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

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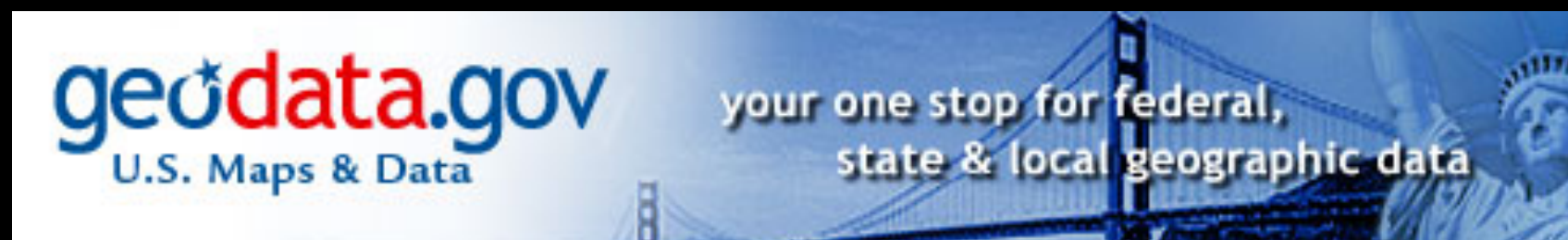Director of Research Data Services, College of University Libraries and Learning Sciences
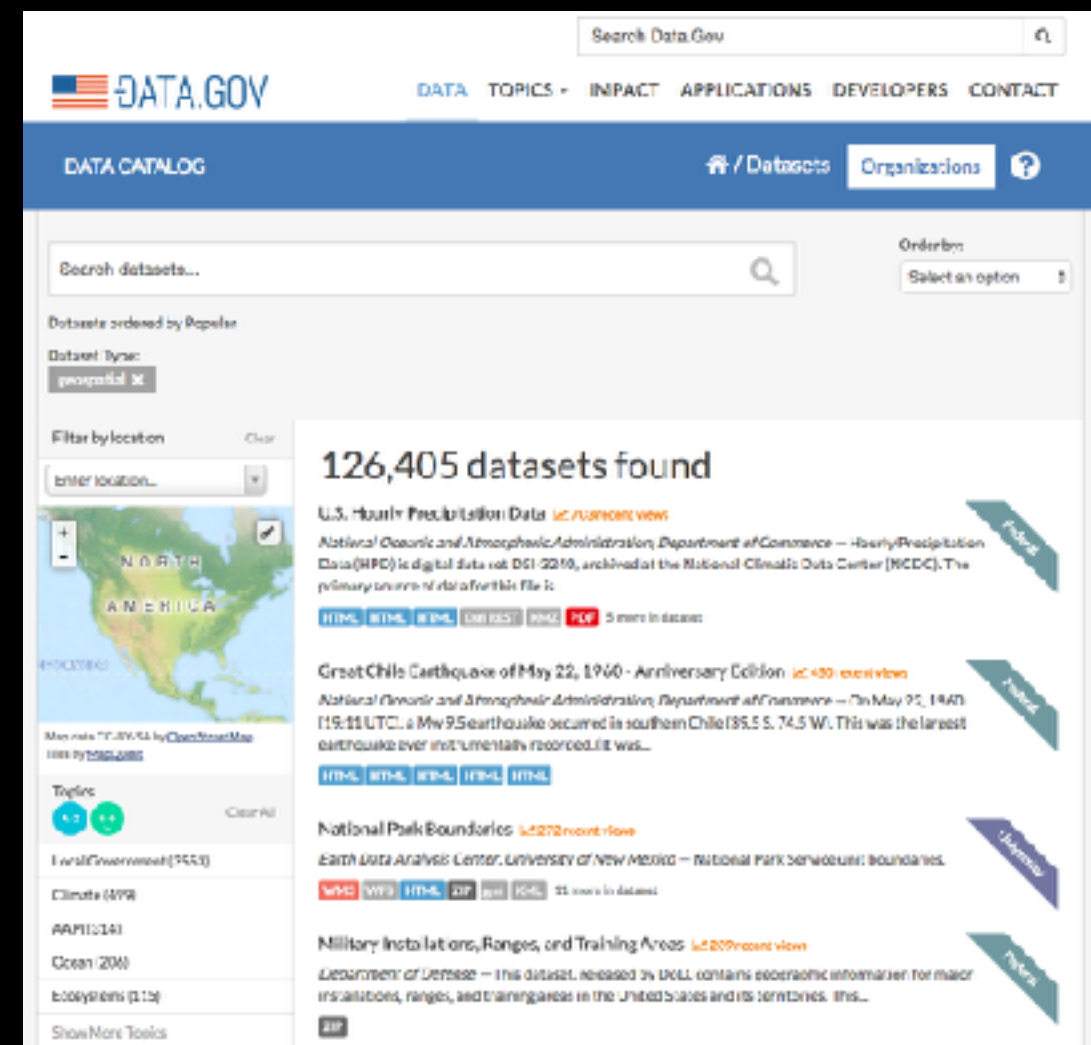University of New Mexico
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http://goo.gl/0ixTa2

Presentation Outline

- Introduction

- Current Context

- Where & How You Can Get Stuff

- Where Your Stuff Can Go

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

... 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

US Government Photo

The rest of the Open Data community is playing catch up - quickly

Drivers

- President Barack Obama - *Memorandum on Transparency and Open Government* (Jan 21, 2009) ⇨
- OMB Memorandum M-10-06, *Open Government Directive* (Dec 8, 2009) ⇨
- data.gov - Announced in Mar 2009, went live in May 2009
- President Barack Obama - *Memorandum on Building a 21st Century Digital Government* (May 21, 2012) ⇨
- OMB - *Digital Government: Building a 21st Century Platform to Better Serve the American People* (May 23, 2012) ⇨
- 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) ⇨

Specific Outcomes
- Data Management Planning/Plan requirements
- Proliferation of general and domain specific data repositories
- Increased focus on *basic* documentation
- Increased focus on machine access to data and metadata

Additional Drivers
- Publisher requirements for verifiable data access statements - examples
  - Nature ⇨
  - PLOS | ONE ⇨
- General increased recognition of value and benefits of adopting Open Data Principles

Where and How You Can Get Stuff

Full-service Geospatial Data Repositories (examples)

- New Mexico Resource Geographic Information System ⇨

- Texas Natural Resources Information System ⇨

- The National Map Small Scale Data Collection ⇨ (web services ⇨)
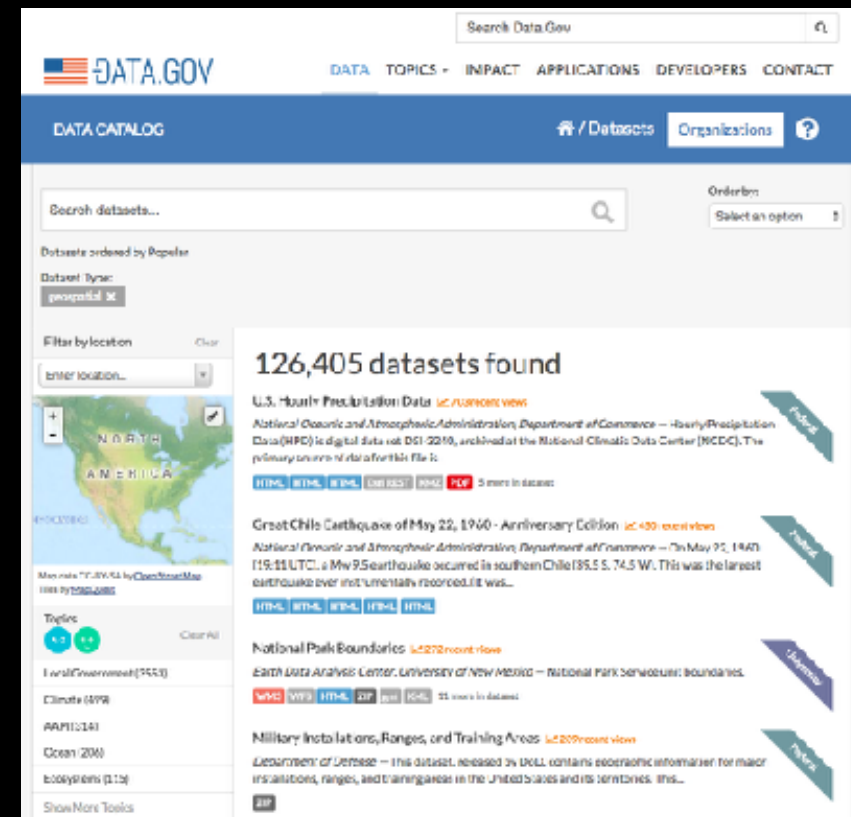
- Global Land Cover Facility ⇨

General and Domain-Specific Data Repositories (examples)

- Find one for yourself: re3data.org ➪

- Figshare ➪

- Dryad ➪

- Zenodo ➪

- Long Term Ecological Research (LTER) Data Portal ➪

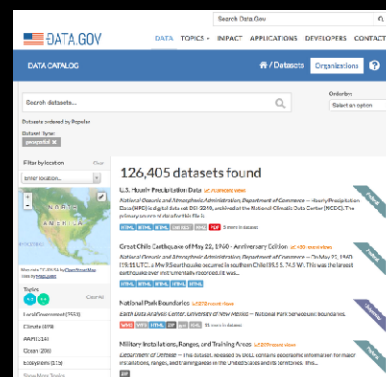- DataZoa (commercial) ➪

Metadata Focused Data Discovery/Access

- data.gov ⇨ (data catalog ⇨)

- GEOPLATFORM.gov ⇨

- DataONE ⇨

- Global Earth Observation System of Systems (GEOSS) ⇨

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 data.gov or GEOSS

Questions?