



The National Map - Delaware Pilot Project

The Nation Needs *The National Map*

Governments depend on a common set of geographic base information as a tool for economic and community development, land and natural resource management, and health and safety services. Emergency management and defense operations rely on this information. Private industry, nongovernmental organizations, and individual citizens use the same geographic data. Geographic information underpins an increasingly larger part of the Nation's economy.

Available geographic data often have the following problems:

They do not align with each other because layers are frequently created or revised separately,

They do not match across administrative boundaries because each producing organization uses different methods and standards, and

They are not up to date because of the complexity and cost of revision.

The U.S. Geological Survey (USGS) is developing *The National Map* to be a seamless, continuously maintained, and nationally consistent set of online, public domain, geographic base information to address these issues. *The National Map* will serve as a foundation for integrating, sharing, and using other data easily and consistently.

In collaboration with other government agencies, the private sector, academia, and volunteer groups, the USGS will coordinate, integrate, and, where needed, produce and maintain base geographic data.

The National Map will include digital orthorectified imagery; elevation data; vector data for hydrography, transpor-

tation, boundary, and structure features; geographic names; and land cover information. The data will be the source of revised paper topographic maps.

Many technical and institutional issues must be resolved as *The National Map* is implemented. To begin the refinement of this new paradigm, pilot projects are being designed to identify and investigate these issues. The pilots are the foundation upon which future partnerships for data sharing and maintenance will be built.

The DataMIL Pilot Project

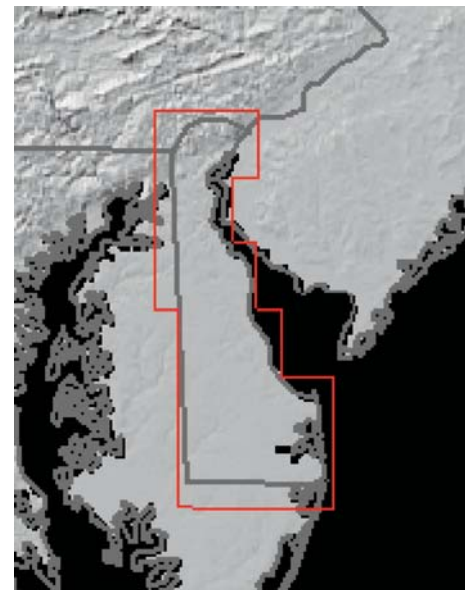
Many Delaware State agencies produce, revise, and use a variety of geospatial data to accomplish their mission of serving the public. These same agencies have been working closely with the USGS to establish a Web-based mapping system using large-scale, seamless geospatial data. When completed, this system will enable users to combine data from the USGS, several Delaware State agencies, and the National Geodetic Survey. The Delaware Geological Survey, the Delaware Office of State Planning Coordination, and the University of Delaware, as well as the Delaware Geographic Data Committee, the Delaware State Mapping Advisory Committee, and the Delaware I-Team, are playing central roles in planning, developing, and implementing this pilot project for *The National Map* with the USGS. The result of this cooperative effort, known as the *USGS National Map/Delaware Framework Data Mapping and Integration Laboratory (DataMIL) Project*, will provide a mechanism for agencies to easily share their data holdings.

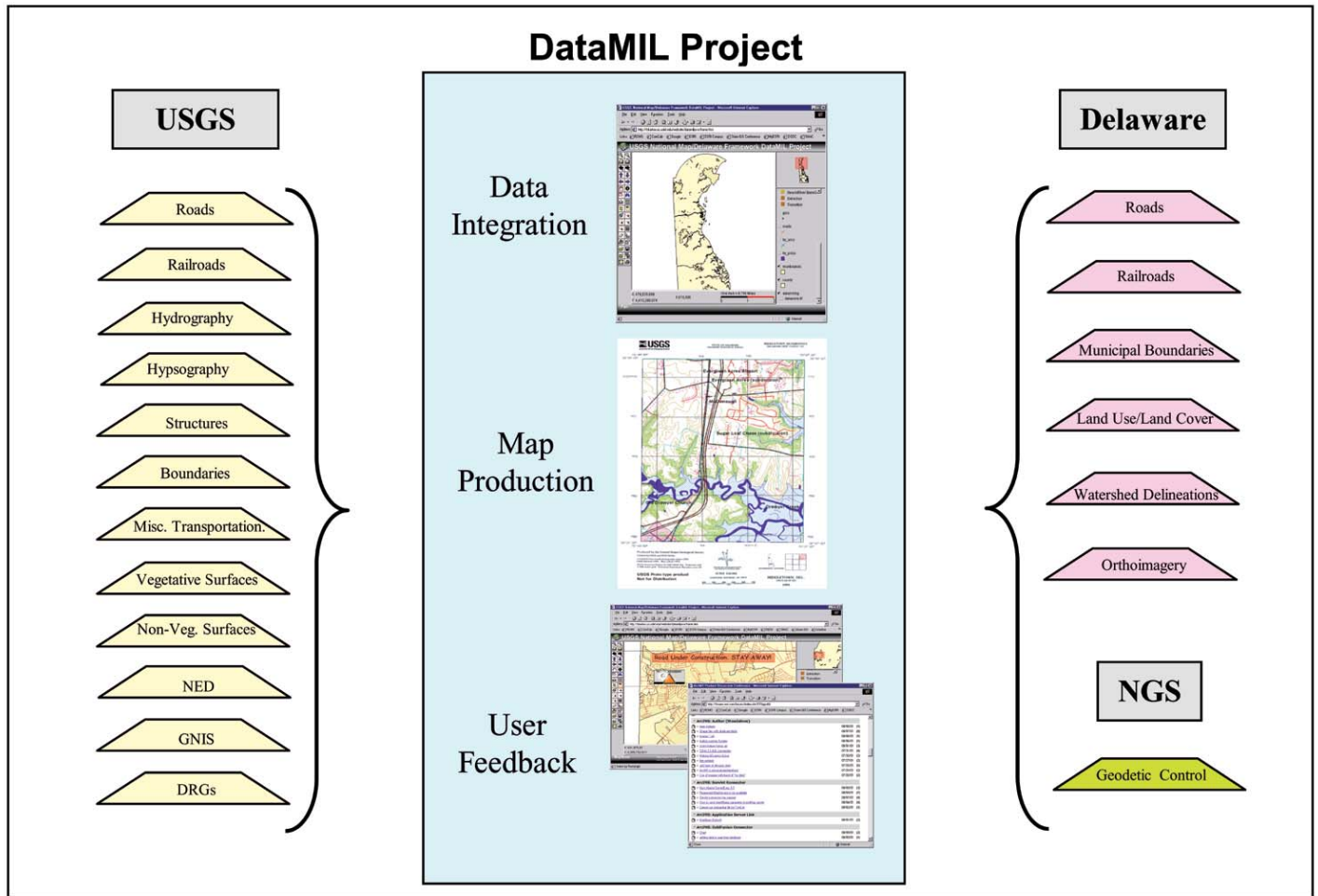
This statewide project covers all of Delaware's approximately 1,982 square miles. Delaware offers a diverse and varied geographic landscape; urban, rural, forested, and coastal environments

are well represented within the State. There are several near-term goals for this project:

- Deploy an Internet mapping system that offers the best available high-resolution State (Delaware) and Federal (USGS) geospatial data to aid in identifying and resolving data integration issues between source providers.
- Provide map generation capabilities so users can produce customized cartographic products online.
- Identify additional requirements for standards development, data content, and product specifications through user feedback.

The "laboratory" environment of the DataMIL project will enable users to superimpose data layers from disparate sources in an effort to see how these data integrate. Map generation functionality will be incorporated into the system so users will be able to create a variety of cartographic products. An important





aspect of this project is obtaining feedback from users on issues pertaining to the data. Through the use of an online discussion forum and various Web-based feedback mechanisms, users will be able to comment on issues ranging from individual feature content and currentness to data integration concerns.

Many different data layers will be provided through this project. All have originated from sources at 1:24,000 scale or larger. The USGS is providing seamless datasets for nine digital line graph categories, as well as data from the National Elevation Dataset, Geographic Names Information System, and Digital Raster Graphics. Data provided by Delaware will originate from the Delaware Department of Transportation, Delaware Department of Natural Resources and Environmental Control, Delaware Office of State Planning Coordination, and University of Delaware. Geodetic data from the

National Geodetic Survey's High Accuracy Reference Network will also be provided through this project.

The DataMIL project will serve as a strong beginning in defining and implementing *The National Map*. As this project matures, other issues regarding data maintenance responsibilities, expansion of partnership opportunities, and data integration requirements will be explored.

More Information About The Delaware Pilot Project

Robert Rinehart
 U.S. Geological Survey
 1400 Independence Road, MS 510
 Rolla, Missouri 65401
 Phone: 573-308-3663
 Fax: 573-308-3652
 Email: rrinehart@usgs.gov

More Information About *The National Map*

We welcome your comments on *The National Map* mission and strategies. You can view and download the full report at nationalmap.usgs.gov. Please share your thoughts about the vision with the USGS by e-mail at nationalmap@usgs.gov or by mail to USGS-National Map, MS 511 National Center, 12201 Sunrise Valley Drive, Reston, VA 20192.