



Managing Historical Geospatial Data Records

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Guide for Federal Agencies

The development of a National Spatial Data Infrastructure (NSDI) is an important step in ensuring the Nation's economic, environmental and scientific well being. The NSDI includes initiatives to establish an electronic clearinghouse to improve public access to and use of geospatial data and to implement content standards for metadata. The NSDI will play an important role in protecting and preserving geospatial data records through their life cycle from creation and use until they pass into the Nation's archives.

This fact sheet explains the responsibilities of Federal geospatial data producers for properly creating data, documenting data with appropriate metadata, making data available through the clearinghouse, and arranging for the appropriate disposition of the data. While the fact sheet is designed for Federal geospatial data producers, the guidelines and principles may be useful to anyone collecting or producing geospatial data.

WHAT IS THE LAW?

The National Archives and Records Administration (NARA) is the Federal agency responsible for acquiring, preserving, and making available those records of enduring value created or received by various components of the Federal Government. Federal agencies are required to manage records in accordance with the NARA regulations, as codified in 36 Code of Federal Regulations, Chapter 12. They are required to seek the approval of the Archivist of

SHOULD THE GEOSPATIAL DATA BE SAVED?

Before you dispose of any geospatial data you should consider the following questions:

1. Do the data involve or reflect any legal rights of the Government or individuals?
2. Will the data be needed to defend the agency or the Government against charges of data fraud or misrepresentation?
3. Could the data be useful to other Federal geospatial data users or the broader geospatial research community?
4. Will other users require access to the original "raw" (unedited, unprocessed) data?
5. Have the geospatial data been made available to other users through agency data sharing agreements, data user services, or the clearinghouse?
6. Can secondary users understand or interpret the data without technical expertise or assistance from the producer?
7. Are the data difficult or expensive to replicate?
8. Are there significant costs or consequences to the program or the Government if the data are lost?
9. Can the data be usefully integrated with newer data resulting from resurveying or improved methods of data collection and interpretation?
10. Does the estimated research value of the data exceed the costs to maintain them for secondary use by Government researchers or other?
11. Will the data be useful for analyzing geographic distributions over time?
12. Do the data support the study of geophysical changes over time?

If the answer to any of these questions is "yes" the data may have long-term or permanent value. The agency's records management or information management staff should be consulted for further guidance.

the United States before any Federal Records are destroyed, stored in Federal Records Centers, or transferred to the National Archives for permanent preservation. State, local and regional governments and many corporations have similar regulations and guidance for their records.

Geospatial data producers and managers should be aware that this responsibility begins with the design and contracting for hardware and software systems used to create data. Minimum system capabilities must ensure appropriate retention and disposition of the records required by law. When designing a new system, or considering the disposition of geospatial data in existing systems, geospatial data producers and managers should consult with the agency's departmental records officer or information resources manager to verify all legal requirements are met.

WHAT RECORDS ARE APPROPRIATE FOR PRESERVATION?

Records in geospatial data base systems that provide evidence of the organization, policies, programs, decisions, procedures, operations, or other activities of an agency of the Federal Government may be appropriate for preservation. A broader body of geospatial data may be preserved because of the value of the information it contains. Storage media for these data may include magnetic tape, floppy and hard disks, and optical cards and disks. The electronic records may include geospatial data files and data bases with a national scope or those at the project or operations level.

HOW DO AGENCIES DOCUMENT HISTORICAL INFORMATION ABOUT THEIR DATA SETS?

The Federal Geographic Data Committee's (FGDC) Content Standards for Digital Geospatial Metadata specify required elements for capturing information about lineage, processing history, sources, intended use, status of the data, and other types of information available through the clearinghouse. This information establishes intellectual control over both the content of the data and the context within which the originating agency created and used the data. Additional historical information may be captured in records documenting the system design and use, and in outputs from the data in the form of reports, maps, and other graphic materials.

GEOSPATIAL DATA BASE SYSTEM CONSIDERATIONS

Records Retention — Every data set, record, or file in the system should have a designated retention period. Temporary records should be deleted or transferred to alternate storage media or facilities for temporary records only at specific times according to an approved records retention schedule.

Records Preservation — Geospatial data creators are required under 44 U.S.C., chapter 29, to preserve permanent records, both the data and appropriate documentation. When the designated permanent records are transferred to NARA at the predetermined date, the transfer will be in a format and on a media acceptable to NARA at the time of transfer.

Records Integrity — The hardware and software systems design must ensure data integrity. This can be accomplished by using passwords and audit trails, by restricting when records can be edited, and by maintaining a "history" file in a meaningful format of all changes, when appropriate.

SOURCES OF INFORMATION

Information about retaining records (records scheduling and appraisal) is available from:
Life Cycle Management Division, NARA
Telephone: (301) 837-3560.

Information regarding electronic records is available from:
Electronic & Special Media Records Services
Division, NARA
Telephone: (301) 837-3420.

Additional information can be accessed through NARA's homepage at:
<http://www.archives.gov>

Information about the FGDC is available from the FGDC Secretariat (see footer) or through the Internet via:
<http://www.fgdc.gov>