

• @martenhogeweg

Location Integrates Functional Areas...

Natural
Resources

Science/Modeling

Conservation

Land Management

Congestion

Pollution

Water

Biodiversity

Energy

Economic Recovery

Public Safety

Global Warming

Land Use

Population
Development

Urbanization
National Security
Humanitarian
Relief
Energy

Human Health

Logistics

Oceans

Education

Facility
Management

Environmental Protection

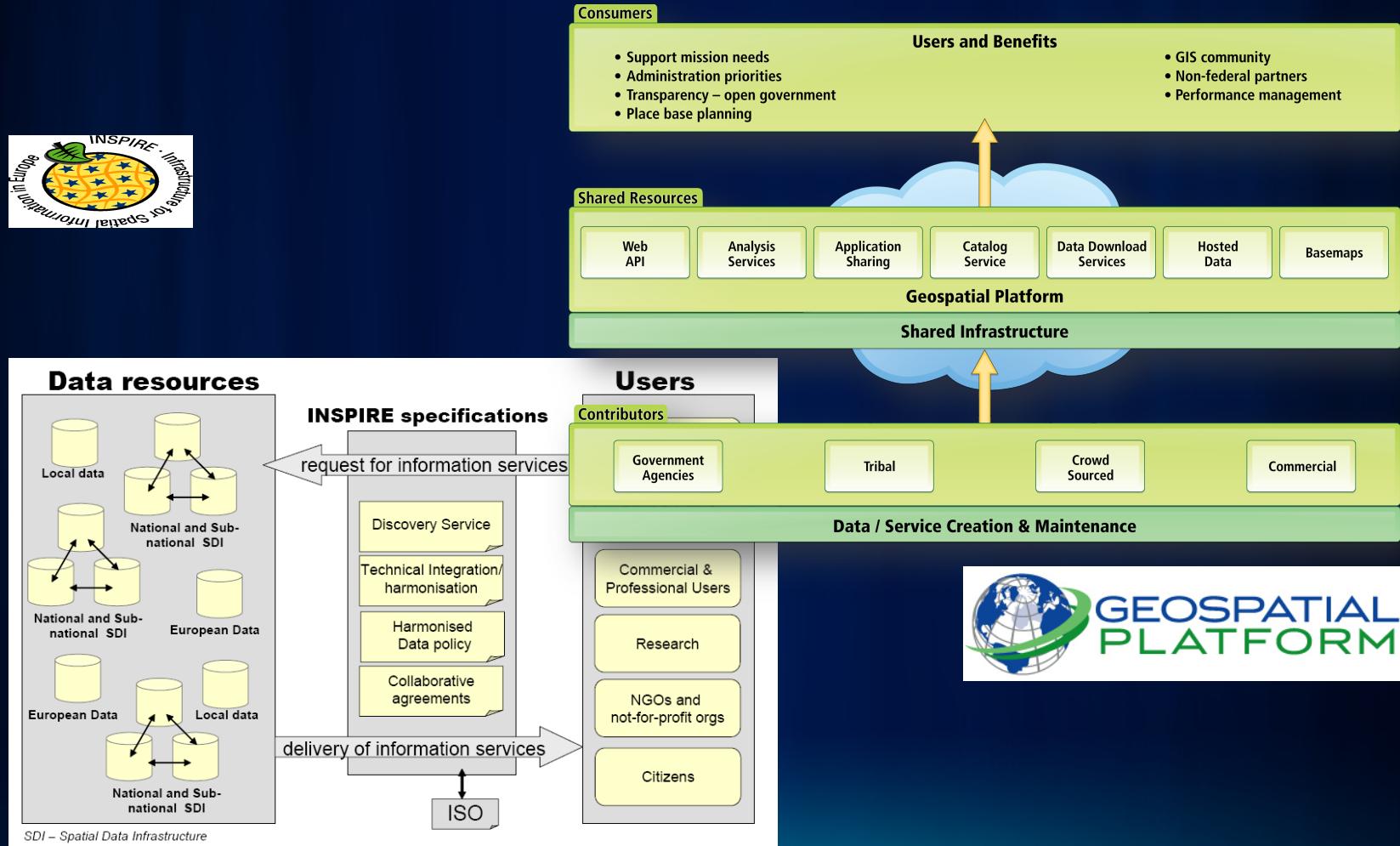
Law Enforcement

Emergency Management



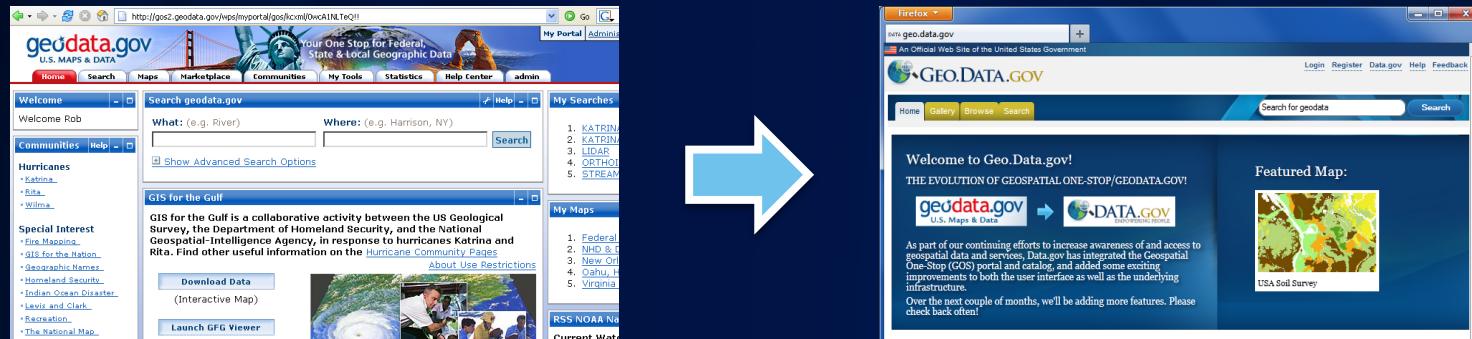
...at All Levels of Government...

...and Forces Governments to Share Data



Source: http://inspire.jrc.ec.europa.eu/reports/position_papers/inspire_ast_pp_v4_3_en.pdf

Geodata.gov > Data.gov > Geo.Data.gov



- 6/2003 Geodata.gov launched as e-Gov initiative.**
- 3/2009 Data.gov – promotes transparent government.**
- 6/2009 Data.gov connects to Geodata.gov web service and grows from 50 to 300,000 resources overnight.**
- 10/2011 Geodata.gov becomes Geo.Data.gov.**
- 7/2012 Geo.Data.gov includes 850,000+ resources.**

Open Government Gone Wild?

Need a place to stay?

The screenshot shows a Windows Internet Explorer window with the title bar "wildfire Mapping - Windows Internet Explorer". The address bar contains the URL "http://www.geospatialtraining.com/WildfireData/Index2.htm". The main content area displays a search result for "wildfire Mapping".

Holiday Inn Express Hotel
Accommodations in Orange Beach Call 800-261-9168 or book online.
www.hiexpress.com

Restaurant Loans
Restaurant, Bar:
\$5,000 to \$1MM In 5-7 Days. Must Be Open 6 Months
AdvanceRestaurantFinance.com

North American Wildfire Browser

A map of North America showing several active wildfire locations marked with orange flames. Labels on the map include AK, AB, MB, SK, ON, ID, MT, and BC. A legend on the right side of the map indicates "Ads by Google" for the Holiday Inn Express Hotel and Restaurant Loans.

InciWeb Incident Information System

Get the [Google Earth Feed](#)

Title	URL	Summary
Big Meadow Wildfire	Link	The Big Meadow Fire was a 90 acre prescribed fire that crossed containment lines and is now aggressive
Morris Wildfire	Link	The Morris Fire started at 4:27 pm on Tuesday, August 25, 2009 and is burning in steep and inaccessible

Open Government Made Useful



Recovery.gov Expenditures vs. Need



World Bank Projects



Visualize Data From Agency-specific API

Climate Change and African Political Stability Program

The screenshot shows a dashboard titled "CLIMATE CHANGE AND AFRICAN POLITICAL STABILITY". It features a map of Africa with various data points marked by circles of different sizes, representing vulnerability scores. The map includes labels for the Mediterranean Sea, Arabian Sea, Bay of Bengal, South Atlantic Ocean, and Indian Ocean. A legend at the bottom indicates the scale of the vulnerability scores. To the right of the map, there is a sidebar with sections for "AD", "GOVERNANCE", "CONFLICT", and "CLIMATE". A detailed description of the climate security vulnerability data is provided, mentioning sources like ACLED conflict events and the CCAPS climate security vulnerability model. A "Learn More" section contains five questions about climate vulnerability in Africa.

The screenshot shows the "World Bank Data Mapper" interface. The map displays Africa with red circles indicating GDP per capita values. The size of each circle corresponds to the GDP value for that country. The map also shows the outlines of countries and major bodies of water. A legend on the left side of the map provides options for filtering data by GDP per capita (constant 2000 US\$), constant LCU, current US\$, and growth (annual %). Navigation tools like zoom in, zoom out, and full extent are available at the top. The map is powered by Esri.

World Bank Data Mapper

HOWEVER: Open Data Comes In Layers...

- Data on Employee Desktops
- Scanned Reports without Data Access
- Sprouting API

The left screenshot shows a USGS ScienceBase-Catalog search results page for "colorado river". The search results include a map of Colorado with various locations labeled and a detailed publication record for "Hydrologic and climatic data bases used to assess potential effects..." (1992) by the U.S. Geological Survey. The right screenshot shows a Firefox browser window displaying a map of Washoe County, Nev., with a table of air-quality network sites and a corresponding map showing station locations.

TABLE 1A. Washoe County, Nev., Health Department air-quality-network sites

Date type: A: meteorological data of relevance to air-quality studies;
T: temperature; W: wind speed and direction; do: digital

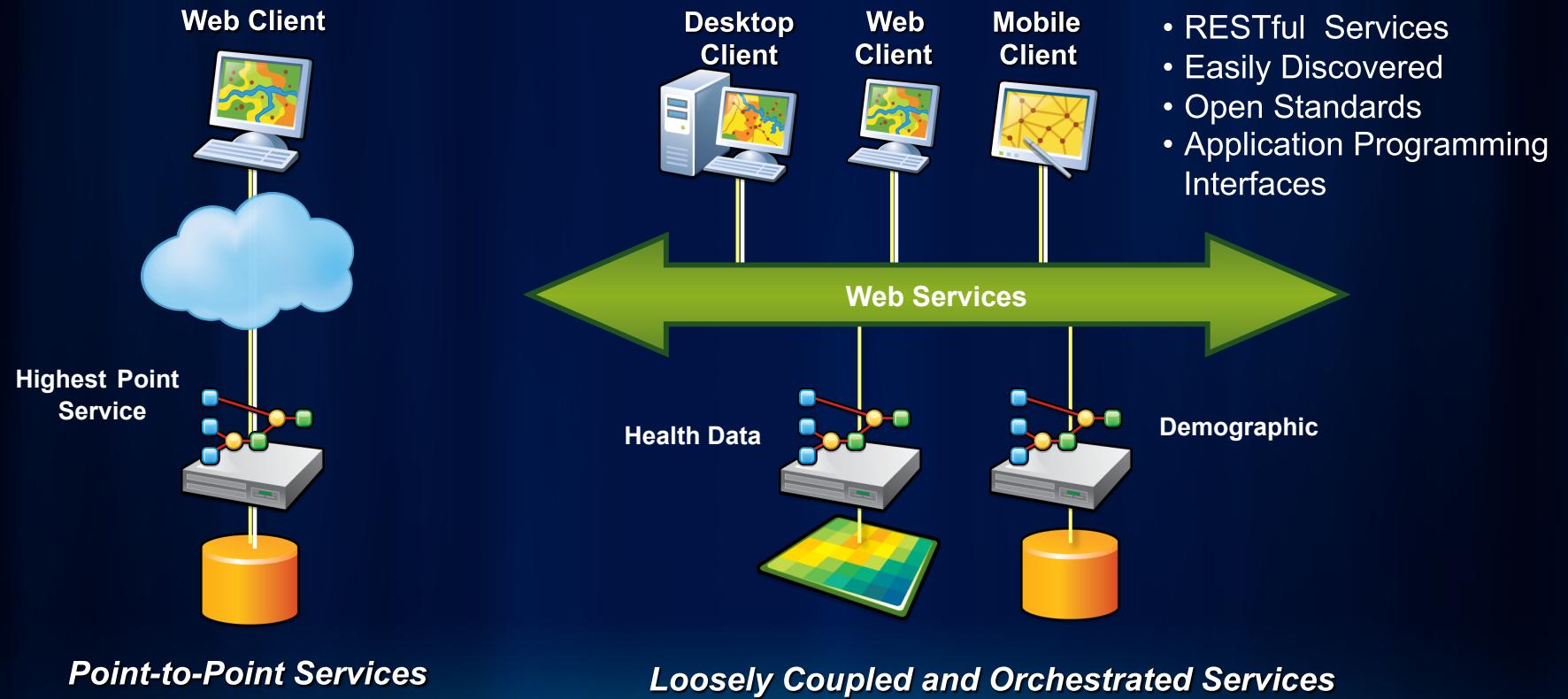
Station Name	N. lat. (degrees, minutes, seconds)	E. long. (degrees, minutes, seconds)	Site type	Data type
CWA	39 31 22	119 42 09	Meteorological	T,W
Garrison	39 31 22	119 42 44	do	T,W
Garrison MDC	39 31 22	119 42 45	Meteorological	T,W
Gravelly Mountain	39 31 48	119 42 30	do	A
Lakeview	39 19 48	119 50 11	Other	A
Maryevry	39 30 23	119 53 22	Meteorological	T,W
Mountain	39 31 48	119 48 01	do	T,W
Reno	39 31 48	119 48 03	do	T,W
Shoshone Mountain	39 28 16	119 48 17	do	T,W
Sherman	39 32 28	119 48 37	do	T,W
Sparks	39 32 28	119 48 37	do	T,W
Valley	39 32 28	119 48 37	do	A

Figure 1B. Washoe County, Nev., Health Department air-quality-network sites. (See table 1A.)

Can We Get Some Direction Please?



From Stove-pipe Applications to Platforms...



Opening Data Is Not Rocket Science

- Publish API:
 - FCC.gov, Aiddata.org, Worldbank.org, Recovery.gov...
 - Open Geospatial Consortium
 - Product API
- Find Geospatial Content At:
 - Data.gov/Geo.Data.gov
 - Geoplatform.gov
 - ArcGIS.com
- Bottom Line:
 - Web Services
 - Web Services
 - Web Services



Unlike Predicting the End of the World...

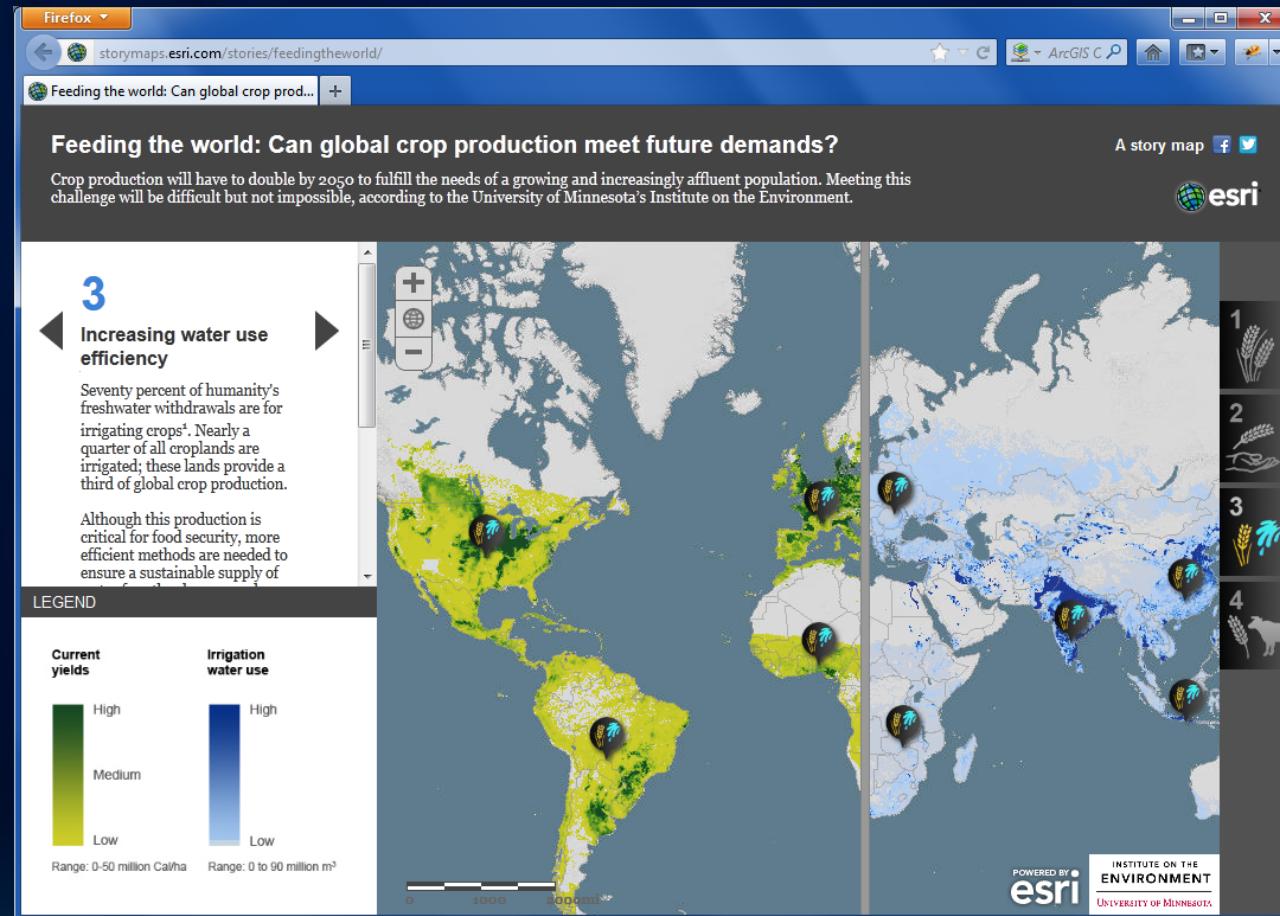
The Art of Open Data Visualization is in the API

- Simple
- Stable
- Forgiving
- Useful
- Meaningful



The Result: Informed Users

Telling Stories With Open Government Data



<http://storymaps.esri.com/stories/feedingtheworld/>