HOME CHAPTERS LOGIN

6. Federal Geographic Data Committee



Even before the USGS completed its nationwide 7.5-minute quadrangle series, the U.S. federal government had begun to rethink and reorganize its national mapping program. In 1990, the U.S. Office of Management and Budget issued Circular A-16, which established the Federal Geographic Data Committee (FGDC) as the interagency coordinating body responsible for facilitating cooperation among federal agencies whose missions include producing and using geospatial data. FGDC is chaired by the Department of Interior, and is administered by USGS.

In 1994, President Bill Clinton's Executive Order 12906 charged the FGDC with coordinating the efforts of government agencies and private sector firms leading to a **National Spatial Data Infrastructure (NSDI)**. The Order defined NSDI as "the technology, policies, standards and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data" (White House, 1994). It called upon FGDC to establish a National Geospatial Data Clearinghouse, ordered federal agencies to make their geospatial data products available to the public through the Clearinghouse, and required them to document data in a standard format that facilitates Internet search. Agencies were required to produce and distribute data in compliance with standards established by FGDC. (The Departments of Defense and Energy were exempt from the order, as was the Central Intelligence Agency.)

Finally, the Order charged FGDC with preparing an implementation plan for a National Digital Geospatial Data Framework, the "data backbone of the NSDI" (FGDC, 1997, p. v). The seven core data themes that comprise the NSDI Framework are listed below, along with the government agencies that have lead responsibility for creating and maintaining each theme. Later on in this chapter, and in the one that follows, we'll investigate the framework themes one by one.

NSDI Framework

Geodetic Control	Department of Commerce, National Oceanographic and Atmospheric Administration, National Geodetic Survey
Orthoimagery	Department of Interior, U.S. Geological Survey
Elevation	Department of Interior, U.S. Geological Survey
Transportation	Department of Transportation
Hydrography	Department of Interior, U.S. Geological Survey
Administrative units (boundaries)	Department of Commerce, U.S. Census Bureau
Cadastral	Department of Interior, Bureau of Land Management

Seven data themes that comprise the NSDI Framework and the government agencies responsible for each.

The Nature of Geographic Information



Chapters

- ► Chapter 1: Data and Information
- Chapter 2: Scales and Transformations
- Chapter 3: Census Data and Thematic Maps
- Chapter 4: TIGER, Topology and Geocoding
- Chapter 5: Land Surveying and GPS
- ▼ Chapter 6: National Spatial Data Infrastructure I
 - 1. Overview
 - 2. National Geographic Information Strategies
 - 3. Legacy Data: USGS Topographic Maps
 - 4. Accuracy Standards
 - 5. Scanned Topographic Maps
 - 6. Federal Geographic Data Committee
 - 7. USGS National Map
 - 8. Theme: Geodetic Control
 - 9. Theme: Orthoimagery

- 10. Photogrammetry
- 11. Perspective and Planimetry
- 12. Stereoscopy
- 13. Rectification by Stereoscopy
- Orthorectification
- 15. Metadata
- 16. Digital Orthophoto Quadrangle (DOQ)
- 17. Summary
- 18. Bibliography
- ► Chapter 7: National Spatial Data Infrastructure II
- ► Chapter 8: Remotely Sensed Image Data
- ▶ Chapter 9: Integrating Geographic Data

Navigation

- login
- Search

Author: David DiBiase, Senior Lecturer, John A. Dutton e-Education Institute, and Director of Education, Industry Solutions, Esri. Instructors and contributors: Jim Sloan, Senior Lecturer, John A. Dutton e-Education Institute; Ryan Baxter, Senior Research Assistant, John A. Dutton e-Education Institute, Beth King, Senior Lecturer, John A. Dutton e-Education Institute and Assistant Program Manager for Online Geospatial Education, and Adrienne Goldsberry, Senior Lecturer, John A. Dutton e-Education Institute; College of Earth and Mineral Sciences, The Pennsylvania State University.

Penn State Professional Masters Degree in GIS: Winner of the 2009 Sloan Consortium award for Most Outstanding Online Program

This courseware module is offered as part of the Repository of Open and Affordable Materials at Penn State.

Except where otherwise noted, content on this site is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

The College of Earth and Mineral Sciences is committed to making its websites accessible to all users, and welcomes comments or suggestions on access improvements. Please send comments or suggestions on accessibility to the site editor. The site editor may also be contacted with questions or comments about this Open Educational Resource.



Navigation

- Home
- News
- About
- Contact Us
- People
- Resources Services
- Login

- · College of Earth and Mineral Sciences
- · Department of Energy and Mineral Engineering
- · Department of Geography
- · Department of Geosciences
- Department of Materials Science and Engineering
- Department of Meteorology and

Programs

- Online Geospatial Programs
- iMPS in Renewable Energy and Sustainability Policy

Program

- Office BA in Energy and Sustainability
- Policy Program Office

Related Links

- · Penn State Digital Learning
- Penn State World Campus
- Web Learning @ Penn State

The John A. Dutton Institute for Teaching and Learning Excellence is the learning design unit of the College of Earth and Mineral Sciences at The Pennsylvania State University.

- Atmospheric Science
- Earth and Environmental Systems Institute
- Earth and Mineral Sciences Energy Institute



2217 Earth and Engineering Sciences Building, University Park, Pennsylvania, 16802 Contact Us

Privacy & Legal Statements | Copyright Information The Pennsylvania State University © 2023