Open Data: The Why and How of Contributing to and Benefitting from the Open Data Ecosystem

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Presentation Outline

- Introduction
- Current Context
- Where & How You Can Get Stuff
- Where Your Stuff Can Go





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your one stop for federal, state & local geographic data

The geospatial data community has a long tradition of Open Data and Data Sharing

		Search Data.Gov		Q
DATA.GOV	DATA TOPICS -	IMPACT APPLICATI	ONS DEVELOPERS	CONTACT
DATA CATALOG		👫 / Da	tasets Organizati	ons ?
Search datasets Datasets ordered by Popular Dataset Type: geospatial X		Q	Order b Select	en option 8
Filter by location Clear Enter location.	126,405 datasets found U.S. Hourly Precipitation Data (x 700 recent view) National Oceanic and Atmospheric Administration, Department of Commerce – Hourly Precipitation Data (HPO) is digital data set DB1-0240, archived at the National Climatic Data Center (NCDC). The primary source of data for this file is IMM Immerity Precipitation IMM IMM IMM IMM IMM Immerity Precipitation Immerity Precipitation IMM IMM IMM IMM Immerity Precipitation Immerity Precipitation Immerity Precipitation IMM IMM Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation Immerity Precipitation<			
Topics Clear All Local Government (3553) Climate (499) AAPI (314) Ocean (206) Ecosystems (115)	National Park Boundaries 1272 recent views Earth Data Analysis Center, University of New Mexico – National Park Service unit boundaries.			
Show More Topics				

... and Open Standards to support data discovery, visualization and access



FGDC - Content Standard for Digital Geospatial Metadata

ISO - 19115, 19115-2 , 19115-1 and related standards





Open Geospatial Consortium

- Web Map Services (visualization)
- Web Feature Services (WFS data access, vector)
- Web Coverage Services (WCS data access, raster)
 - ... and many others



OMB Memorandum M-13-13 (pg. 1-2)

Specifically, this Memorandum requires agencies to collect or create information in a way that supports downstream information processing and dissemination activities. This includes using machine readable and open formats, data standards, and common core and extensible metadata for all new information creation and collection efforts. It also includes agencies ensuring information stewardship through the use

- of open licenses and review of information for privacy, confidentiality,
- security, or other restrictions to release. Additionally, it involves agencies building or modernizing information systems in a way that
- maximizes interoperability and information accessibility, maintains internal and external data asset inventories, enhances information
- safeguards, and clarifies information management responsibilities.

23, 2012) 🖒

US Government Photo

- Executive Order 13642 Making Open and Machine Readable the New Default for Government Information (May 9, 2013) ➡
- OMB Memorandum M-13-13 Open Data Policy -Managing Information as an Asset (May 9, 2015) ➡

statements - examples

- Nature ➡
- PLOS | ONE II>
- General increased recognition of value and benefits of adopting Open Data Principles

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Where and How You Can Get Stuff

Full-service Geospatial Data Repositories (examples)

 New Mexico Resource Geographic Information System ➡>



- Texas Natural Resources
 Information System
- Global Land Cover Facility ➡



The National Map

Global Land Cover Facility

TNRIS

General and Domain-Specific Data Repositories (examples)







- Find one for yourself: re3data.org
- Dryad ➡
- Zenodo 🖒
- Long Term Ecological Research (LTER) Data Portal
 ➡>
- DataZoa (commercial) ➡

Metadata Focused Data Discovery/Access

- <u>data.gov</u> ➡ (data catalog ➡)
- DataONE 🗠
- Global Earth Observation System of Systems (GEOSS)
 ➡>







GEOSS Portal Discover, Access, Contribute Earth Observations, Information and Services



Where Your Stuff Can Go

Many of the Same Players



- NM RGIS
- A wide variety of the increasingly popular data sharing platforms
- Metadata publication/ registration through <u>data.gov</u> or GEOSS



GEOPLATFORM.gov



Questions?