

ACCESS TO SPATIAL DATA

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Finding Spatial Data

- Lots of existing data available
- Problems become
 - Where data sets reside
 - Are data sets accessible
 - What is storage media distribution

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National Spatial Data Infrastructure

- Executive Order 12906 (4/11/94) calls for agencies to
 - Contribute and use national geospatial data clearing house prior to starting new data collection project
 - Use metadata standards to document data sets and support public access
 - Cooperatively develop data standards as necessary

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National Spatial Data Infrastructure

- Develop plan for implementation and maintenance of national geospatial data framework
- Develop strategies to maximize cooperative efforts

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■ Principles for improving NSDI

- Availability - through public networks having maximum user capacity or other media like CD-ROM
- Ease of Use - “Most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it”

[Weiser, M. 1991. “The Computer for the 21st Century”,
Scientific American, 265(3):94-104]

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■ Principles for improving NSDI (cont.)

- Flexibility - cannot be dependent on today's technology, data, or organizational structures
- Foundation for Other Activities - purpose is to foster not control new applications, services, and industries

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■ Components

- Data bases, metadata, and sources
- Data networks -- highways linking data bases and users
 - » Objectives is designing system that provides flexibility, maximum national coverage and user accessibility, and security and reliability required for different types of enquiries

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■ Components (cont.)

- Technology -- must be intelligent connections at each end, optimizing management of data bases at source and maximizing potential application of data by user
- Institutional Arrangements -- organizational cooperation is critical ingredient

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■ Components (cont.)

- Policies and Standards
- at heart of NSDI because they are the rules and common conventions that will allow data to pass
- » Open architecture will help reduce issue

■ Components (cont.)

- Users -- unless NSDI enables users to do something new or something they already do more easily or more cost efficiently, then rationale for NSDI falters