

BIOGRAPHICAL INFORMATION

Vicki Lukas
Chief, Northwest Geographic Science Team
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Specific Responsibilities

Joined Northwest Geographic Science Team in 2003. Oversee development of *The National Map* and USGS geographic science in the Pacific Northwest (Washington, Oregon, Idaho). Manage a distributed team with staff in Seattle, Spokane, Boise and Portland. Lead the Partnership Design Team for *The National Map*.

Past Experience

Prior to joining the Northwest Geographic Science Team, served as a mapping liaison for approximately six years, first for Hawaii and The Pacific Basin, then for California. As the California Mapping Liaison, coordinated with state, federal and local agencies on geographic information issues related to USGS map data and *The National Map*. Participated in the formation of the State Geographic Information System Council. In 2002, lead the Lake Tahoe Area *National Map* pilot project and worked with the State of California on an agreement designed to initiate a statewide implementation plan for California's part of *The National Map*. Lead *The National Map* Implementation Partnership Team.

Previously supervised the USGS Geologic Division's Spatial Data and Cartography Section, and before that held positions as digital map specialist and thematic map cartographer.

Educational Information

Received a B.S. in Geography with a Cartography focus from the University of Wisconsin, Madison; followed by graduate studies at the University of California, Santa Barbara Geography Department.

Professional Memberships

National States Geographic Information Council
Past board member of the California Geographic Information Association
Past member of the Hawaii Geographic Information Coordination Council
Past board member and newsletter editor of American Society for Photogrammetry and Remote Sensing, Northern California Region

**A VISION FOR CONSISTENT, SEAMLESS GEOGRAPHIC INFORMATION
FOR THE NATION:
THE NATIONAL MAP PARTNERSHIPS – LESSONS LEARNED AND FUTURE
DIRECTIONS**

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ABSTRACT

The vision: Geographic information is a nationally consistent, seamless, and integrated infrastructure available to all levels of users for their own decisionmaking and applications.

The reality: Today's affordable technology has led to the evolution of a large and varied community of data producers. One benefit has been the production of a greater range of geographic data than ever before. The downside is that datasets are still difficult to effectively use together because they commonly are distributed in different formats, do not align with each other or across jurisdictions, or are not easily accessible.

The goal of *The National Map* program is to partner with local, State, Federal and private organizations to integrate the best available data sources into a consistent, seamless, up-to-date map for the nation that is publicly available online. The program was initiated in 2002 through eight pilot projects and was expanded in 2003 to several key urban areas to address the need for critical infrastructure data for homeland-security preparedness and response. This session will provide an overview of *The National Map's* status and focus on partnership lessons learned and future directions.

STATUS OF *THE NATIONAL MAP*

To initiate *The National Map* program in 2002, the U.S. Geological Survey (USGS) conducted eight pilot projects in locations distributed across the country. The purpose of these pilot projects was to test the vision and program concepts on a manageable scale to discover where the challenges and opportunities lie for implementation nationally. Pilot project areas included a wide range of partnership and data-development scenarios and ranged in area from 225 to 6,440 square miles.

International: The Texas pilot project straddled the United States-Mexican border, including a town in Mexico.

Multi-State and cross-jurisdictional: Two pilot projects included significant parts of two States: the Washington-Idaho pilot project, which focused on two counties in each State; and the Lake Tahoe Area pilot project, which included parts of eight counties in California and Nevada.

Statewide: The Delaware pilot project addressed statewide datasets.

Partners from all levels of government and across both public and private sectors were engaged in *The National Map* pilot projects and early implementations. A list of partner types for seven of these pilot projects is as follows:

Partner types	
County government	9
State government	9
City government	3
Federal Government	3
Academia	2
Regional government	1
Tribal government	1
<u>Private company</u>	<u>1</u>
Total partners	29

In fiscal year 2003, additional implementations of *The National Map* were initiated in several of the Nation's urban areas to support homeland-security readiness. The USGS has been working with local and state partners to acquire and integrate datasets for *The National Map* and for use by the homeland-security community. High-resolution orthoimagery that was collected in many urban areas has proved to be widely useful to the user community. Pilot projects to develop additional data layers for *The National Map* are ongoing in several urban areas, including Seattle-Tacoma. Areas in the United States where *The National Map* includes data at a scale of 1:24,000 or higher are shown in figure 1.

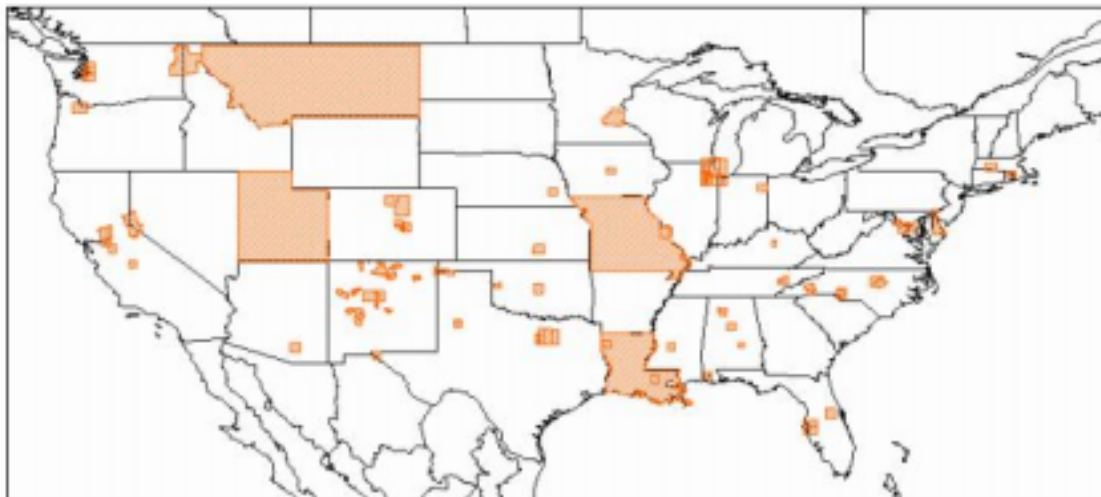


Figure 1. Areas in the United States where data were collected for The National Map at a scale of 1:24,000 or higher, excluding nationally available digital orthophotos, digital raster graphics (scanned topographic maps), and shaded-relief National Elevation Dataset images.

PARTNERSHIP LESSONS LEARNED

To consistently document and better understand what they have learned from the pilot projects and early implementations, the USGS teams reported on many aspects of their experiences, using a standardized template. The results are currently being compiled and analyzed for commonalities and trends, as well as differences between the pilot projects. The pilot-project teams made various observations on what worked and what didn't, and provided numerous recommendations about how the USGS coordinates and collaborates with partners; some of the study's preliminary recommendations are as follows:

- The pilot-project teams that directly engaged local governments reported on the large effort required to work with many small entities and the need for a more consolidated approach through the State-coordination groups. Clearly, the USGS does not have the resources to extrapolate the level of effort applied to the pilot-projects to a more widespread, national implementation. As a Federal Agency, the USGS must strongly promote State-coordination efforts and encourage local participation in them. Given its position in the hierarchy of government, the State is the inherent facilitator between Federal and local agencies. The USGS needs to engage more fully with the states to establish and maintain Statewide framework data and distribution mechanisms that feed into *The National Map*. State coordination and local participation are keys to success of effective development of *The National Map*.
- The USGS should go beyond working with partners only to obtain datasets to engaging them more fully into all aspects of *The National Map* program, including design, implementation, and application.
- The USGS must seriously consider partner requirements in developing *The National Map* to ensure its relevance. Many of the pilot-project reports discussed the need for greater flexibility and creativity in collaborating with partners. *The National Map* continue to evolve with technology and user needs, and the planning and maintenance process should also be flexible and responsive.
- All the pilot-project teams reported that face-to-face meetings are a foundation for establishing relationships with *The National Map* partners, confirming the need for a more broadly distributed USGS presence. The USGS must continue to emphasize the creation of distributed teams for working with the local communities.

- The USGS should study the modeling of fund transfer to partners after the Federal Geographic Data Committee (FGDC) Cooperative Agreements Program (CAP).
- Many of the pilot-project teams identified pressure from partners to formalize content and standards/specifications and to coordinate with other Federal standards such as Geospatial One-Stop. Many of the pilot-project reports also called for greater partner involvement or influence in setting standards and specifications.
- The USGS must improve its recognition of the important role of partners and their contributions to *The National Map*.

FUTURE DIRECTIONS

To address some of the above-mentioned recommendations and to further develop *The National Map*, efforts are being made to advance coordination both among Federal agencies and with State and local partners.

Federal Coordination

In December 2003, USGS *National Map* leaders met with representatives from Geospatial One-Stop and the FGDC to clarify and define the roles of each group and to plan for aligning their efforts. So far, the three programs have agreed to the following directions:

- The FGDC will renew its leadership role in developing standards that will be applicable to both *The National Map* and Geospatial One-Stop.
- Both *The National Map* and Geospatial One-Stop will be developed so that users will be able to seamlessly move between them.
- Rather than working with each Federal program separately, content providers will be able to register their data or Web mapping services once for all three programs.
- *The National Map* will focus on the eight base data layers and other USGS datasets and applications.

Coordination with State and Local Partners

The National States Geographic Information Council (NSGIC), the National Association of Counties (NACo), and the USGS are formulating a proposal to create a joint workgroup to address partnership issues and identify critical factors and successful models for implementing and maintaining the community's *National Map*. Proposed objectives include the following:

- Establish a NSGIC-NACO-USGS workgroup to define the fundamental partnership structure needed to implement a sustainable *National Map*.
- Develop a common understanding of *The National Map* among State and local partners and demonstrate its relevance across all levels of government.
- Develop a best-practices model that identifies State and local requirements, expectations and roles for the USGS and its partners, mechanisms for better engaging local agencies, and other characteristics.
- Develop, initiate, and manage a systematic process for project teams in each State to produce a report on the opportunities, challenges, and strategies for developing *The National Map*.
- Establish a procedure for local, State, Federal, and private-sector stakeholders to actively collaborate on a regular basis with the USGS in matters of national policy and guidance in support of *The National Map*.