Big Data for Government Symposium

http://www.ttcus.com

Linkedin/Groups:
Technology Training Corporation

@TECHTrain
Using Big Data and Open Data for Innovation

Jeanne Holm
Evangelist, Data.gov
General Services Administration
November 20, 2013
Citizens and Businesses Need...

- Government to provide more and better information for
  - Transparency
  - Economic growth
  - Education and learning
Releasing and using open data is about empowering people to make better decisions
Open Government Initiative

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, 03/11/09
Executive Order -- Making Open and Machine Readable the New Default for Government Information

EXECUTIVE ORDER

MAKING OPEN AND MACHINE READABLE THE NEW DEFAULT FOR GOVERNMENT INFORMATION

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. General Principles. Openness in government strengthens our democracy, promotes the delivery of efficient and effective services to the public, and contributes to economic growth. As one vital benefit of open

Click Here to Access!
Open source government policy, technical guidance, and software

Citizen contributions to policy, code, and content

http://project-open-data.github.io/
Open Data is an Ecosystem
Community Starts With Trust
Open Exchanges with Citizens

Questions and answers at the new Open Data Stack Exchange

http://opendata.stackexchange.com/

Data jams and data paloozas at the White House
Connecting Over Social Media

github

skype

Twitter

Google+ 

Google Docs
100,000 Federal data collections
349 citizen apps
175 agencies
295 APIs
Easy to Find Data

210,912 datasets found

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 other...

2012 Preliminary Toxics Release Inventory data for the state of Massachusetts
U.S. Environmental Protection Agency — Preliminary Toxics Release Inventory Data. The Toxics Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical...

2012 Preliminary Toxics Release Inventory data for the District of Columbia
U.S. Environmental Protection Agency — Preliminary Toxics Release Inventory Data. The Toxics
**Powered Through Advanced Technologies**

- Provides developers tools
- Partnership with
  - W3C: eGov Community Group [http://www.w3.org/community/egovernance/](http://www.w3.org/community/egovernance/)
  - RPI for research in semantic web and open linked data
- Data hosted in the cloud
- Open source platform
- Builds on established ontologies
Local and federal data is available for you to jam with.
US Open Data at Cities, Counties, and States
Find Data Across Cities

<table>
<thead>
<tr>
<th>Name</th>
<th>Popularity</th>
<th>Type</th>
</tr>
</thead>
</table>
| Hospitals Community hospitals | 475 views | Provided by data.seattle.gov
| Hospitals in Seattle | |
| Hospital Geographic shape, shp, esri, hospital | 0 views | Provided by data.pasmorecity.gov
| ESRI Shp file of hospital locations. | |
| Hospitals Community health, hospital, emergency | 0 views | Provided by data.baltimorecity.gov
| This data set shows the location of Baltimore City hospitals. | |
| Hospitals in Hawaii Health hospital | 0 views | Provided by data.hawaii.gov
| Department of Health Hospitals listing | |
| Map Hawaii Hospitals Health hospital | 0 views | Provided by data.hawaii.gov
| Department of Health Hospitals listing | |
| Hospitals - KMZ Geographic kml, kmz, hospital, institution, health | 0 views | Provided by data.baltimorecity.gov
| KMZ file of hospital locations. | |
| Public Health Statistics - Diabetes Hospitalizations in Chicago, 2000 - 2011 Health & Human Services diabetes, hospitalization, chronic diseases | 84 views | Provided by data.cityofchicago.org
| This dataset contains the annual number of hospital | |
| Hospitals Provided by data.honolulu.gov | 0 views | Feature Service of Hospitals/Medical Centers within the City & |
| Public Health Statistics - Asthma Hospitalizations in Chicago, by year, 2000 - 2011 Health & Human Services asthma, hospitalization, respiratory, ... | 0 views | Provided by data.cityofchicago.org
| This dataset contains the annual number of hospital | |
Open Communities

<table>
<thead>
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<th>Community</th>
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<tbody>
<tr>
<td>Developers</td>
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<tr>
<td>Safety</td>
<td>✓</td>
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<tr>
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<tr>
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<td>Law</td>
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<td>Education</td>
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<td>Ocean</td>
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<tr>
<td>Manufacturing</td>
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<td>Business</td>
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<td>Ethics</td>
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<tr>
<td>Counties</td>
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<tr>
<td>Cities</td>
<td>✓</td>
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<tr>
<td>Agriculture</td>
<td>✓</td>
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<tr>
<td>+ many more...</td>
<td></td>
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</tbody>
</table>
Agriculture Drives Innovation and Saves Lives

[Image of website with text about agriculture and open data for agriculture]

Farmers’ Markets

iCow
Helping Others Through a Disaster
Hurricane Sandy

Early warnings save lives

700,000 downloads of a transportation app using data from Data.gov
Creating a Multi-Billion Dollar Industry
NOAA weather data + Air Force GPS services = $100B industry
Climate Corporation

How TWI Works

TWI generates a customized Weather Risk Report based on your 2012 production plan.

crop, location, soil type, and target yield

Get Your Weather Risk Report

Planting Rain
Excess Rain
Drought
Daytime Heat Stress
Nighttime Heat Stress
Low Heat Units / Freeze

Learn about key perils that cause crop loss for your specific county.

Target Yield
Uninsured
Insured

Break Even

You could lose most of your expected profit.

Your Insurance Gap
Find out how much of your potential profit is still uncovered and could be lost without any compensation.
Disruptive Innovations
Green Button and OPower

- Green button reaches 30 million homes to download their data
- OPower allows people to use this data to save money, manage appliances through mobile devices, and change behaviors
Creating Citizen Scientists
Be A Martian!
Age of Virtual Exploration & the Human-Robotic Partnership
Have you ever saved a life?
What if you could help save 7,000,000 lives?
Open Government Platform (OGPL)

Email, Github, Facebook, Drupal.org, and Twitter for discussion

https://github.com/opengovtplatform
http://www.opengovplatform.org
A Global Movement Has Begun to Provide Transparency and Democratization of Data

Don’t see your site? Update via @usdatagov
The Times They Are A'Changing

People

Knowledge

Problems

CHANGE AHEAD
Student Performance Data

As part of an ongoing transparency effort, the U.S. Department of Education released student performance data in.

JUNE 19TH, 2013

EDUCATION
A collection of **open data** from the government, private sector, and non-profits that are fueling a new economy.

**COMMERCe**

**GPS**
Real-time location for your apps and services using a space-based satellite navigation system.

**Weather**
Atmospheric measurements like temperature and precipitation.

**Census Data**
Current and historic population and economic indicators for the USA.
I ❤️ Developers
WELCOME TO THE SAFETY COMMUNITY

The Safety Community is where data and insight are combined to facilitate a discussion around and awareness of our Nation's public safety activities. Whether you are interested in crime, roadway safety, or safety in the workplace, we have something for you. Check out the data, browse and use the apps, and be part of the discussion.

Check out talks from the White House Safety Datapalooza

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Blogs/News

Safety.data.gov is a new open government initiative to increase awareness of and deepening insights into our Nation's public safety.

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Challenges

To maximize opportunities for education and entrepreneurship across a diverse set of public safety subjects, safety.data.gov has challenges.

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Forum

An early focus of safety.data.gov is bringing together public safety data from across the Federal government. For the first time ever, we
Building a federated catalog of national data
LINKED OPEN DATA

On the web
Machine-readable data
Non-proprietary format
RDF standards
Linked RDF

IS YOUR DATA 5★?
Let’s work together to set the data free!

www.Data.Gov
@usdatagov