

The US Open Government Framework

*Establishing an Environment of Openness for
Societal Collaboration and Benefit*



Eldrich “Rich” Frazier
Federal Geographic Data Committee
U.S. Geological Survey



About the U.S. Geological Survey

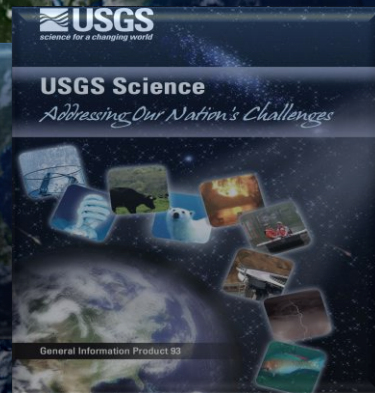
How do we make smart decisions about
a changing world?

Start
With **Science**



The USGS serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

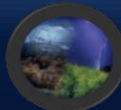
The USGS is focused on some of the most significant issues society faces—in which natural science can make a substantial contribution to the well-being of the Nation and the world.



Facing Tomorrow's Challenges – USGS Science in the Decade 2007- 2017



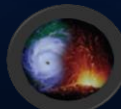
Understanding *Ecosystems* and Predicting
Ecosystem Change



Climate Variability and Change



Energy and *Minerals* for
America's Future



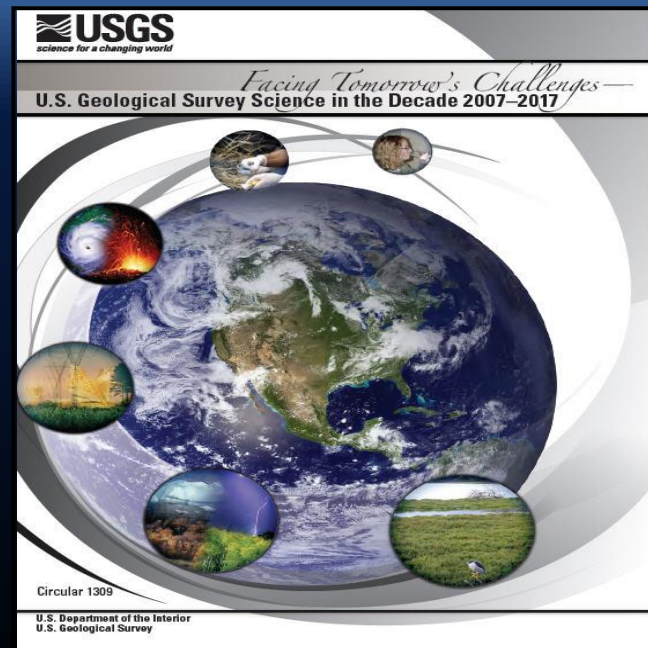
A National *Hazards*, Risk, and
Resilience Assessment Program



The Role of Environment and
Wildlife in *Human Health*



A *Water* Census of the United States



U.S. Open Government: *Evolution*

Open Government Initiative TRANSPARENCY ♦ PARTICIPATION ♦ COLLABORATION

OPEN GOV

About Open Government | Open Gov Blog | Open Government Partnership | Participation | Collaboration

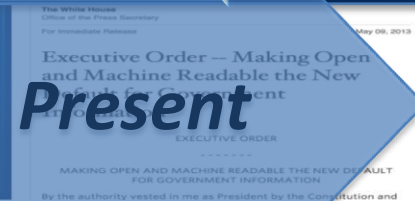
“My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government.”

— PRESIDENT OBAMA, 01/21/09

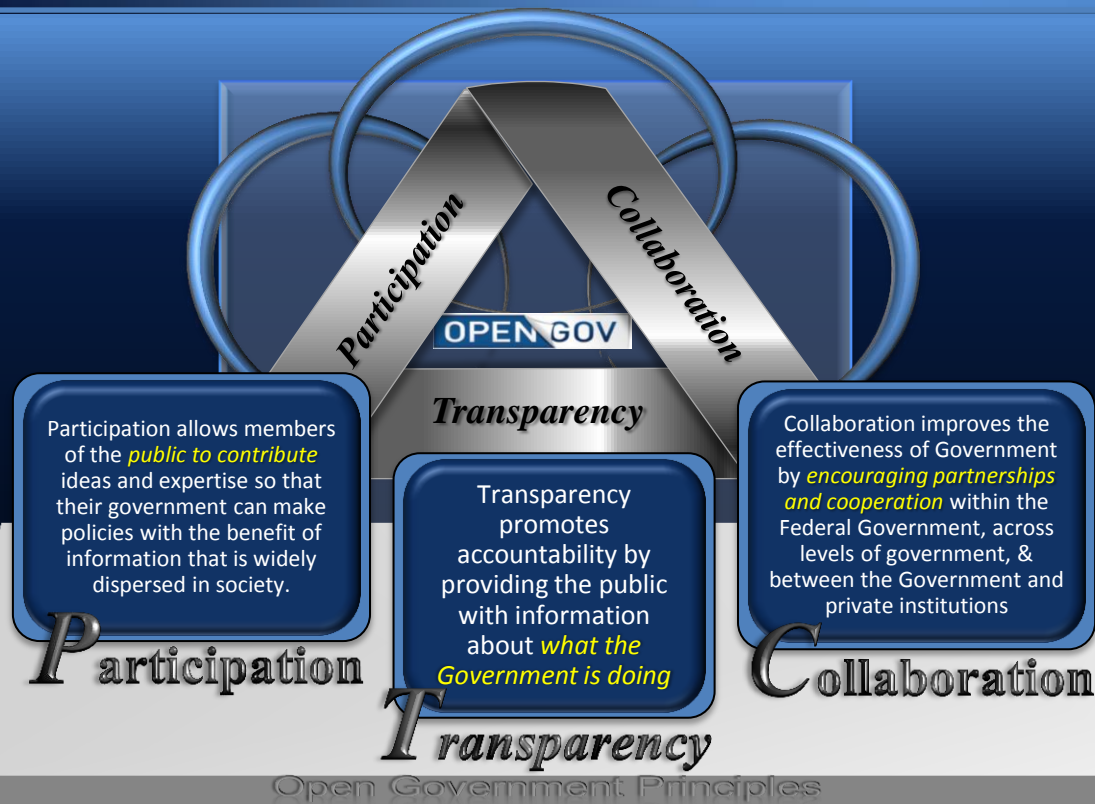


Executive Memo | Freedom of Information | OpenGov Directive | Digital Strategy | Open Data Directive |

Open Government Evolutionary Actions 2009 - Present



U.S. Open Government: *Executive Direction & Policy*



- Create a policy framework for Open Government
- Publish government information online
- Improve the quality of information
- Education and culture alignment



OPEN GOV

U.S. Open Government: Digital Strategy

Open Government Initiative
TRANSPARENCY + PARTICIPATION + COLLABORATION

OPEN GOV

About Open Government | Open Gov Blog | Open Government Partnership | Participation | Collaboration

Ultimately, this Strategy will ensure that agencies use emerging technologies to serve the public as effectively as possible. As a Government, and as a trusted provider of services, we must never forget who our customers are—the American people.

— President Barack Obama
05/23/2012



- Information-Centric
- Shared Platform
- Customer-Centric
- Security and Privacy



A dark blue world map is centered in the background of the slide. The map shows the continents in a slightly lighter shade of blue against a darker blue ocean. The title text is overlaid on the map.

U.S. Open Government

Best Practices and Lessons Learned

U.S. Open Government: *Global Partnership & Collaboration*

Open Government Partnership



"This is exactly the kind of partnership that we need Open government can help make countries more prosperous and more just."

- President Barack Obama, September 2011



OPEN GOVERNMENT PARTNERSHIP

U.S. Open Government: *Global Partnership & Collaboration*

Open Government Partnership

"I wish to reaffirm Mexico's commitment to this Initiative, to consolidate an Open Government close to citizens and responding to their needs in a swift, efficient and transparent manner."

-President Enrique Peña Nieto of Mexico



"We've got to give our full-throated support for the groups that support and promote transparency, not least the Open Government Partnership. This is a truly exciting institution. Rather than getting bogged down in endless communiqués, the Open Government Partnership is about concrete reform."

-Prime Minister David Cameron of the United Kingdom



"...OGP's greatest strength lies in its facilitation of the exchange of ideas, learning, and experiences on open and good governance."

- President Susilo Bambang Yudhoyono of Indonesia



Open Government: *Citizen Participation*



U.S. Open Government: *Public Engagement*



U.S. Open Government: *Transparency & Citizen Participation*

regulations.gov

Your Voice in Federal Decision-Making

Home Help Resources Contact Us

Search

Browse

Learn

Make a difference. Submit your comments and let your voice be heard.

SEARCH for: Rules, Comments, Adjudications or Supporting Documents:

Search

Advanced Search

What's Trending

Endangered and Threatened Wildlife and Plants: African Elephant (*Loxodonta africana*) Rule; Revision
Closed on Sep 28, 2015

Medicare and Medicaid Programs: Reform of Requirements for Long-Term-Care Facilities
Closing on Oct 14, 2015

Instructions on Filing a Submission to FAA for applications, petitions, exemptions, and any other items for which a...
Closing on Sep 30, 2015

Nicotine Exposure Warnings and Child-Resistant Packaging for Liquid Nicotine, Nicotine-Containing ELiquid (s), and Other...
Closing on Oct 24, 2015

Obstetrics and Gynecology Devices Panel of the Medical Devices Advisory Committee: Notice of Meeting
Closing on Oct 24, 2015

Comments Due Soon

Today (12)
Next 3 Days (72)
Next 7 Days (208)
Next 15 Days (400)
Next 30 Days (716)
Next 90 Days (1,074)

Newly Posted

Today (89)
Last 3 Days (152)
Last 7 Days (480)
Last 15 Days (1,053)
Last 30 Days (1,941)
Last 90 Days (5,876)

2015 Digital Innovation Summit

APIs for Developers

Browse by Category



Use the Browse tab to View Featured Regulations

DOS Regulations Twitter Page

OFFICE of INFORMATION and REGULATORY AFFAIRS
OFFICE of MANAGEMENT and BUDGET
EXECUTIVE OFFICE of the PRESIDENT
Reginfo.gov

U.S. General Services Administration GSA

Search: Agenda Reg Review ICR

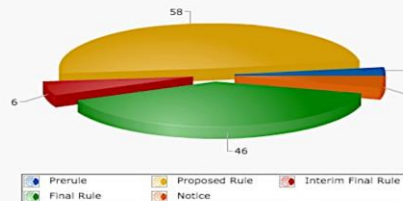
Home Unified Agenda Regulatory Review Information Collection Review FAQs / Resources Contact Us

AGENCIES WITH THE MOST REGULATORY ACTIONS CURRENTLY UNDER REVIEW



Total Pending Actions: 118

Pending Actions By Rule Stage



View By Rule Stage

The Reg Map

Informal Rulemaking

Step One

Initiating Events

Agency Initiatives
Congressional Requests
Executive Orders
Administrative Proceedings
Judicial Review

Step Two

Determination Whether a Rule Is Needed

Administrative Procedure Act Provisions
Required Reviews
Statutory Mandates
Recommendations from Other Agencies/External Groups/Opinion Federal Advisory Committees
Lawsuits
Petitions
OMB Prompt Letters

Step Three

Preparation of Proposed Rule

Proposed Rule
A notice of proposed rulemaking, including a description of the problem to be addressed, the objectives of the proposed rule, and the legal authority for the rule.

Step Four

OMB Review of Proposed Rule

OMB Review Under Executive Order 12866
OMB reviews all rules that are subject to EO 12866. OMB may recommend changes to the rule, or may recommend that the rule be withdrawn.

Step Five

Publication of Proposed Rule

Administrative Procedure Act Provisions
The Administrative Procedure Act (APA) requires that a proposed rule be published in the Federal Register. The APA also requires that a proposed rule be accompanied by a notice of proposed rulemaking.

Step Six

Public Comments

Comments
The APA requires that a proposed rule be accompanied by a notice of proposed rulemaking. The notice of proposed rulemaking must include a description of the problem to be addressed, the objectives of the proposed rule, and the legal authority for the rule. The notice of proposed rulemaking must also include a statement of the reasons for the proposed rule, and a statement of the benefits and costs of the proposed rule.

Step Seven

Preparation of Final Rule, Interim Final Rule, or Direct Final Rule

Final Rule
A final rule is a rule that is issued by an agency. A final rule may be issued in a number of ways. A final rule may be issued as a direct final rule, or it may be issued as a final rule after a notice of proposed rulemaking. A final rule may also be issued as a final rule after a notice of proposed rulemaking.

Step Eight

OMB Review of Final Rule, Interim Final Rule, or Direct Final Rule

OMB Review Under Executive Order 12866
OMB reviews all rules that are subject to EO 12866. OMB may recommend changes to the rule, or may recommend that the rule be withdrawn.

Step Nine

Publication of Final Rule, Interim Final Rule, or Direct Final Rule

Final Rule
A final rule is a rule that is issued by an agency. A final rule may be issued in a number of ways. A final rule may be issued as a direct final rule, or it may be issued as a final rule after a notice of proposed rulemaking. A final rule may also be issued as a final rule after a notice of proposed rulemaking.

Step Ten

OMB Review of Final Rule, Interim Final Rule, or Direct Final Rule

OMB Review Under Executive Order 12866
OMB reviews all rules that are subject to EO 12866. OMB may recommend changes to the rule, or may recommend that the rule be withdrawn.

Step Eleven

Publication of Final Rule, Interim Final Rule, or Direct Final Rule

Final Rule
A final rule is a rule that is issued by an agency. A final rule may be issued in a number of ways. A final rule may be issued as a direct final rule, or it may be issued as a final rule after a notice of proposed rulemaking. A final rule may also be issued as a final rule after a notice of proposed rulemaking.

UNIFIED AGENDA and REGULATORY PLAN

The Unified Agenda and Regulatory Plan provide uniform reporting of data on regulatory and deregulatory actions under development throughout the Federal government, covering over 60 departments, agencies, and commissions.

- The 2015 Spring Agenda was published on 5/21/2015

More about Agenda >>

REGULATORY REVIEW

Example: Step Nine directs agencies to prepare a statement of principles in rulemaking, a statement of alternatives and costs, and a statement of the role in the rulemaking

OMB Review Under Executive Order 12866
OMB reviews all rules that are subject to EO 12866. OMB may recommend changes to the rule, or may recommend that the rule be withdrawn.

More about Regulatory Review >>

INFORMATION COLLECTION REVIEW

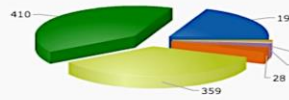
The Paperwork Reduction Act requires that agencies submit information collections for review to the OMB. The OMB reviews all information collections that are subject to the Act. The OMB may recommend changes to the collection, or may recommend that the collection be withdrawn.

More about Information Collection Review >>

WHAT'S NEW

OMB has added some additional functionality which we hope will help users with our site. We have added an ICR Dashboard. It displays a graphical representation of the Information Collection packages currently under review at OIRA. The ICRs can be viewed by agency, type of request, relationship to rulemaking, and length of review. Each

ICR DASHBOARD INFORMATION COLLECTIONS REVIEW PENDING BY TYPE



The Reg Map

The Reg map gives an overview of the informal rulemaking process.

Reg Map

Comment on Federal Rulemaking

Regulations.gov finds and submit comments on proposed regulations

regulations.gov

Citizens participate in the development of rules and regulations

Transparency : Government Spending



HOME ABOUT WHERE IS THE MONEY GOING REFERENCES DOWNLOAD CENTER CONTACT US

WHAT IS USASPENDING.GOV?

USAspending.gov is the publicly accessible, searchable website mandated by the Federal Funding Accountability and Transparency Act of 2006 to give the American public access to information on how their tax dollars are spent. Learn More...

OVERVIEW OF AWARDS - FY 2015

The federal agencies distribute funding through federal contracts, grants, loans, and other financial assistance. See the [Overview of Awards by Fiscal Year](#) trend graph for spending by all Fiscal Years.



*See explanation in Glossary

AWARDS BY STATE - FY 2015

Roll over map to see data. Click on state for more details.

State: California
Funds Awarded: \$212.71B
Number of Transactions: 357,110



Search Data by Keyword Search Site

Enter Keyword

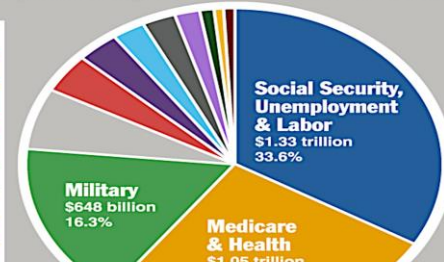
Advanced Data

Where the \$ are spent?

Where the \$ are spent?

Who is receiving the \$

Total Federal Spending 2015: \$3.9 trillion



LARGEST AWARDEES IN U.S. - FY 2015

Contracts	Grants	Loans	Other Financial Assistance *	
1. LOCKHEED MARTIN CORPORATION				\$14,168,583,109
2. MCKESSON CORPORATION				\$5,891,456,830
3. ELECTRIC BOAT CORPORATION				\$4,507,011,324
4. RAYTHEON COMPANY				\$3,578,729,174
5. THE BOEING COMPANY				\$3,518,650,124
6. UNITED TECHNOLOGIES CORPORATION				\$3,364,193,146
7. RAYTHEON COMPANY				\$2,562,136,103
8. BECHTEL GROUP INC.				\$2,527,282,331
9. LOCKHEED MARTIN CORPORATION				\$2,475,795,029
10. HUMANA MILITARY HEALTHCARE SERVICES, INC.				\$1,806,624,781

[Text View and More Details on All Contracts](#)

U.S. Open Government: *Transparency*

THE AMERICAN RECOVERY AND REINVESTMENT ACT

Recovery.gov is the U.S. government's official website that provides easy access to data related to Recovery Act spending and allows for the reporting of potential fraud, waste, and abuse.

Looking For ? HOME ABOUT ACCOUNTABILITY WHERE IS THE MONEY GOING? OPPORTUNITIES NEWS FAQs & RESOURCES CONTACT US

WHAT IS RECOVERY.GOV/ARRA?

This website was created under the Recovery Act to show the American public how ARRA funds are being spent by recipients of contracts, grants, and loans, and the distribution of ARRA entitlements and tax benefits. [Get Started >>](#)

OVERVIEW OF FUNDING

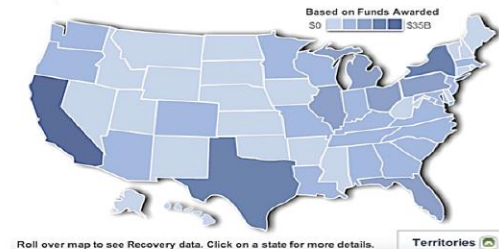
The American Recovery and Reinvestment Act of 2009 distributes funds in three ways. Since its enactment in February 2009, \$816.3B has been paid out.



Source | Text View of Funding As of 12/31/2013

FUNDING FOR FEDERAL CONTRACTS, GRANTS AND LOANS

February 17, 2009 - December 31, 2013



See Projects in your Neighborhood

Zip Go



MAP GALLERY

FEATURED STORIES



Some Recipient Data Being Removed

The Recovery Accountability and Transparency Board will sunset on September 30, 2015 and has decided for its last year not to renew the licensing agreement that allows for the display of certain recipient-related data.

Find out more about Some Recipient Data Being Removed >

[View All Featured Stories](#)



RECOVERY FUNDED JOBS REPORTED BY RECIPIENTS

63,565

October 1 - December 31, 2013

RECOVERY ON TWITTER

[recovery.gov/arra](#) | [rsnapare...](#)
[pic.twitter.com/rqJucQtXVL](#)



Expand

[View All Social Media](#)

Connect With Us [f](#) [t](#) [in](#) [p](#) [b](#)

Search Go

[Advanced Data Search](#)

HURRICANE SANDY FUNDING

An Official Website

Home About Accountability Where is the Money Going News

In November 2012 and January 2013, Congress passed two bills totaling approximately \$60 billion to assist states impacted by Hurricane Sandy. In the January bill, Congress authorized the Board to provide oversight of the funds going to Sandy recipients.

[Read more...](#)



First Audit On Hurricane Sandy
As Hurricane Sandy fund of Homeland Security Inc. managed.
[Find out more about First Audit](#)

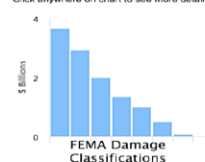
◀ ▶ 🔍

TWITTER



WHERE IS THE MONEY GOING?

Roll over bar chart to see funding details. Click anywhere on chart to see more detail.



CONTRACT AWARDS MAP

Click on map to see details.



[Report Sandy Fraud at the DOJ Hotline!](#)



WHAT IS RECOVERY.GOV?

The site, created by the American Recovery and Reinvestment Act of 2009, displays information about the Recovery Accountability and Transparency Board's activities, as well as data related to the \$840 billion stimulus bill and information about the distribution and spending of Hurricane Sandy funds.



GOVERNMENT ACCOUNTABILITY AND TRANSPARENCY BOARD

[View All Featured Stories](#)

U.S. Open Government: *Budget Transparency*

FOREIGNASSISTANCE.gov

EXPLORE

SEARCH

DOWNLOAD

LEARN

MAP OF FOREIGN ASSISTANCE
WORLDWIDE

SEARCH COUNTRIES

PLANNED OBLIGATED SPENT

\$33,680,468,000
PLANNED

Poland
\$11,000,000 PLANNED

CATEGORIES

AGENCIES



\$162,120,001 - \$3,100,000,000
\$43,623,001 - \$162,120,000
\$8,681,001 - \$43,623,000
\$1,320,001 - \$8,681,000
\$10,000 - \$1,320,000
No Funding

◀ 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 ▶



U.S. Open Government: Transparency

An Official Web Site of the United States Government

Thursday, April 07, 2011 | Text: A+ A- A | Share



HOME DATA TOOLS COMMUNITY METRICS OPEN DATA SITES GALLERY WHAT'S NEW



FOREIGN ASSISTANCE

Dynamic and user-friendly visualizations of foreign assistance budget data make it easier for U.S. citizens, partner country governments, other donors, and advocacy groups to understand and access information. The current website is the first step towards providing greater transparency into the breadth of the U.S. Government's foreign assistance activities.



Earthquake and Tsunami Datasets and Information

- Worldwide M1+ Earthquakes, Past 7 Days
- RadNet Map Interface for Near-Real-Time Monitoring Data
- Search other related datasets
- World Earthquake Interactive Map Demo

SEARCH OUR CATALOGS

Search our catalogs..

DATA AND APPS



- 379,949 raw and geospatial datasets
- 946 government apps
- 236 citizen-developed apps
- 44 mobile apps
- 172 agencies and subagencies

COMMUNITIES



Come explore, discuss, meet others in the same field, and develop the data and apps in the community that you care about. Join in the discussions by going to communities below that interest you.

OPEN DATA

SEMANTIC WEB

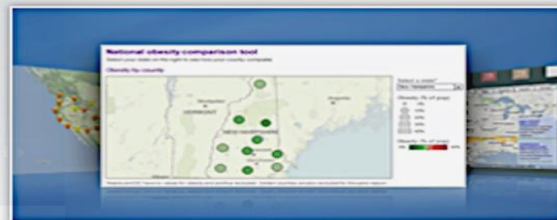
OPEN GOVERNMENT



Latest News: Japanese Earthquake Radiation Data

Real-time alerts and data related to the earthquakes off the coast of Japan and radiation levels in US.

DATA AND APPS



- 379,949 raw and geospatial datasets
- 946 government apps
- 236 citizen-developed apps
- 44 mobile apps
- 172 agencies and subagencies



Open Government: *Partnership & Collaboration*

Heat & Social Inequity in the United States

Heat & Human Health

I. Heat & Humidity

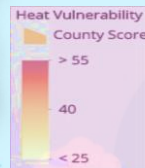
II. Social Vulnerability

III. Medical Access

IV. Physical Environment

V. Heat Vulnerability Score

1st Place Winner



CAUTION!
EXTREME
HEAT
DANGER

This series of maps examines one of the most significant public health risks posed by climate change: **heat vulnerability**.

The maps combine projections from global climate models with socioeconomic indicators of heat vulnerability to compare the complex and interconnected components of heat risk and resilience by county in the U.S.

Maps I to IV let you explore the determinants of heat vulnerability that compose your county's vulnerability to heat. Map V displays a new composite indicator developed by our team, the "Heat Vulnerability Score," to help identify counties most vulnerable to negative health impacts due to extreme heat.

The maps can be used to discuss climate change impacts on public health with doctors, nurses and other professionals in the healthcare sector. Public health officials can focus on a county of interest and identify key drivers of vulnerability as a starting point for planning and evaluation. The maps can also be used to engage the community and help improve preparedness ahead of heat events in the short- and long-term.

This application was developed by Four Twenty Seven, a climate change risk and adaptation consultancy.

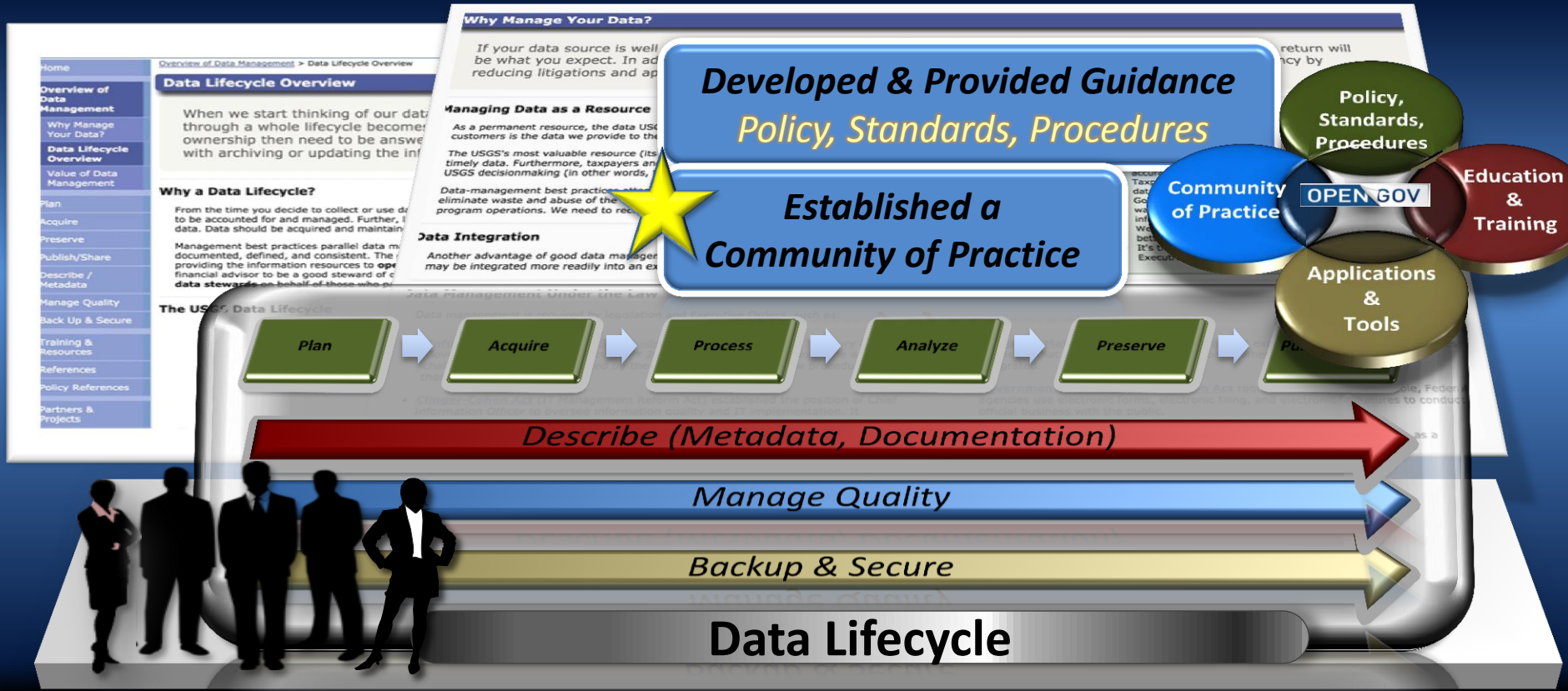


U.S. Open Government: *USGS Strategy*

- We have to have a **Framework for Open Government!**
- Requires a **Cultural Change**
- Will *Require Collaboration*
- Need to **Engage the Community**



U.S. Government : USGS Strategy



U.S. Government: *USGS Strategy*

Data Management Training & Resources

USGS Data Management Training Modules

Sponsored by the USGS Community for Data Integration and developed by a cross organizational and agency collaboration, these three [Training Modules](#) offer in-depth guidance on many of the topics covered on this Web site.



USGS Data Management Resources

The USGS Data Management Web site contains various resources, such as handouts, dictionaries, and the Data Management Association (DAMA) "Data Management Body of Knowledge", and DAMA Dictionary. The [USGS Data Management Resources](#) page contains links to all of these items, located all in one place for easy access.

Future Data Management Training

**Initial and Ongoing
Governance Awareness**

**Developed Resources
Education & Training**

**Developed, Implementing, Refining
Tools & Services**

Policy,
Standards,
Procedures

OPEN GOV

Education
&
Training

Applications
&
Tools

Community
of Practice

U.S. Open Government: USGS Data Sharing

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

U.S. Geological Survey Science Data Catalog

Search the Catalog | Featured Datasets | About | Help | Feedback | Data Providers (USGS Only)

(press ESC to close suggestions) [RSS](#) [Web Services](#) [Help](#)

Data Search

Limit search by location

Current Selection(s): 6 Results Found

Poland

Mission Area:
Environmental Health
Discover Catalog
Holdings provided by the
USGS Environmental
Health Mission Area

Filter By:

Keywords

- Geology (4)
- Oil shale resources (3)
- Petroleum (3)
- Earth Science (3)
- Resource Assessment (3)
- Gas (3)
- Natural Resources (3)
- Natural gas resources (3)
- Natural Gas (3)
- Economic geology (3)
- Oil sand resources (3)
- Oil (3)
- environment (2)
- Geologic age (2)
- Geologic Province (2)

[more](#)

Data Source

- USGS Energy Data Finder (3)
- Water National Spatial Data Infrastructure Node (1)
- USGS Geoscience Data Catalog (1)
- Mineral Resources On-Line Spatial Data (1)

Scientist

- National Minerals Information Center, U.S. Geological Survey (1)
- González, Elizabeth (1)
- Feliciano, Calix Saul Laboy (1)
- Faunt, Claudia C. (1)

Map and table of world copper

Data Source: Mineral Resources On-Line Spatial Data
Mission Area: Energy and Minerals
This map and table comprise information on 124 world copper smelters (2 of which are closed and 1 of which is under development) and 4 (low-grade solvent extraction-electrowinning) operations whose pr [more](#)

[html](#) [View Metadata](#)

Minerals Yearbook (with year and subject commodity or place)

Data Source: USGS Geoscience Data Catalog
Mission Area: Energy and Minerals
The Minerals Yearbook is an annual publication that reviews the mineral industry of the United States and foreign countries. It contains statistical data on materials and minerals and includes informati [more](#)

[html](#) [View Metadata](#)

Faults of Europe including Turkey (flt4_21)

Data Source: USGS Energy Data Finder
Mission Area: Energy and Minerals
This coverage includes arcs that describe faults found in the surface outcrops of bedrock of Europe including Turkey (Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyp [more](#)

[html](#) [html](#) [zip](#) [View Metadata](#)

Geologic provinces of Europe including Turkey, 2000 (prv4_21)

Data Source: USGS Energy Data Finder
Mission Area: Energy and Minerals
Begin Date: Unknown
End Date: Present

Scientist Credited for Work

Scientist

U.S. Department of Energy, U.S. Geological Survey, Department of Interior and the National Geophysical Data Center NOAA (535)

U.S. Geological Survey and the Department of Interior (405)

John C Nelson (279)

Steven E. Hanser (166)

Faunt, Claudia C. (90)

Michael E. Wiczorek (68)

Andrew E. LaMotte (68)

VeeAnn A. Cross (67)

John F. Bratton (55)

Jeffrey A. Coe (53)

Manuel Antonio Mota (52)

Robert C. Bucknam (52)

Runkle, Donna (47)

Lea, Alan (47)

Daniel T. Snyder (44)

Data, maps, imagery, models

Data Source

Airborne geophysical surveys: magnetic anomaly and gamma ray from USGS and NURE (1567)

Water National Spatial Data Infrastructure Node (1222)

Coastal and Marine Geology Program (1083)

USGS Geoscience Data Catalog (483)

USGS Energy Data Finder (467)

Upper Midwest Environmental Sciences Center Data (323)

Greater Everglades Ecosystem Restoration (SOFIA) (266)

Forest and Rangeland Ecosystem Science Center (241)

Earth Resources Observation and Science (194)

Mineral Resources On-Line Spatial Data (107)

National Wetlands Research Center (45)


Alaska Science Center (21)

Patuxent Wildlife Research Center (14)

Core Science Analytics and Synthesis (9)

Land Cover (9)

U.S. Open Government: *Participation & Collaboration*




USA npn
National Phenology Network

Taking the Pulse of Our Planet


ABOUT US ▾ PARTNER WITH US ▾ EDUCATE ▾ GET DATA ▾ PUBLICATIONS ▾

NEWS AND EVENTS ▾



Phenology and Climate Change


The ways in which the world is responding to climate change are not well understood. Phenology is a great indicator of current and future climate impacts on people, plants, animals and our natural areas.



SIGN UP FOR "THE CONNECTION" First Name

Our bi-monthly e-newsletter for partners covers new tools and research in


News



JOIN US FOR THE 8TH ANNUAL PROSE SYMPOSIUM
September 1, 2015


The 8th Annual Phenology Research and Observations of Southwest Ecosystems (PROSE) Symposium is now accepting paper and poster submissions. The Symposium will be held on Friday, October 16th at the University of Arizona (Tucson) Campus. This year PROSE will also kick off the USA-NPN Phenology Days Celebration!

[All News »](#)



nature's notebook

Whether you're an amateur or professional naturalist you can participate in our national, online program, NATURE'S NOTEBOOK. Observe plants and animals to generate long-term phenology datasets for scientific discovery.



Connecting People with Nature to Benefit Our Changing Planet

OBSERVE ▾ FOR GROUPS ▾ MORE WAYS TO CONNECT ▾



Contribute to Scientific Discovery

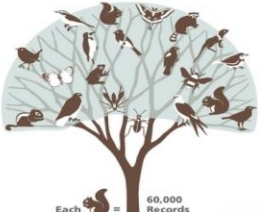
Nature's Notebook is emerging as invaluable tool that scientists and the public use for tracking the impacts of climate change.

Dr. Richard Primack, Boston University, Boston, MA

TRACKING Seasonal CHANGES IN PLANTS AND ANIMALS

We're hoping to collect 1.5 million observation records in 2015. Track our progress and help us reach our goal!

83% towards our goal



Each record = 60,000 Records

HOW TO PARTICIPATE IN THE PROGRAM


Become an observer in 3 steps:

- 1 Join the program
- 2 Set up your account
- 3 Go outside and observe!

[BECOME AN OBSERVER](#)




U.S. Open Government: *Participation & Collaboration*




USFWS Regions

More Info Source




USFWS Ecosystem Regions

Source




National Climate Assessment Regions

More Info Source



National Park Service Regions

More Info




ONTARIO


USGS

National Coordinating Office
July 14, 2015


Map data ©2015 Google Imagery ©2015 NASA, TerraMetrics, Esri




npn
National Phenology Network
Taking the Pulse of Our Planet



nature's
notebook




The USA-NPN Phenology Visualization Tool



Teachable Moments


Students in my classes benefit from the outstanding opportunity *Nature's Notebook* provides to share their data on plants and animal life cycles with a national audience.

- Dr. Heidi Steltzer, Fort Lewis College, Durango, CO



Nature's Notebook...


Nature's Notebook is a national, online program where amateur and professional naturalists regularly record observations of plants and animals to generate long-term data sets used for scientific discovery and decision-making.



Have Fun Outdoors


When I walk my dog, I take observations at the same time. She gets to sniff and I get to see the plants change over time, which is really amazing.

- Lise G., Portland, OR




Nature's Notebook

Join amateur and professional naturalists in regularly observing plants and animals to generate long-term data sets used for scientific discovery and decision-making.




Partner

Use phenology for your science and engagement efforts.




Researcher

Explore phenology data and publications.




Educator

Enrich your teaching with phenology.



Natural Resource Manager

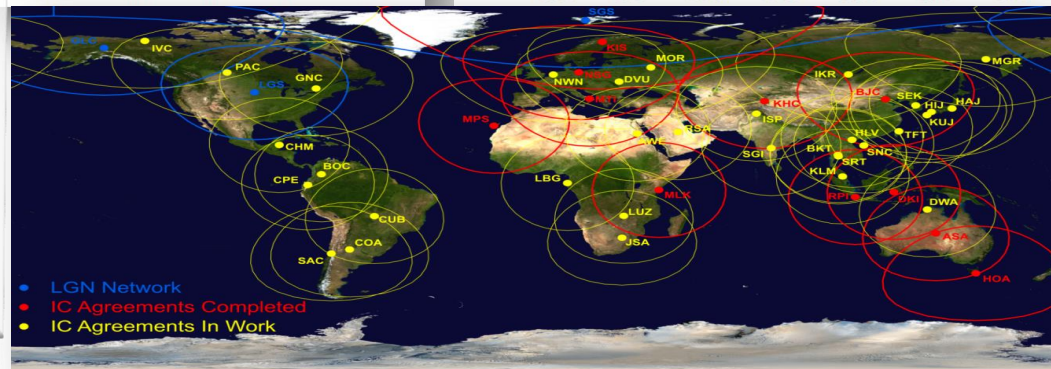
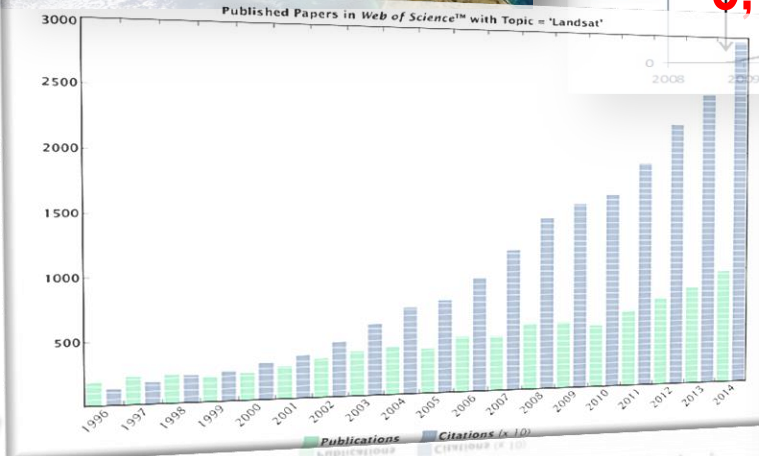
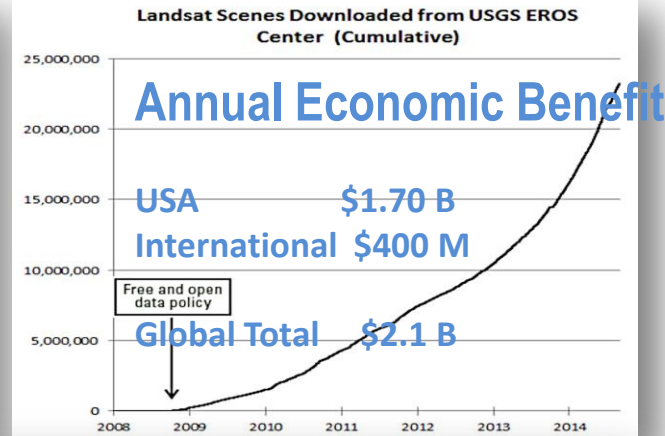
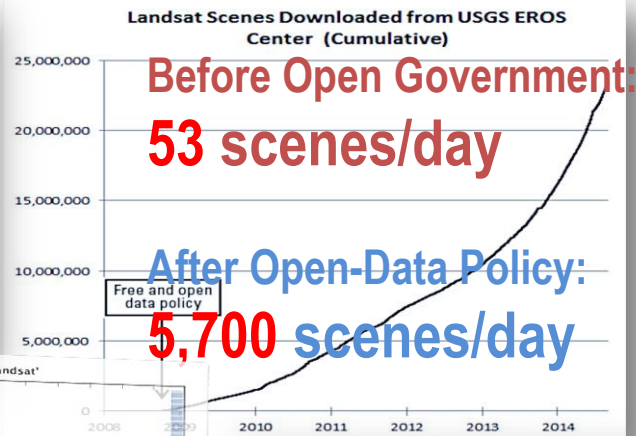
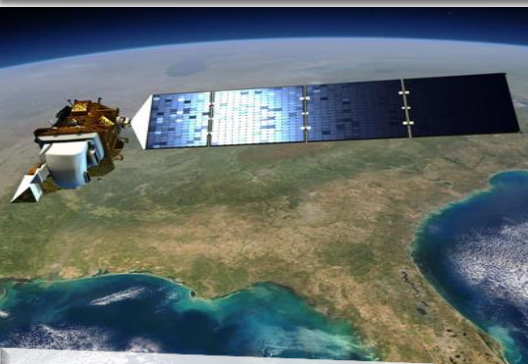
Improve decision making with phenology data and information.



Naturalist

Contribute to an exciting national effort.

U.S. Open Government: USGS Open Data



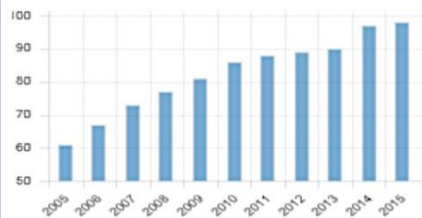
U.S. Open Government: *Global Partnership & Collaboration*



Number of Members (2015)

Africa	25
Americas	15
Asia/Oceania	17
C.I.S.	7
Europe	34
Total	98

Number of Members by year



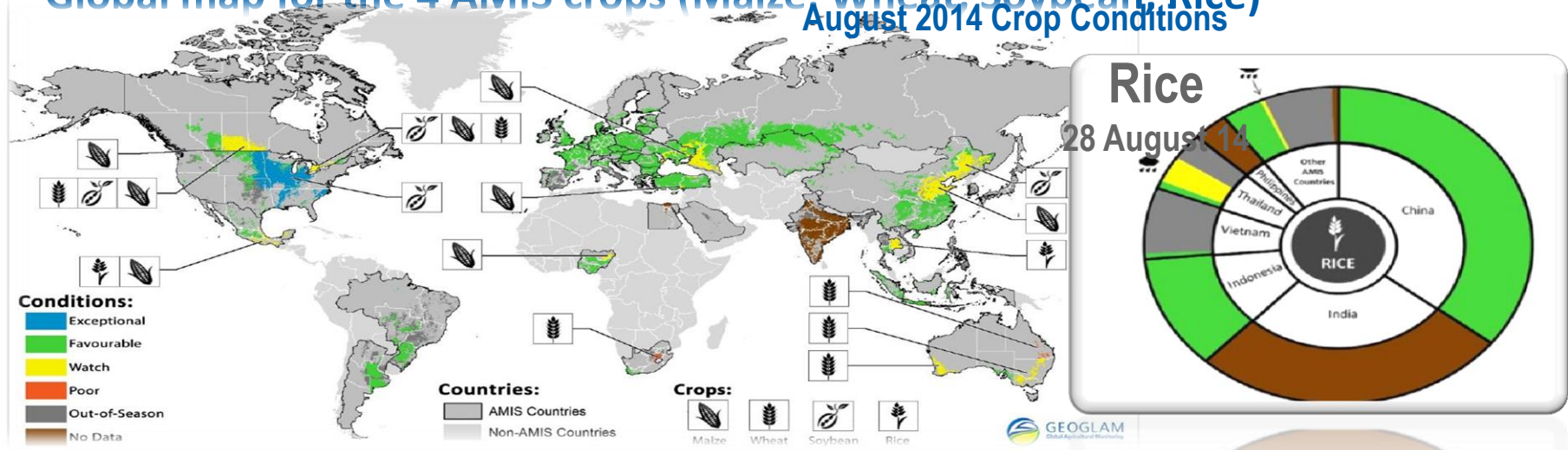
190 Million Global Assets

U.S. Open Government: *Global Partnership*



GEOGLAM Crop Monitor for AMIS

- Operational since September 2013
- 36 institutions, 22 countries + 7 international organizations
- Global map for the 4 AMIS crops (Maize, Wheat, Soybean, Rice)



The US Open Government Framework

*Establishing an Environment of Openness for
Societal Collaboration and Benefit*

Questions?

Eldrich “Rich” Frazier
Federal Geographic Data Committee
U.S. Geological Survey

