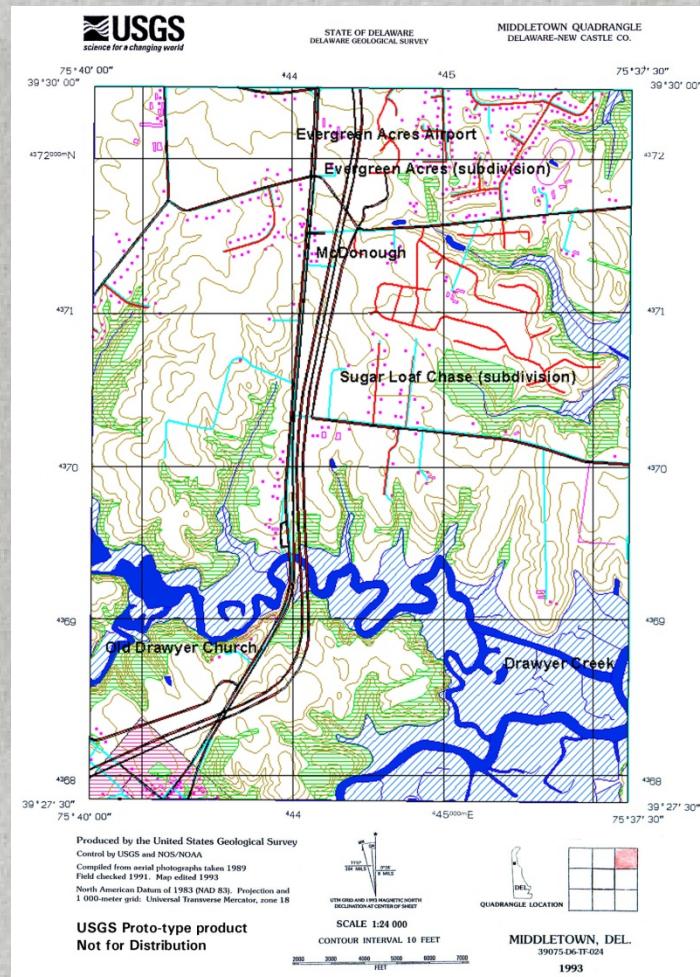
United States Geological Survey
Delaware Geological Survey
University of Delaware
Delaware Geographic Data Committee

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Last Updated: June 28, 2002
DataMIL Project Home -- <http://datamil.udel.edu>

Done Internet

Map Production Lab

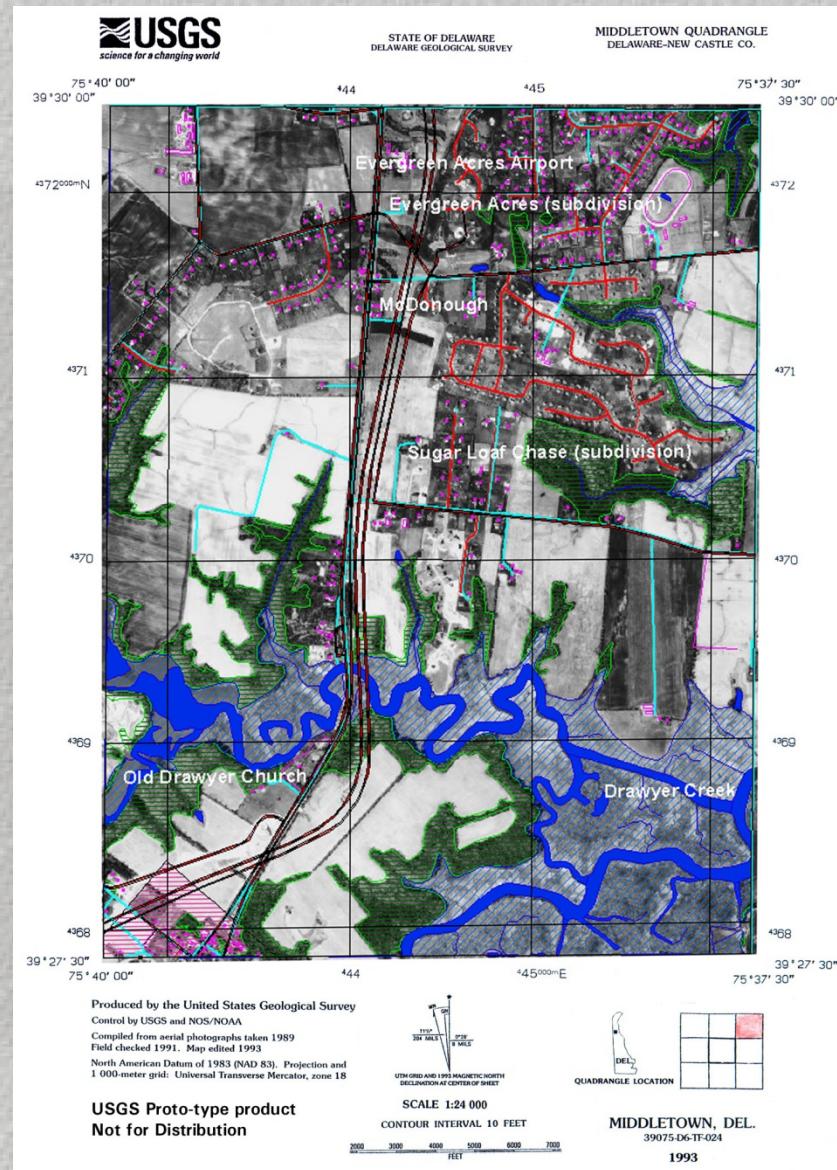
- Delaware Framework
- *The National Map* (USGS DLGs)
- Online Maps
- Production Maps
- GIS data download
- Metadata
- Discussion Forums



Map Lab

Product Generation

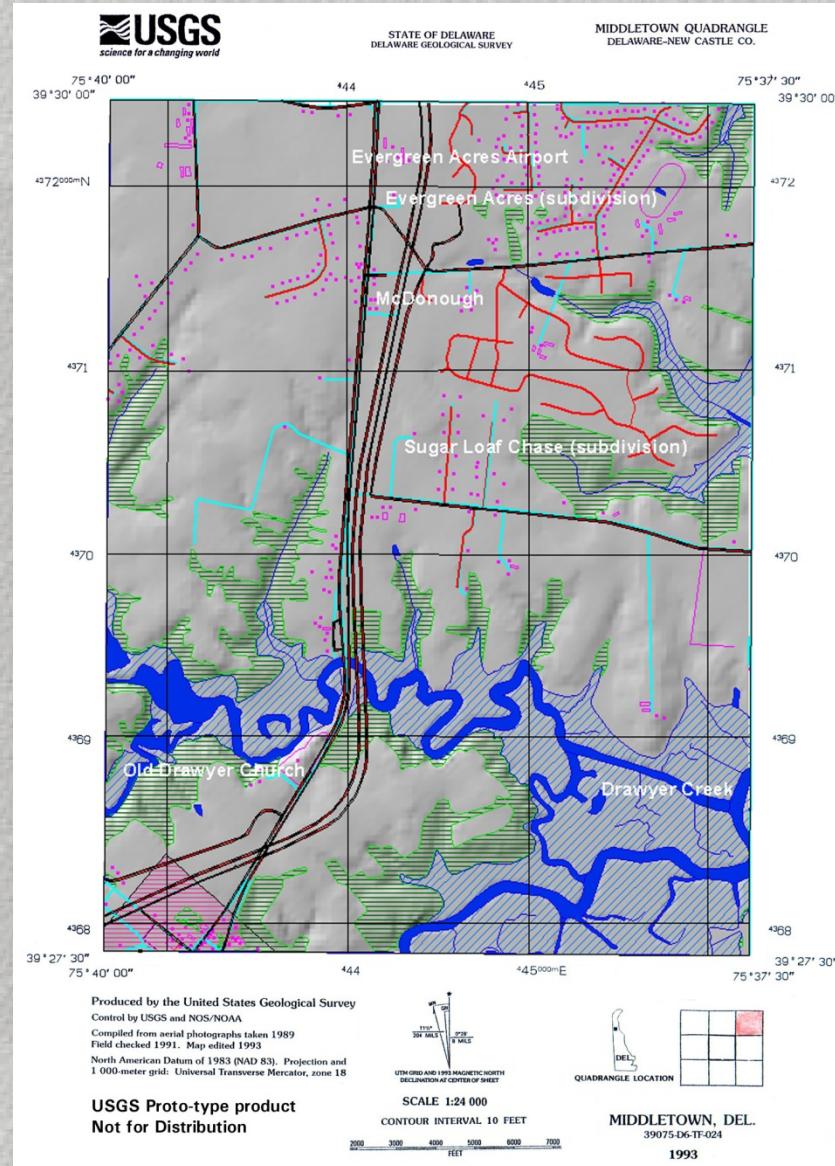
- Imagery
- GNIS
- Transportation



Map Lab

Product Generation

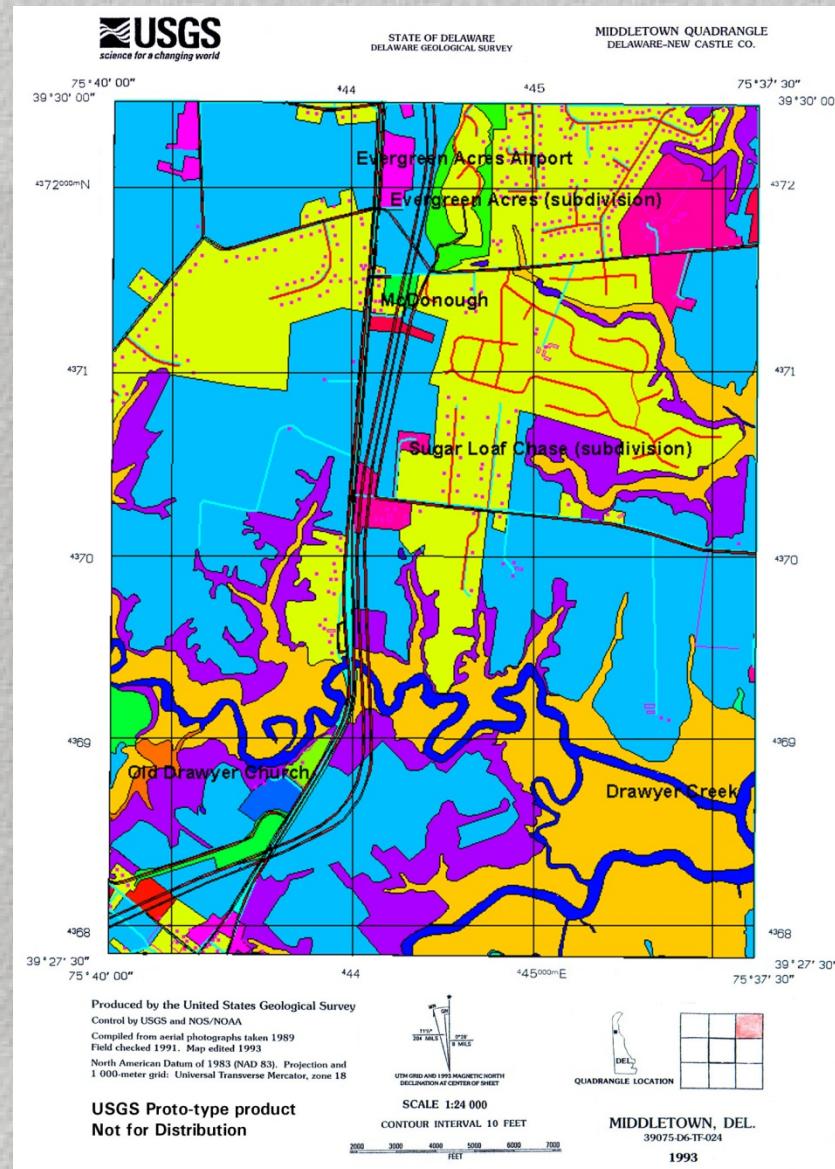
- Hillshade
- Contours
- Hydrography
- Trails



Map Lab

Product Generation

- Cadastral
- Land Use
- Surface Cover



D Delaware DataMIL Map Production Laboratory - Microsoft Internet Explorer

Delaware DataMIL Data Mapping & Integration Laboratory

USGS National Map Pilot Map Production Laboratory

Zoom In Zoom Out Zoom Full Pan Identify Draw Erase

Getting Started

Quick Zoom Bear Area

Zoom to Scale 1: 9904 go

Full State 1:100K
1:64K
1:24K
1:12K

Neighborhood

Download Image

Legend Yes No

Locator Map Size 300x300 go

Extract Data Send Image to Forums

N W E S Locator Map Legend Layers

Boundaries

- Boundary Monuments
- State/County Lines
- Census Blocks
- Census Blockgroups
- Census Tracts
- Census ZCTAs
- USGS Boundaries
- Municipal Boundaries

County Parcels

- New Castle

Water Features

- Hydrography (lines)
- Hydrography (areas)
- DNREC Watersheds

Transportation

- DelDOT Roads
- USGS Roads
- DelDOT Railroads
- USGS Railroads

Elevation

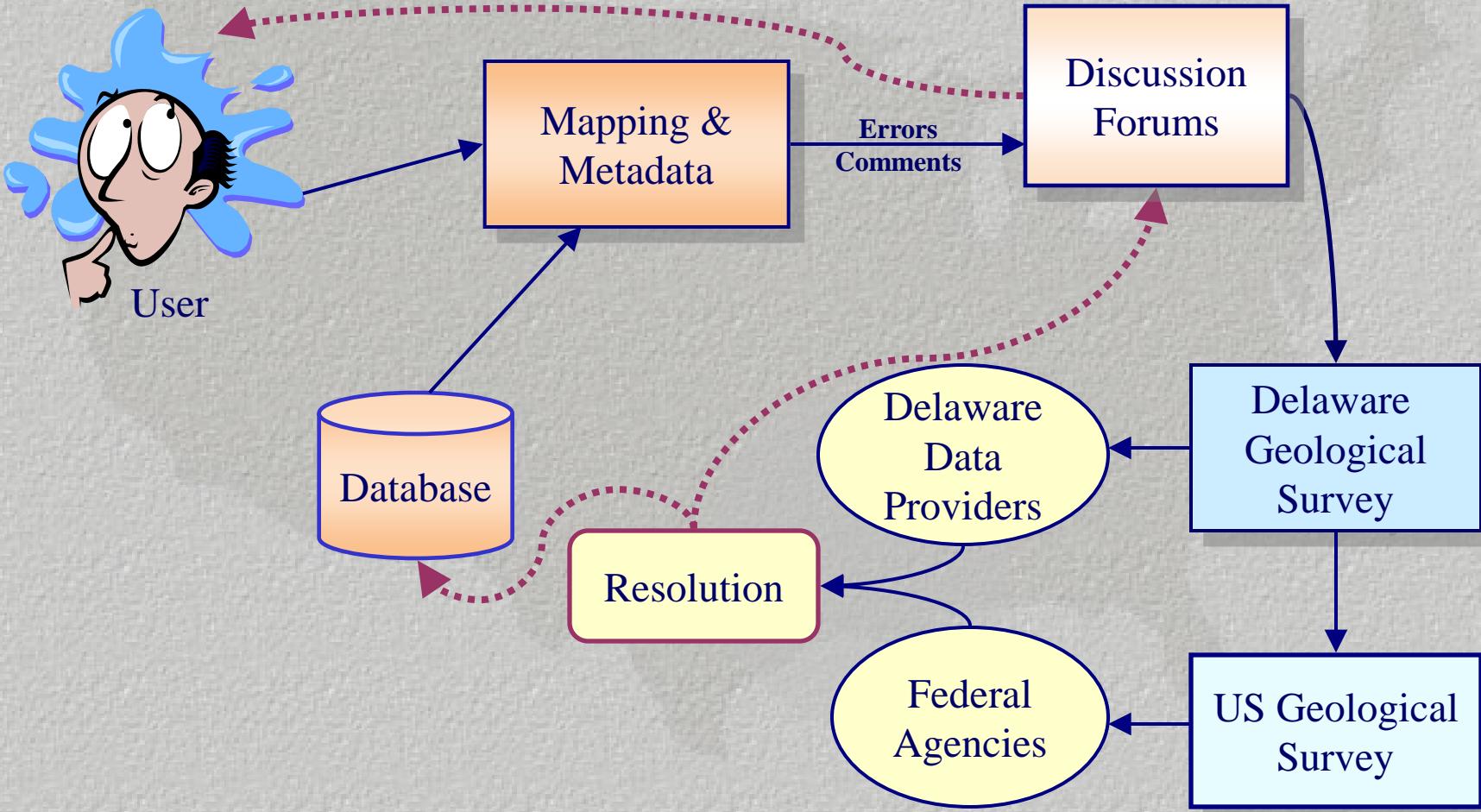
Refresh Map Clear Map

Done Internet

Discussion Forums

- Divided by geographic theme
- Threaded discussion list
 - Content/Keyword, Date searchable
- Online archive of all messages
- Submission through the forum and Map Lab
- Open to all with moderators for each theme
- Feedback

DataMIL Feedback



The Delaware DataMIL - Microsoft Internet Explorer

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Back Search Favorites Media Links Google Search Google.com Windows Media >

Address http://www.datamil.udel.edu/nationalmappilot/home.asp?main=forums_overview&toc=tocforumcenter

ABOUT DATAMIL MAPPING FORUMS METADATA RESOURCES

Forums Discussion Forums

Overview Boundaries Elevation Geographic Names Imagery Miscellaneous Features Surface Cover Transportation Water

The organization's boundaries are clearly defined by the state and county lines. This clarifies the area covered by the survey. We have submitted several suggestions before integrating them into the system.

The geographic names are organized into categories such as boundaries, elevation, and imagery. These features are used to create detailed maps and overlays. The survey team has also identified various water bodies and surface cover types across the state.

The survey team has developed a set of tips and frequently asked questions to help users understand the data and its applications. They have also provided instructions for adding, deleting, or correcting feature information.

Geographic Names (GNIS) Discussion Forum

All Posts | 0 New

Tips and FAQs (13)

Add, Delete or Correct a Feature (27)

- Newark High School 3/19/2002 (3)
- Shields School Name Wrong 4/19/2002 (3)
- Selbyville Middle School 5/20/2002 (3)
Delaware State College (Shannon Bain) 5/20/2002
- Red Man Cemetery, Selbyville 5/29/2002 (2)
The villages of the three Ardens (DataMIL Visitor) 5/29/2002
- Breezewood incorrectly placed over a trailer park 6/6/2002 (2)
- Perkins Run Through Arden 8/8/2002 (2)

Topic: Brookmont farms Now Sparrow Run (1 of 2), Read 22 times
Theme: [Add, Delete or Correct a Feature](#)
From: [Mike Mahaffie](#)
Date: Friday, September 06, 2002 08:12 AM

Per an article in today's New Journal (9/6/02) the Brookmont Farms neighborhood in New Castle County has been renamed Sparrow Run. It is not stated in the news story, but this name change may also affect the Brookmont Farms Park adjacent to the neighborhood.

(Click image to enlarge in separate window.)

Done Expand Internet

Start Windows ... Inbox - Mi... The Delaw... DataMIL ... Microsoft ... Internet 11:37 AM

The Delaware DataMIL - Microsoft Internet Explorer

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Address http://www.datamil.udel.edu/nationalmappilot/home.asp?main=forums_overview&toc=tocforumcenter

ABOUT DATAMIL MAPPING FORUMS METADATA RESOURCES

Forums Discussion Forums

Overview Boundaries Elevation Geographic Names Imagery Miscellaneous Features Surface Cover Transportation Water

DataMIL Discussion Forum - Microsoft Internet Explorer

FORUMS SEARCH REFRESH CHAT PAGE MARK READ MORE HELP LOGOFF

Delaware DataMIL Data Mapping & Integration Laboratory

Geographic Names (GNIS) Discussion Forum

All Posts | 0 New

- [Tips and FAQs \(13\)](#)
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ENTIRE TOPIC POST REPLY REPLY/QUOTE DELETE EDIT MOVE

PREVIOUS TOPIC PREVIOUS ENTRY NEXT ENTRY NEXT TOPIC

Topic: Brookmont farms Now Sparrow Run (2 of 2), Read 15 times
Theme: [Add, Delete or Correct a Feature](#)
From: [Sandy Schenck](#)
Date: Thursday, September 26, 2002 01:18 PM

I have sent this information onto the US Board on Geographic Names for correction. Thank you for your comments.

Sandy Schenck
DataMIL Gatekeeper
Delaware Geological Survey

DataMIL Gatekeeper: Please select a name Assign Task Reply To User

Done Expand Internet

Start Windows ... Inbox - Mi... The Delaw... DataMIL ... Microsoft ... 11:38 AM

Delaware Metadata Explorer

Delaware Metadata Explorer - Microsoft Internet Explorer provided by University of Delaware

delaware metadata explorer

SEARCH **BROWSE**

HELP

1 Type place name & press Find:
 FIND
or draw search area :



2 Choose content type:

Choose content theme:

Optional Keyword (e.g. river):

3 **START SEARCH**
 Search NSDI Clearinghouse

How to search the Metadata Explorer

1 **Specify the location you want to search.**

Either

Type in a place name and press Find. A list of places that match what you typed will appear. Choose the place you want from this list.

Or

Draw a box on the map with the tool to define the area you want to search.

2 **Choose any additional search criteria.**

These choices are all optional.

3 **Press "Start Search"**

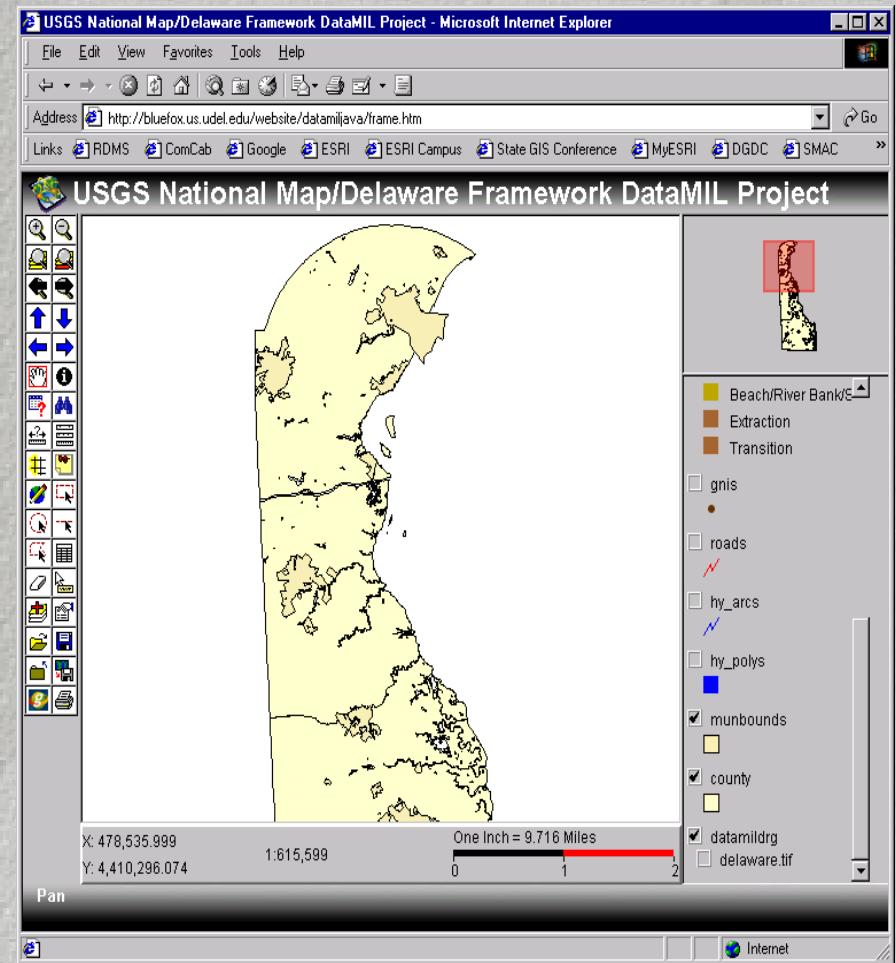
Done 

Delaware Metadata Explorer

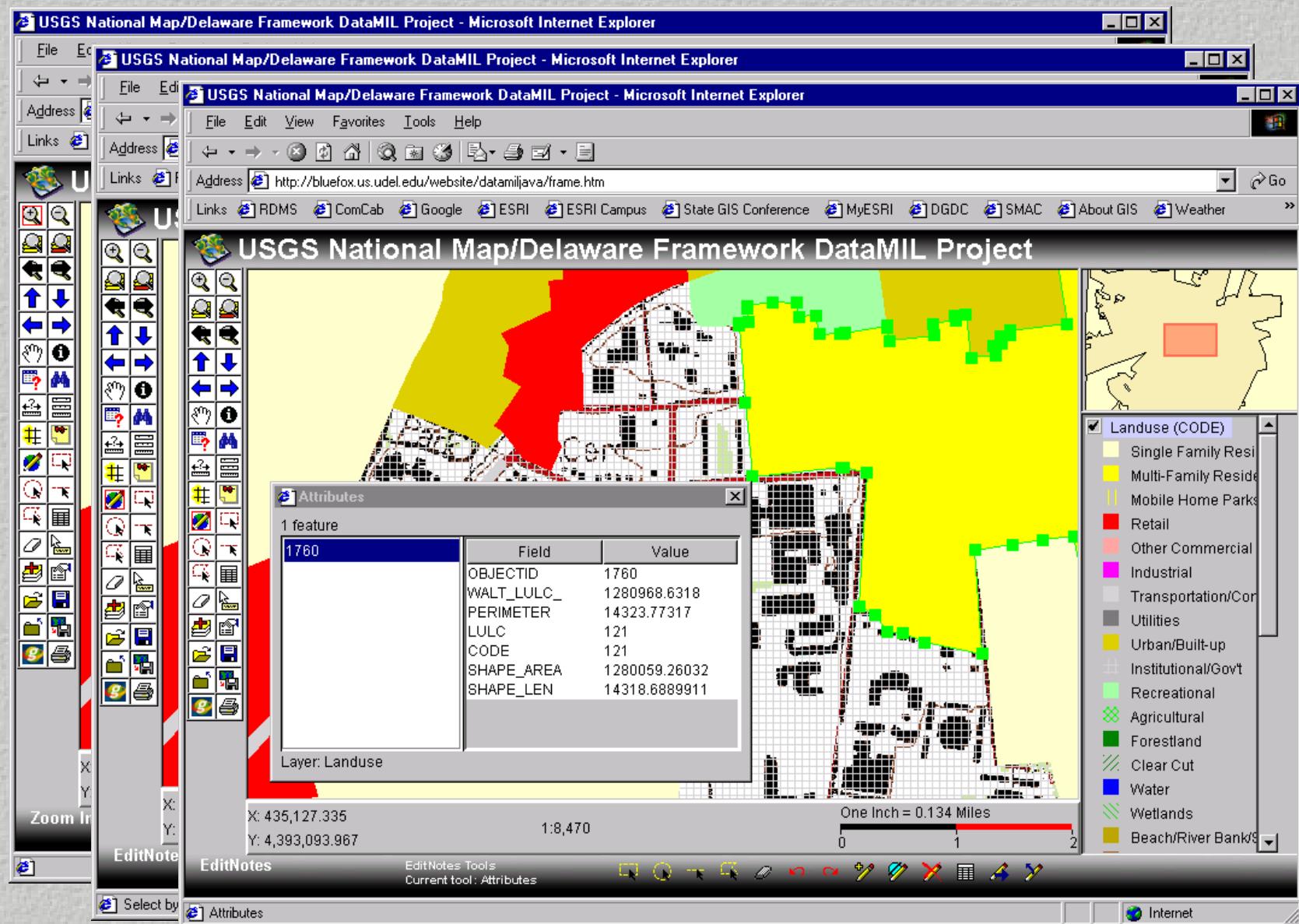
- Delaware NSDI Clearinghouse
- ESRI ArcIMS Metadata Server
- Distributed maintenance
 - Each data providing agency with ArcCatalog gets own password
 - Others use DIME or send RDMS xml file

Data Integration Lab

- Feature Streaming
- User can suggest shape/attribute edits (EditNotes)
- User can modify rendering of features
- User can add graphics (MapNotes)
- Multiple data sources



Feature Editing - EditNotes

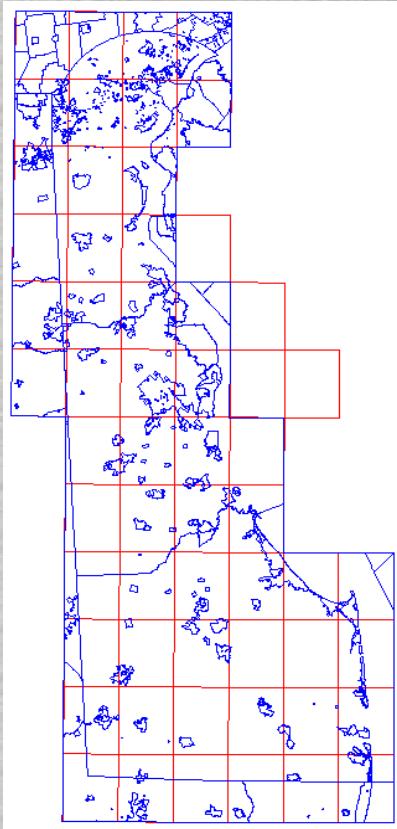


Data Preparation

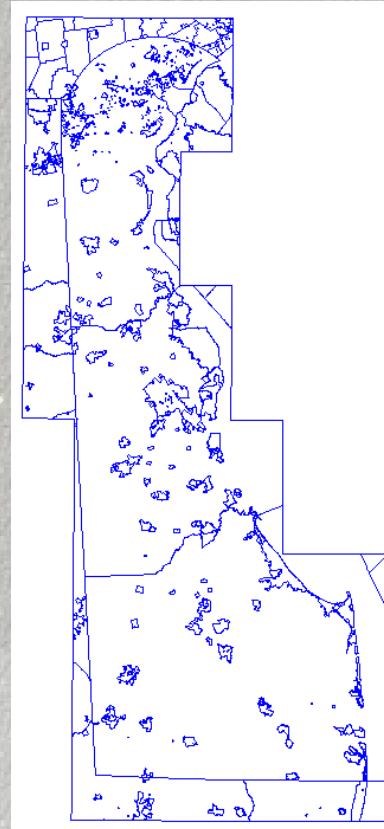
- Delaware Framework
 - Transportation, Orthoimagery, Land Use
 - Municipal Boundaries, etc...
- USGS Digital Line Graphs (DLG)
 - Hypsography, Hydrography, GNIS
 - Surface Cover, Transportation, etc...
- USGS Digital Raster Graphic (DRG)
- National Elevation Dataset
- Landsat

USGS Data Preparation (spatials)

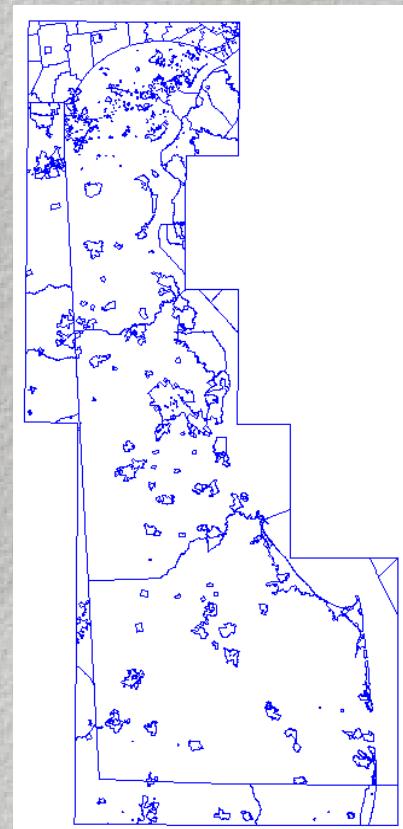
Panel DLGs



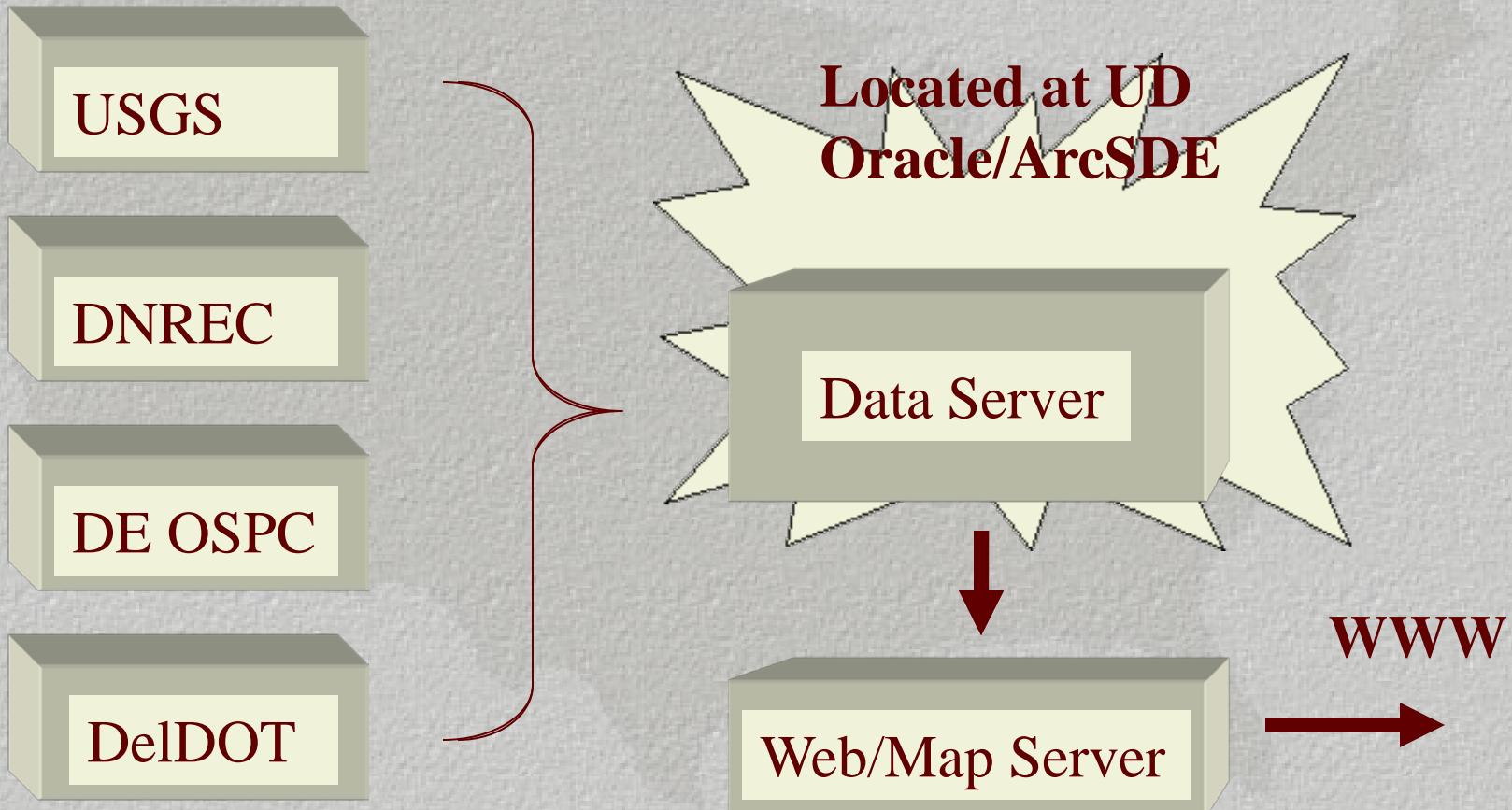
Dissolve Neat lines



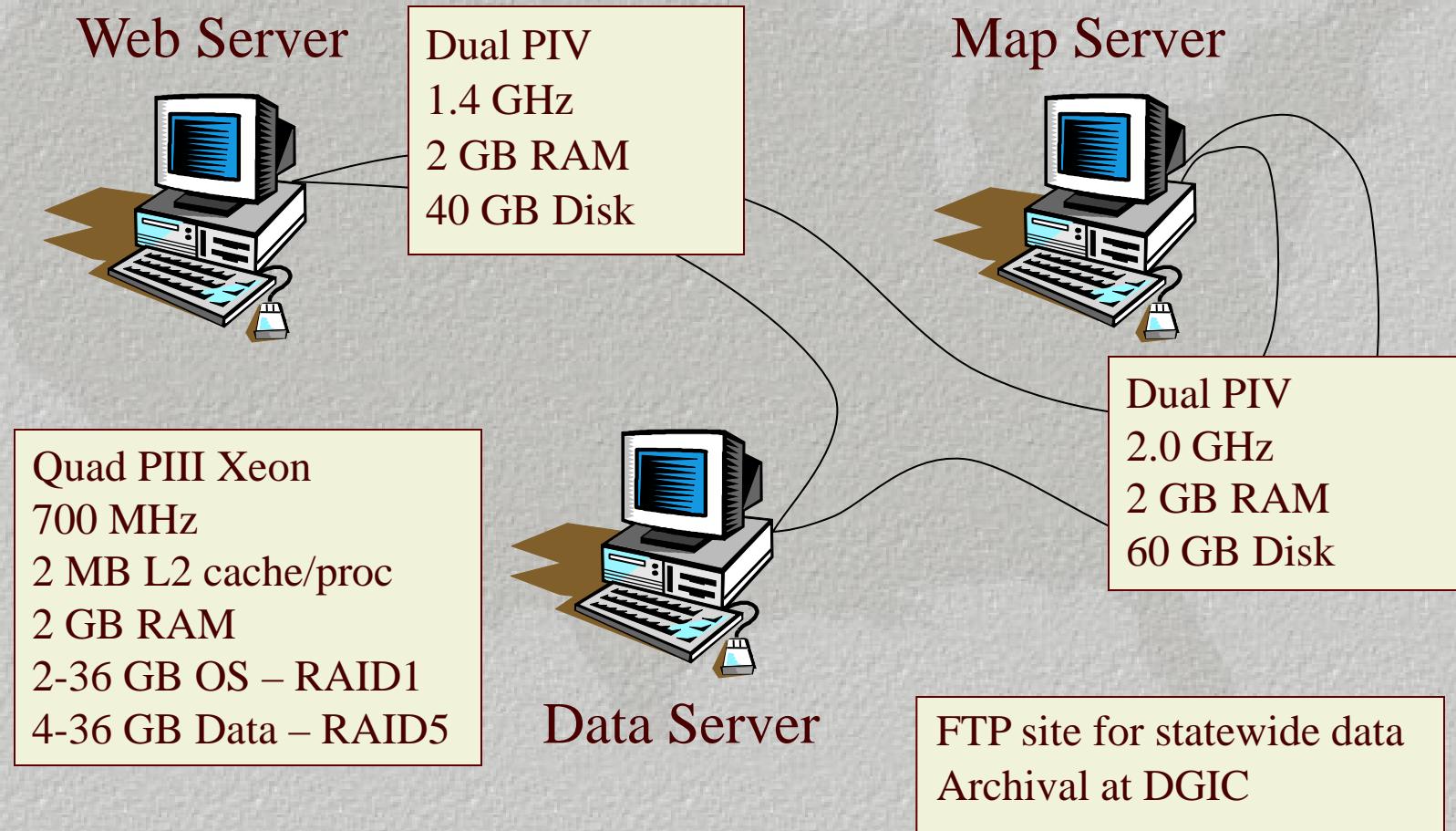
Edit Data



DataMIL – Data Sources



Infrastructure - Hardware



DataMIL Web Site

<http://datamil.udel.edu/>