

Define NDIN: a National (U.S.) Disaster Information Network -- that supplies appropriate data to the emergency management community to support all phases of emergency management for all hazards.



National Academy of Public Administration

Slide 1

INFORMATION NEEDED FOR DISASTER MANAGEMENT

Base Data

Scientific Data

Engineering Data

Economic Data

Environmental Data

Response Data

SOURCE: Board on Natural Disasters, National Research Council, *Reducing Disaster Losses Through Better Information* (Washington, DC: National Academy Press, 1998), pp. 11-12.

Slide 2

Disaster Management Information Elements Classified by Data Limitation Concerns

Privacy

Land Ownership/Use
Hazardous Sites
Environmentally Critical Factors

Proprietary

Building Inventories
Utility Infrastructure, Pipelines, Powerlines,
Communication Systems
Financial Data
Insurance Company Holdings and Losses
Exposure to Economic Losses

Intellectual Property

Land Ownership/Use (if copyrighted by local
government)

Liability

Hazardous Sites
Critical Facilities
Evacuation Routes
Management Plans
Warning Systems
Monitoring Systems

Security

Engineering Data on Critical Facilities
such as:

- Control Structures: locks, dams, levees
- Pump Stations
- Building Inventories
- Offshore Facilities
- Transportation, bridges, tunnels
- Utility Infrastructure, Pipelines, Powerlines, Communication Systems

Examples of Federal Laws and Regulations Affecting Data Access and Disclosure

- Clinton Memorandum for the Heads of Executive Departments and Agencies, Privacy and Personal Information in Federal records (May 14, 1998) which concerns review of federal policies on privacy protections for information exchanged between the federal government and the state, local, and tribal governments
- Comprehensive Environmental Response, Compensation, and Liability Act
- Computer Fraud and Abuse Act
- Computer Security Act
- Driver's Privacy Protection Act
- Electronic Communications Privacy Act
- Emergency Planning and Community Right-To-Know Act
- Federal Acquisition Regulations
- Freedom of Information Act
- Federal Privacy Act
- Federal Technology Transfer Act
- Federal Torts Claim Act
- OMB Circular A-110
- OMB Circular A-130
- Paperwork Reduction Act
- Pollution Prevention Act of 1990
- U.S. Copyright Act
- 28 U.S.C. §1498(b)

Emergency Management Tasks and Data Needs

- **Vulnerability Management**
 - Summarized Data for Community Planning and Policy-Making
- **Crisis Management**
 - Detailed Real-Time Data for Operational Planning, Training, and Response
- **Loss Compensation Management**
 - Detailed Personal and Proprietary Data for Casework

FINDINGS

- **Many Data Affected by Limits.** Many types of information proposed to be available through an NDIN will be affected by access and/or disclosure limitations.
- **Precise Limits Not Defined.** Need to know more about the features and intended uses of the network.
- **Lessons from Other Fields.** Lessons for accommodating data access and disclosure limitations associated with an NDIN may be available from other fields, such as GIS.
- **Complexities and Inconsistencies.** The current array of federal, state, and local laws, regulations and practices that limit data access and disclosure is highly complex, and not always consistent.
- **International Implications.** Unresolved international intellectual property proposals, as well as privacy protection conventions, may have significant impact on U.S. practices.

RECOMMENDATIONS

- **General Principles.** Incorporate the following general principles into the design of an NDIN:
 - Provide open access as much as possible
 - Restrict access to certain information
 - Aggregate information to avoid disclosing sensitive data
 - Negotiate data sharing agreements
 - Secure the integrity of all the information
- **Network Design Implications for Data Access and Disclosure.** Define more precisely the specific data elements that need to be acquired and disclosed.
- **Best Practice Studies and Models.** Needed to assist legislators, and the designers and users of the NDIN.
- **Awareness and Capacity.** Provide information about potentially applicable data access and disclosure limitations.
- **Federal Roles.** Make data access and disclosure principles an integral part of the federal government's effort to develop the NDIN.