

The US Geospatial Platform and the Global Earth Observations System of Systems (GEOSS)

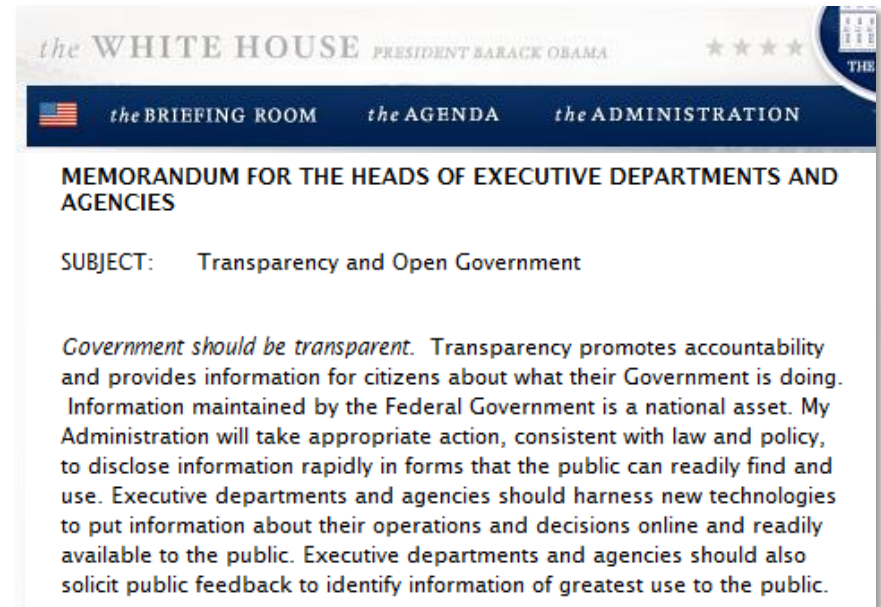
Geospatial World Forum
May 5, 2014

Ivan DeLoatch, Executive Director
Federal Geographic Data Committee, *US Department of the Interior*

Presentation Structure

- ◆ Current Policies
- ◆ Brief History of the Federal Geographic Data Committee (FGDC)
- ◆ GeoPlatform Planning
- ◆ GeoPlatform goals
- ◆ GeoPlatform components
- ◆ GEOSS

Open Government



“Information
maintained by the
Federal Government is
a national asset.”

President Obama January 21, 2009



GEOPLATFORM.gov

Federal Geographic Data Committee **fgdc**

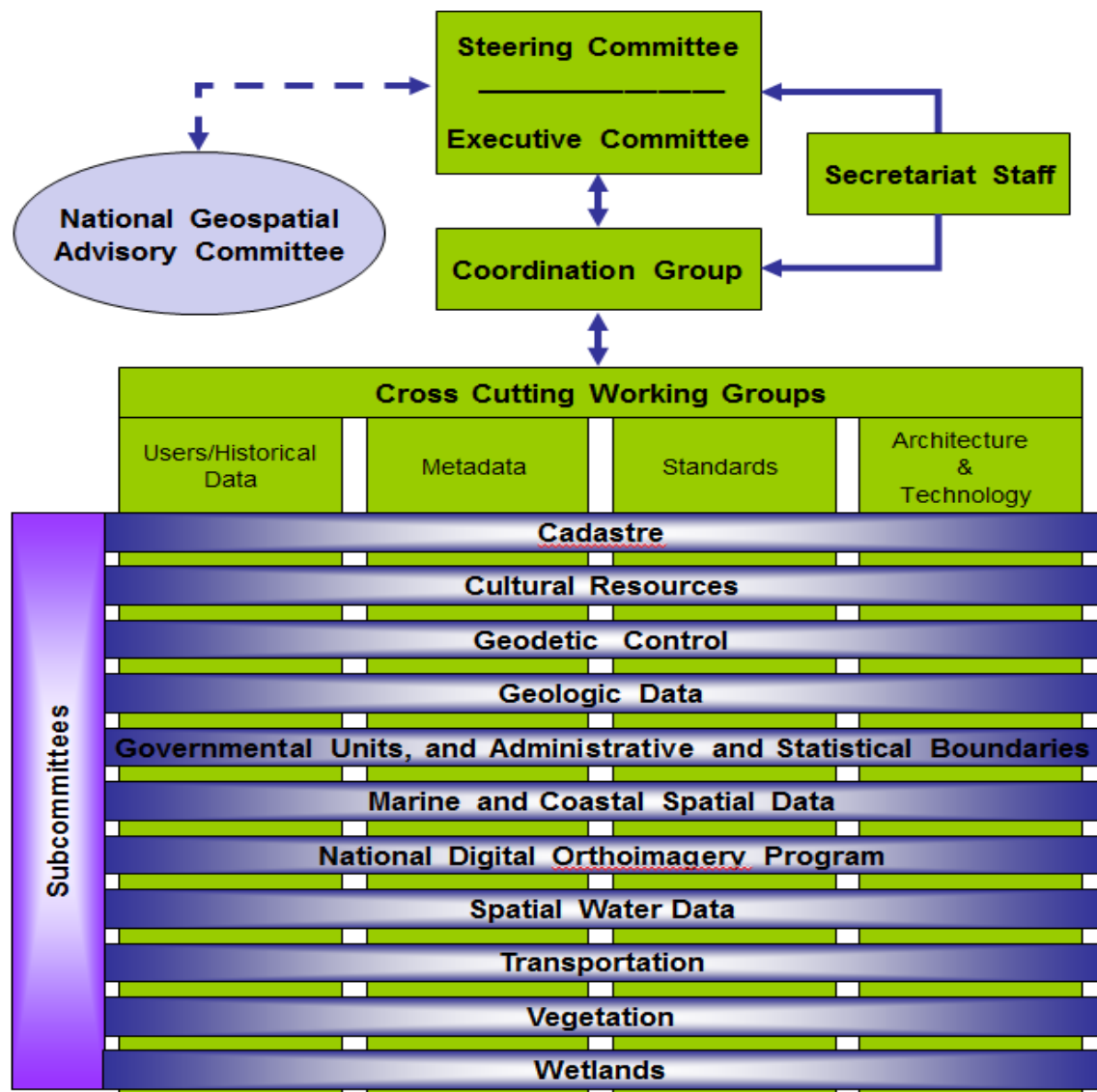
Open Data

- ◆ President Obama released Executive Order May 9, 2013
 - “Making Open and Machine Readable the New Default for Government Information”
- ◆ OMB Memorandum M-13-13
 - “Open Data Policy – Managing Information as an Asset”
 - Project Open Data

Brief History of FGDC

- ◆ OMB Circular A-16 (rev. 2002, *Supplemental Guidance* 2010)
 - Provides for improvements in the coordination and use of spatial data
 - Establishes vision for the National Spatial Data Infrastructure (NSDI)
 - Establishes FGDC as coordinating body for NSDI activities within federal government

FGDC Structure and Participants



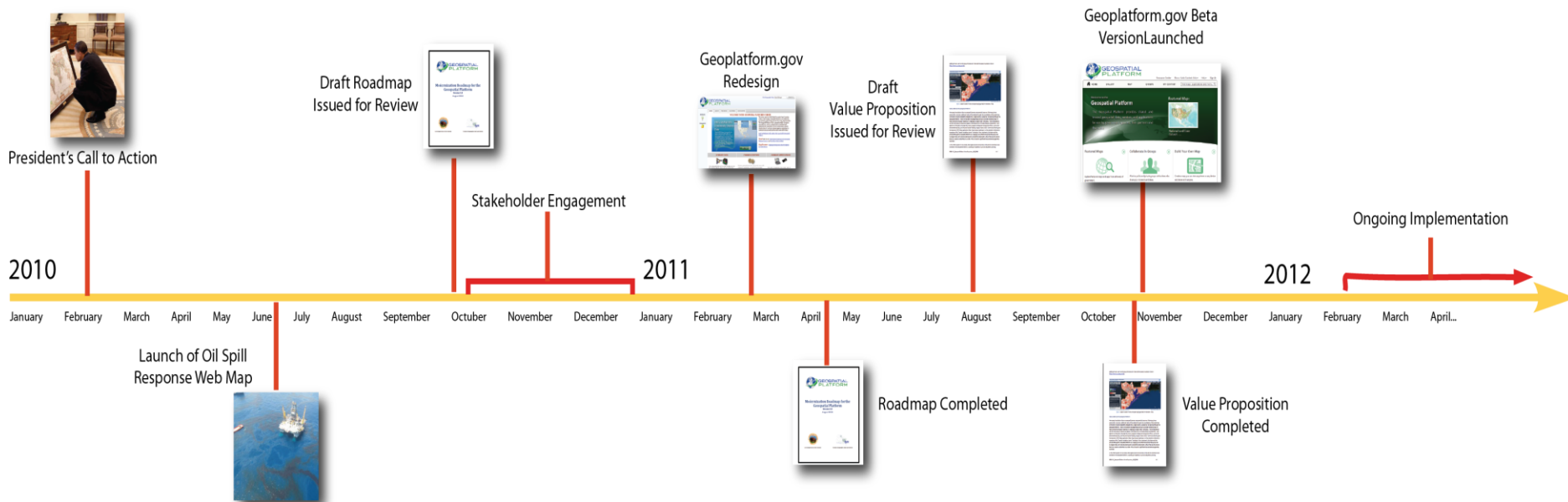
| Steering Committee | |
|--------------------------------------|-----------|
| Chair – Interior Vice Chair - OMB | |
| USDA | USAID |
| DOC | Education |
| DoD (NGA) | Energy |
| DHS | HHS |
| EPA | HUD |
| NASA | DOJ |
| GSA | DOL |
| LOC | DOS |
| NARA | DOT |
| NSF | Treasury |
| OPM | VA |
| SBA | NRC |
| Smithsonian | USACE |
| SSA | FCC |
| TVA | NCPC |

Pending: HIFLD SubComm. and National Boundaries WG

A Call to Action

- ◆ Budget Language for FY 2011, Direction to create the “Geospatial Platform”
 - Portfolio Management, prioritize investments based on business need
 - Leverage existing initiatives
 - Improve the governance framework
 - Address the requirements of State, local and tribal agencies
 - Reuse data, tools and architecture
 - Increase access to geospatial data

Planning to achieve the vision...



Most Recent Products of Note (see: <http://www.fgdc.gov>)
National Spatial Data Infrastructure (NSDI) Strategic Plan (2014-2016)
National Geospatial Data Asset (NGDA) Management Plan

Geospatial Platform is an OMB Shared Service and Line of Business

Geoplatform.gov

◆ Goals:

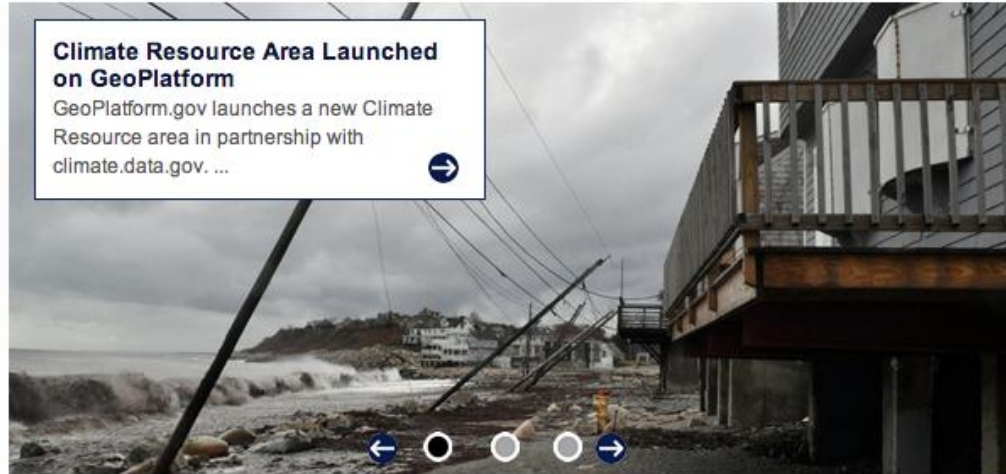
- Facilitate understanding via expanded use of geospatial data and tools
- Search/Catalog shared with data.gov
- Focus on National Geospatial Data Assets / A-16 data
- Focus on non-experts / decision makers
 - ◆ Make maps and spatial apps more discoverable and more accessible
- Content organized by Communities
 - ◆ A-16 Theme Communities
 - ◆ Cross-Agency Collaboration Communities
 - ◆ Agency “storefront” Communities
- Provide shared cloud infrastructure


[Overview](#)
[Data](#)
[Maps](#)
[Communities/Agencies](#)
[Resources](#)
[Marketplace](#)
[Dashboards](#)

[Sign In](#)
[Help](#)
[Explore](#)
[Develop](#)
[Publish](#)

Climate Resource Area Launched on GeoPlatform

GeoPlatform.gov launches a new Climate Resource area in partnership with climate.data.gov. ...



80,604 Datasets

Search geospatial datasets by terms above...

[Learn More](#)

News & Blogs - What's in the news and the latest information about GeoPlatform

Site Statistics & Data Metrics - site usage, popular pages, organizational dataset counts and updates.

Featured Applications



GeoPlatform - Climate Resources

Find data and tools related to climate change and its impacts that can help inform, prepare, and strengthen America's communities. This resource area is focused on providing easy access to data and resources related to coastal flooding, sea level rise, and their impacts. Over time, this area will expand to include additional data and tools relevant to other important climate-related impacts, including risks to human health, the food supply, and energy infrastructure.

Trending Data

[USGS US Topo Map Collection](#)

U.S. Geological Survey, Department of the Interior - Layered GeoPDF 7.5 Minute Quadrangle Map. Layers of geospatial data include orthoimagery, roads, grids, geographic names, elevation contours, hydrography, and...

[US Median Household Income](#)

Federal Geographic Data Committee - This thematic map presents the median household income in the United States in 2010. The 2010 Median Household Income is an estimate of income for the calendar...

[TIGER/Line Shapefile, 2013, Series Information File for the Current Address Range-Feature Name Relationship Files](#)

US Census Bureau, Department of Commerce - The TIGER/Line shapefiles and related database files (.dbf) are an extract of selected geographic and cartographic information from the U.S. Census Bureau's...

[View more data](#) 

Featured Maps

[Sea Level Rise Planning Tool - New Jersey and New York State](#)



NOAA, in partnership with FEMA, USACE, USGCRP, and CEQ has created a set of map services and related tools to help communities, residents, and other stakeholders consider risks...

[View Details](#)

[Exploring Ocean Wind Energy](#)





Offshore Wind is a viable source of energy capable of providing 900,000 megawatts (MW) of electricity—almost enough energy to power the entire country.



[View Details](#)

[View more maps](#) 

Catalog


 **GEOPLATFORM.gov**

Federal Geographic Data Committee 

 [Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) 


[Sign In](#) | [Help](#)

Filter By Location Clear



Map data CC-BY-SA by [OpenStreetMap](#)
Tiles by [MapQuest](#)

Dataset Type Clear All

Geospatial (5207) 

Show More Dataset Type

Tags Clear All

Transportation (4055)

Roads (1403)

Streets (1202)

Utah (888)

Georgia (550)

Dataset Catalog

Note that only datasets marked as "Federal" are subject to the U.S. Federal Government and Data.gov's [Data Policy](#). Non-federal participants (e.g., universities, organizations, and tribal, state, and local governments) maintain their own data policies. It is important that users understand the data policies of participating entities in order to best utilize these datasets. A description of this catalog and information about the datasets presented and associated metrics is available [here](#).


Search

Order by:

Relevance

5,207 datasets found for "transportation"

Dataset Type:

geospatial 

Teale Railroads And Miscellaneous Transportation

California Department of Resources -California Spatial Information System (CaSIL) is a project designed to improve access to geo-spatial and geo-spatial related data information throughout the...

ZIP

State


Teale Airports

California Department of Resources -California Spatial Information System (CaSIL) is a project designed to improve access to geo-spatial and geo-spatial related data information throughout the...

ZIP

State

Map Galleries

 **GEOPLATFORM.gov**

Federal Geographic Data Committee **fgdc**

Search






[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Map Galleries

The following maps are from data sources that are available on a national scale of coverage. The data sources are already being used by some regional portals and are the basic building blocks of information for regional planning. These data include administrative boundaries, bathymetry, and other types of data that have already been identified as needed for regional planning efforts.

America's Great Outdoors



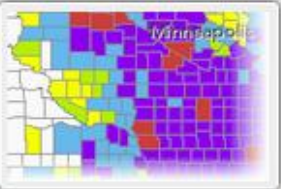
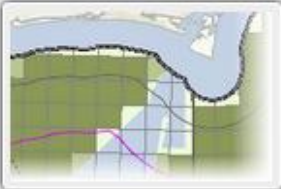

America is place of natural outdoor beauty, though challenges face its future. Come explore the data and applications that you can use to explore and understand the America's Great Outdoors!



[USA National Wetlands Inventory](#) | [Recreation](#) | [Natural Heritage Tour](#) | [Highlighted Projects](#) | [America's Great Outdoors](#)

Energy

Energy is the lifeblood of the American economy. Explore America's increasing commitment to domestic energy supplies, developments in clean energy production and steps to increase the energy efficiency of our society.



[USGS Shale Gas Basins and Plays](#) | [Offshore wind](#) | [NREL Biomass Resource Potential](#) | [Heating Needs](#) | [Heating Needs](#)

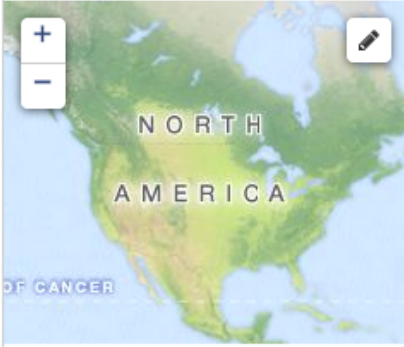
Marketplace

 **GEOPLATFORM.gov**

Federal Geographic Data Committee 

[Home](#) | [Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Filter By Location [Clear](#)



NORTH AMERICA

Map data CC-BY-SA by [OpenStreetMap](#)
Tiles by [MapQuest](#)



Dataset Type [Clear All](#)

Geospatial (48) [×](#)

[Show More Dataset Type](#)

Geospatial Platform Marketplace

Search data that is "Planned" for collection and development.

Welcome to the Geospatial Platform Marketplace. Here you will find a listing of datasets that are planned for acquisition by one or more of the FGDC member agencies. You can use this listing to determine whether a potential partner is already trying to acquire data that you have an interest in. As time goes on, we will be expanding the functionality of the Marketplace to help federal agencies and their partners get their geospatial data needs met in the most time and cost effective manner possible – so stay tuned for enhancements to this part of Geoplatform.gov!

[Search](#)

48 datasets found **Order by:** [Relevance](#)

Dataset Type: [geospatial](#) **Status:** [planned](#)

Bathymetric And Topographic Data Collection Data Of Planned Field Activity W-07-13-PS In Puget Sound From 09/15/2013 To 09/19/2013

U.S. Geological Survey, Department of the Interior -United States Geological Survey, Pacific Science Center, Washington State Department of Ecology, Washington Sea Grant. Chief Scientists: Jon Warrick, Guy Gelfenbaum....

[HTML](#) [XML](#) [HTML](#) [HTML](#)


Federal


Bathymetric Data Collection Data Of Planned Field Activity W-06-13-WO In Washington- Oregon From 09/12/2013 To 09/14/2013

U.S. Geological Survey, Department of the Interior -United States Geological Survey, Pacific Science Center. Chief Scientist: Guy Gelfenbaum. Bathymetric Data Collection data of planned field activity W-06-13-WO...

Federal

Resources and Dashboards


 **GEOPLATFORM.gov**

 Federal Geographic Data Committee

[Home](#) | [Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

GeoPlatform Resources

Welcome to the Geoplatform Resources Pathway. On this page, you'll find a variety of resources to help you learn how to utilize the Geoplatform to support your geospatial data needs. Here, you'll find tutorials and trainings on topics like: producing compliant metadata, registering data, Community administration, and more. You also find information on supporting organizations and initiatives; and have access to presentation and publication resources related to the Geoplatform.



Documentation


- [Geoplatform Business Plan \(redacted\)](#)
- [Geoplatform Outreach and Communications Plan](#)
- [Geoplatform Roadmap v4](#)
- [Geoplatform Value Proposition](#)
- [OMB Circular A-16 Supplemental Guidance](#)
- [OMB Circular A-16 Supplemental Guidance Implementation](#)
- [Open Data Policy](#)
- [NSDI Strategic Plan \(Draft\)](#)
- [Geospatial Platform Groups and Communities White Paper](#)
- [White Papers](#)


Organizational Information

- [Data Organizations](#)
- [FGDC Coordination Group](#)
- [FGDC Steering Committee](#)
- [FGDC Subcommittees & Working Groups](#)
- [GeoCloud Sandbox Initiative](#)

Tutorials And Trainings

- [Example CSDGM Metadata Record](#)
- [Example ISO format \(XML\) Metadata Record](#)
- [How to Register Data on the Geoplatform/Data.gov Catalog](#)
- [Metadata Best Practices](#)
- [Metadata Resources](#)
- [NSDI Training](#)

 **GEOPLATFORM.gov**

 Federal Geographic Data Committee

[Home](#) | [Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Datasets Published per Month

Data last updated on 01/07/2014 1:40 AM.

| Agency Name | Number of Datasets published by month | | | | | | | | | | | | Total In the Past 12 Months |
|---------------------------------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------------------|
| | Feb '13 | Mar '13 | Apr '13 | May '13 | Jun '13 | Jul '13 | Aug '13 | Sep '13 | Oct '13 | Nov '13 | Dec '13 | Jan '14 | |
| Department of Agriculture | - | - | - | - | - | - | - | - | - | 48 | - | - | 48 |
| Department of Commerce | - | 6071 | - | 25217 | 146 | - | 314 | 3294 | 65 | 252 | 42 | - | 35401 |
| Department of Homeland Security | - | - | - | - | - | - | 2 | - | - | - | - | - | 2 |
| Department of the Interior | - | 10812 | - | - | 1 | - | 393 | 461 | 1 | 41 | 275 | - | 11984 |
| Department of Transportation | - | - | - | - | - | - | - | 49 | - | - | - | - | 49 |
| Total | - | 16883 | - | 25217 | 147 | - | 709 | 3804 | 66 | 341 | 317 | - | 47484 |

Contact Us | [Data Policy](#) | [FAQ](#) | [Privacy Policy](#) | [Accessibility](#)

Featured Maps and Apps

GEOPLATFORM.gov

fgdc
Federal Geographic Data Committee

Search

[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Featured Maps

20 Must-see Pennsylvania State Parks



Pennsylvania actually has 120 must-see state parks, but the Commonwealth's significant natural and historic resources.

Map URL:

<http://maps.dcnr.pa.gov/storymaps/mustseeparks.html>

Exploring Ocean Wind Energy



NOAA and BOEM - Offshore Wind is a viable source of energy electricity—almost enough energy to power the entire country. assessing offshore wind speed can help identify potential com there are no current offshore wind farms in development, prog show how MarineCadastre.gov data can help with offshore win

Map URL:

<http://www.arcgis.com/apps/StorytellingTextLegend/index.html?appid=46b2bf2c83bc4...>

FEMA 100 Year Floodzones



Federal Emergency Management Agency - This map service re important for floodplain management, mitigation, and insurance (NFIP). The National Flood Hazard Layer (NFHL) data present digital format suitable for use in electronic mapping application

Map URL:

<http://geoplatform.maps.arcgis.com/home/webmap/viewer.html?services=d6a5bc3e7d9c...>

National Atlas Locator Map



United States Geological Survey - States, Counties, urban are federal sources over NASA Blue Marble.

GEOPLATFORM.gov

fgdc
Federal Geographic Data Committee

Search

[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Featured Applications

WGA Crucial Habitat Assessment Tool

Featured Date: December 18, 2013



With the launch of this Western Governors' Crucial Habitat Assessment Tool (CHAT), the Western Governors' Association and its Wildlife Council aim to bring greater certainty and predictability to planning efforts by establishing a common starting point for discussing the intersection of development and wildlife. While not intended for project-level approval, CHAT is designed to reduce conflicts and surprises while ensuring wildlife values are better incorporated into land use decision-making, as well as large-scale conservation projects.

The History of CHAT

With the adoption of its Wildlife Corridors Initiative Report in 2008, the Western Governors created the Western Governors' Wildlife Council and tasked its members with developing policies and tools to identify and conserve crucial wildlife habitat and corridors across the region.

The Wildlife Council first approached the Governors' directive by launching regional pilot projects in 2010 with support from a grant from the Department of Energy. The year-long pilot projects allowed the Wildlife Council to test the framework outlined in their [White Paper](#), helping to refine their vision.

In August 2011, the Wildlife Council established a plan to develop a West-wide tool with the goal of launching a public and regionally compatible crucial habitat GIS tool by 2013. All the while, the Wildlife Council has continued to support the development of state-specific CHATs in individual states.

Now guided by WGA policy resolution 13-04 and focused on implementing the CHAT model, the Wildlife Council is working to make information on important fish and wildlife habitat compatible across the West and available to the public for use in informing land use decisions.

CHATs in Individual States

Arizona, California, Kansas, Montana, Washington and Wyoming have already developed state-specific information on priority species and habitat. In addition, the Southern Great Plains CHAT provides information specific to the lesser-prairie chicken, a species with habitat ranging across five states. Other states are continuing to develop individual systems to provide additional state-specific information.

Application URL:

<http://westgovchat.org/map>

National Wetlands Inventory

Featured Date: November 12, 2013





U.S. Fish and Wildlife Service - The development of the new Wetlands Mapper stems from the U.S. Fish and Wildlife Service's (Service) need to expand and improve the availability of digital wetlands data. The Service's strategic plan for digital wetland data is focused on the development, revision, and dissemination of wetlands data and information to Service resource managers and the public. The present goal of the Service is to provide the citizens of the United States and its Trust Territories with current geospatially referenced information on the status, extent, characteristics and functions of wetlands, riparian, deepwater and related aquatic habitats in priority areas to promote the understanding and conservation of these resources.

The revision of Wetlands Mapper is in direct response to the need to integrate digital map data with other resource information to produce timely and relevant management and decision support tools.

This new version of the Wetlands Mapper is designed to promote greater awareness of wetlands map data applications and to deliver easy-to-use, maplike views of America's wetland resources in a digital format. It has been developed in collaboration with the U.S. Geological Survey (USGS), Water Resource

Communities – A-16 Themes

 **GEOPLATFORM.gov** Federal Geographic Data Committee 


[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)



Theme Home **NGDA Datasets**

Welcome to the Governmental Units, and Administrative and Statistical Boundaries Theme Community

Theme Lead Agency: United States Census Bureau (US Census)

Theme Lead: Lynda Liptrap (US Census)

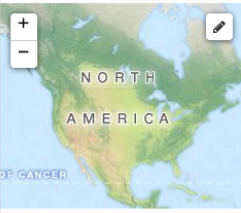


 **GEOPLATFORM.gov** Federal Geographic Data Committee 

[Overview](#) | [Data](#) | [Maps](#) | [Communities/Agencies](#) | [Resources](#) | [Marketplace](#) | [Dashboards](#) | [Sign In](#) | [Help](#)

Theme Home **NGDA Datasets**

[Clear](#)


Map data CC-BY-SA by OpenStreetMap
Tiles by MapQuest

35 datasets found [Search](#)
Order by: **Relevance**

Dataset Type: [geospatial](#) **Tags:** [governmental units](#) [ngda](#)

Series Information File For The 2012 Cartographic Boundary File, 2010 Census Urban Area, 1:500,000
US Census Bureau, Department of Commerce -The 2012 cartographic boundary shapefiles are simplified representations of selected geographic areas from the Census Bureau's MAF/TIGER geographic ...
[HTML](#)

Series Information File For The 2012 Cartographic Boundary File, 2013 State-State Legislative District (Lower Chamber), 1:500,000
US Census Bureau, Department of Commerce -The 2012 cartographic boundary shapefiles are simplified representations of selected geographic areas from the Census Bureau's...
[HTML](#)

Series Information File For The 2012 Cartographic Boundary File, 2013 State-State Legislative District (Upper Chamber), 1:500,000
US Census Bureau, Department of Commerce -The 2012 cartographic boundary shapefiles are simplified representations of selected geographic areas from the Census Bureau's...
[HTML](#)

Series Information File For The 2012 Cartographic Boundary File, State-Congressional District (113th), 1:500,000
US Census Bureau, Department of Commerce -The 2012 cartographic boundary shapefiles are simplified representations of selected geographic areas from the Census Bureau's...
[HTML](#)

Dataset Type [Clear All](#)
Geospatial (35) [x](#)
[Show More Dataset Type](#)

Tags [Clear All](#)
Governmental Units (35) [x](#)
Ngda (35) [x](#)
Ngda Portfolio Them... (35)
U.S. (31)
Polygon (30)
[Show More Tags](#)

Formats [Clear All](#)
HTML (4)
[Show More Formats](#)

Overview



Governmental Units, and Administrative and Statistical Boundaries Theme Definition: Political, governmental, statistical, and administrative (management) type boundaries that are used to manage people and resources. Includes geopolitical boundaries (county, parish, state, city, etc.), Tribal Boundaries, Federal land boundaries and Federal Regions, International Boundaries, statistical boundaries such as Census Blocks, Governmental administrative units such as Congressional Districts, international lines of separation, limits, zones, enclaves/exclaves and special areas between States and dependencies as well as all jurisdictional offshore limits within U.S. sovereignty.

Committees And WGs



FGDC International Boundaries & Sovereignty Subcommittee
Boundaries Working Group

Geospatial



Information technology for the identification of the United States Insular Areas (IN...
Information technology for the identification of the United States Insular Areas within the...
Information technology for the identification of the United States Insular Areas of the United States (2010)



Climate Resources

Find data and tools related to climate change and its impacts that can help inform, prepare, and strengthen America's communities. This resource area is focused on providing easy access to data and resources related to coastal flooding, sea level rise, and their impacts. Over time, this area will expand to include additional data and tools relevant to other important climate-related impacts, including risks to human health, the food supply, and energy infrastructure.

For more information and data visit our partners at climate.data.gov →



Search Climate Data

Search the geospatial catalog for data relevant to important climate-related impacts, including risks to human health, the food supply, and energy infrastructure. [Start Your Search](#)



Climate Maps

Explore map resources related to climate change and its impacts that can help inform, prepare, and strengthen America's communities, businesses, and citizens. [Climate Map Group](#)



Climate Tools

The tools below may be helpful in analyzing and assessing the impact of climate in your community.

[Coastal Change Analysis Program \(C-CAP\) Land Cover Atlas](#): Provides access to regional land cover and land cover change information.

[CanVis](#): A visualization program used to "see" potential impacts from coastal development or sea level rise.

[Climate Resilience Evaluation and Awareness Tool \(CREAT\)](#): Provides information on climate impacts to assist water utilities to assess future risks and vulnerabilities.

[Coastal Change Hazards Portal](#): The U.S. Geological Survey is uncovering the science behind coastal change hazards and providing data, tools, and scientific knowledge to help coastal planners as they work to reduce risk along our coastlines.

Resources

The resources below will allow you to build innovative tools and solutions to help communities plan and prepare for the potential effects of coastal inundation. Through creating new data, visualizations, and simulations, you can help people understand their exposure to coastal inundation hazards and their increased vulnerability due to population increase and sea level rise.

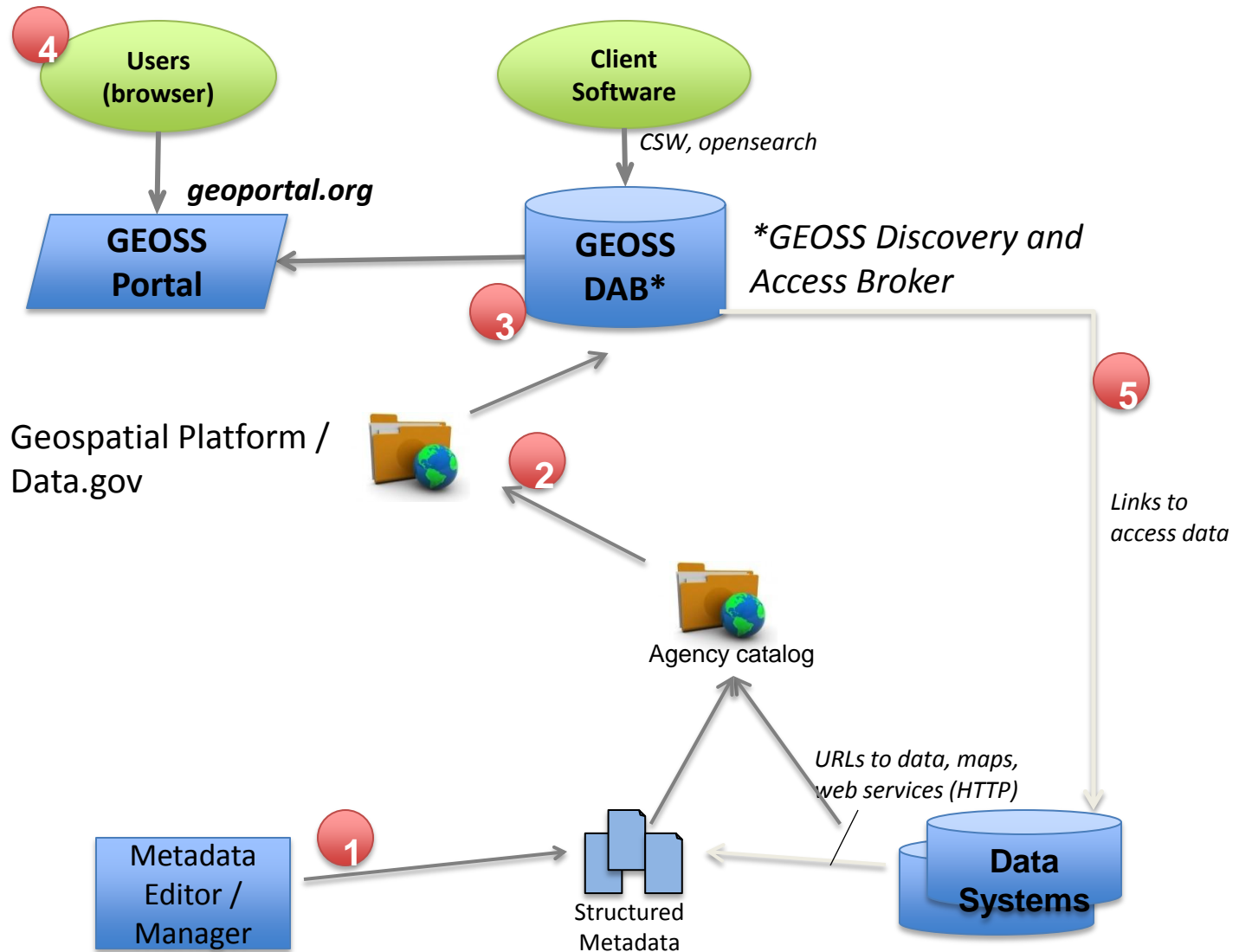
Homeland Security Infrastructure Program (HSIP) Public Domain Services

- [All REST Services](#) (directory only)
- Natural Hazards [REST Service](#) | [WMS Service](#)
- Public Health [REST Service](#) | [WMS Service](#)
- Transportation Air [REST Service](#) | [WMS Service](#)
- Transportation Ground [REST Services](#) | [WMS Service](#)
- Transportation Water [REST Services](#) | [WMS Service](#)

Platform to GEOSS

- ◆ Geospatial Platform users register their data in a catalog shared with data.gov as part of our Open Data Policy
- ◆ The common catalog (catalog.data.gov) is registered with GEOSS
- ◆ Metadata are accessed with links to the data, services, or applications being described
- ◆ *Result is that US national assets are visible to the Global EO community*

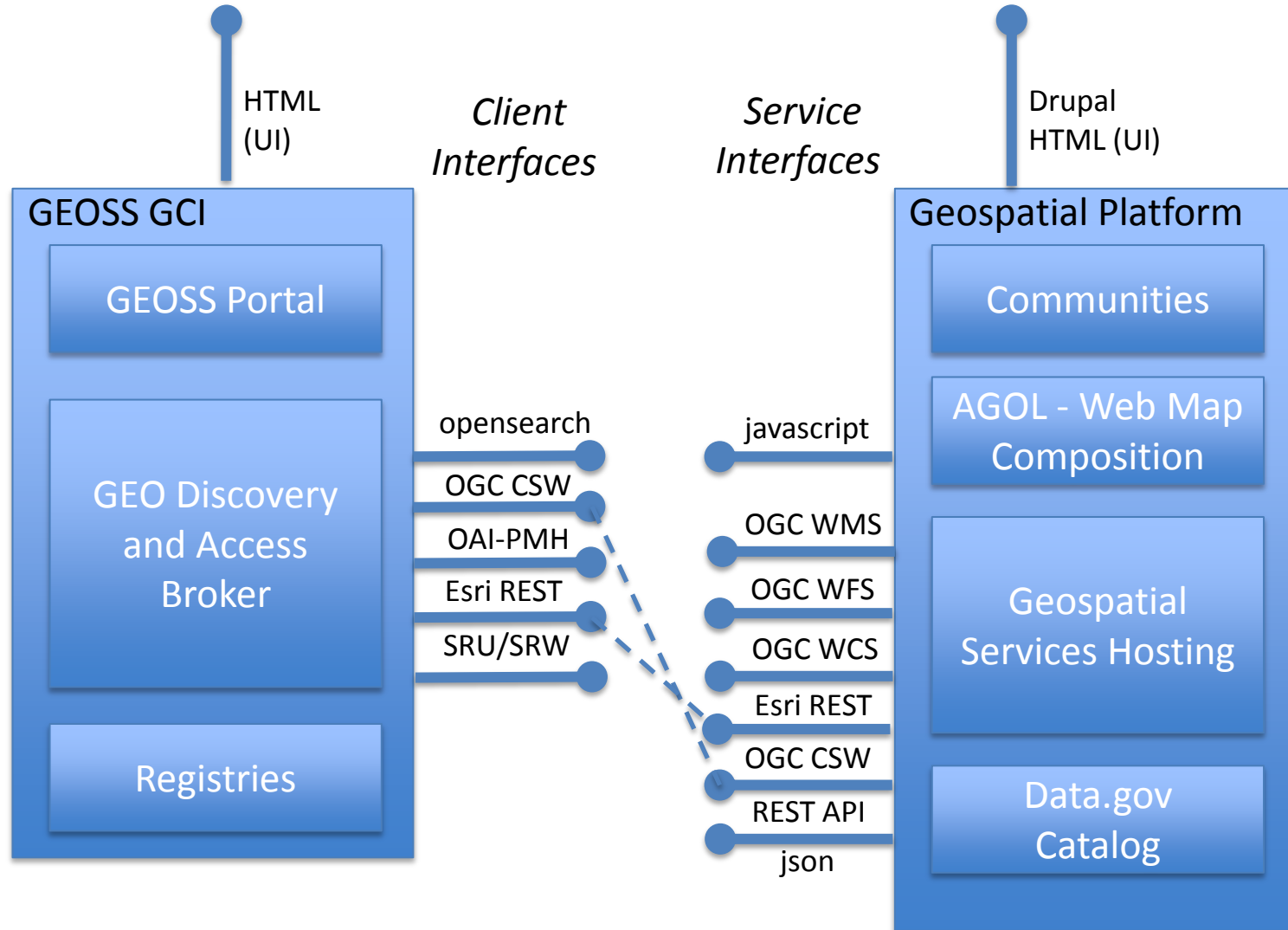
Data Publishing to GEOSS



1. Create metadata
2. Save in catalog
3. Indexed by DAB
4. Search via Portal
5. Link via metadata

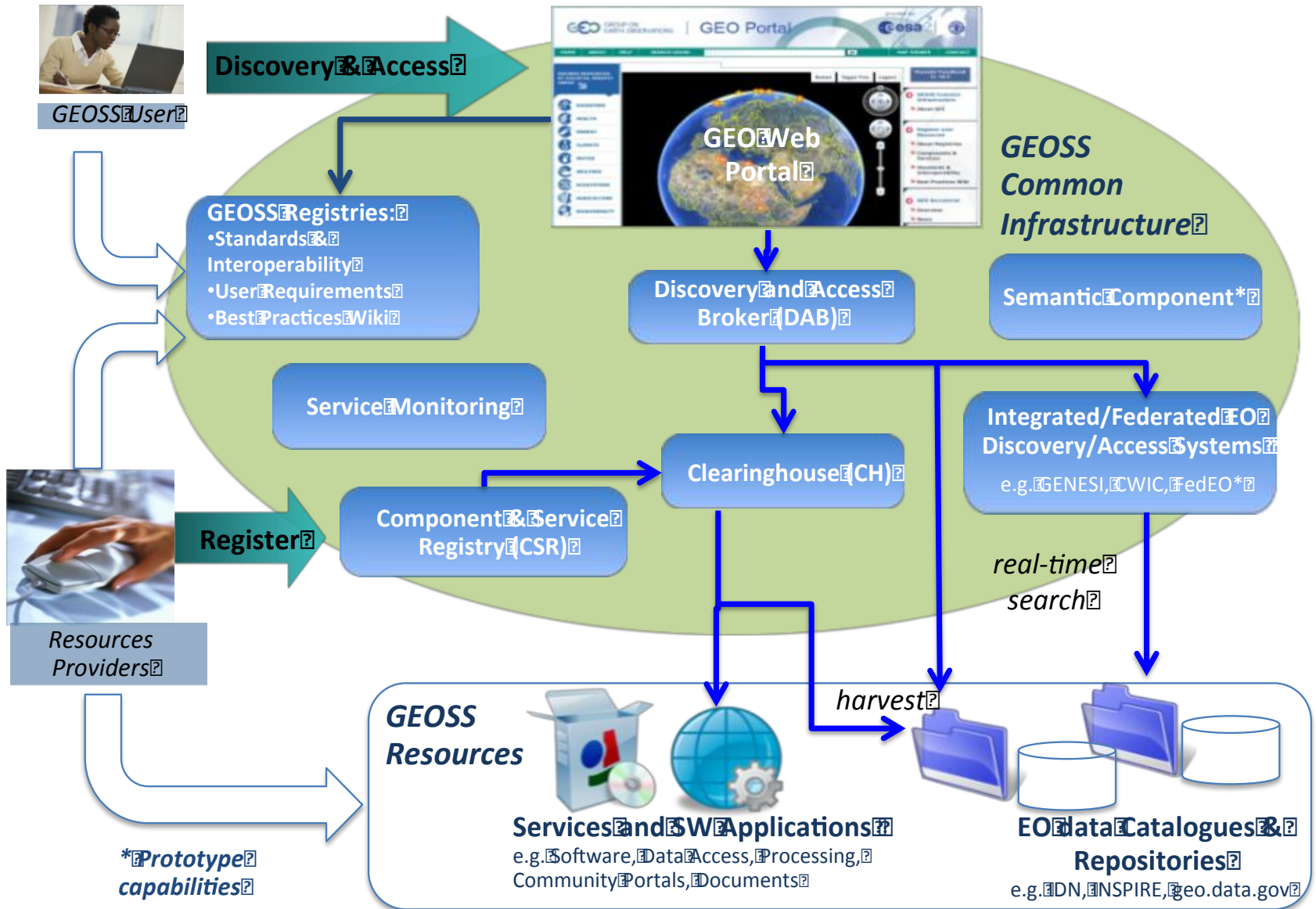
Agency Metadata and Data Services

GEOSS and GeoPlatform Interfaces



Focus of interaction is to support catalog access and reference to data and services described in metadata

GCI Architecture



Conclusion – Value Proposition

- ◆ Supports open data and the GEOSS Data Sharing Principles as part of our Open Data Policy
- ◆ The common catalog (catalog.data.gov) is registered with GEOSS
- ◆ Demonstrates interoperability using internationally recognized standards
- ◆ *Result is that US national assets are visible to the Global EO community*

Thank You!