FEMA Perspectives & Initiatives

Big Data for Government Symposium

March 6, 2013
FEMA Mission

FEMA’s mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Challenge

How can FEMA partner with the Whole Community to harness use of its data to support first responders and survivors?
OpenFEMA

Open FEMA aims to ensure the agency is providing timely, usable, and accurate information to constituents; specifically, this means providing data in a raw format to enable citizens, the private sector and non-government organizations to leverage the data in innovative and value-added ways. Most importantly, by proactively releasing information on an ongoing basis, it will be easier to operationalize live data in times of a disaster.

- **Priority Actions:**
  – Engage potential external partners interested in leveraging FEMA’s data to support first responders and disaster survivors
  – Engage potential internal agency partners to determine how the Open FEMA initiative can best enhance existing efforts to either release data or form external partnerships
  – Work to develop real-time feeds for FEMA data as the logical next step to posting static data sets
  – Create an /open page on fema.gov to provide a forum to engage external stakeholders, highlight data published on safety.data.gov, provide a mechanism to request data, and highlight external champions and successes
Fire Incident & Cause Data 2010 & 2011
- Partnered with USFA
- Posted 2010 Fire Incident & Cause Data on FEMA Media Library and Data.gov
- Facilitating the release of 2011 Fire Incident & Cause Data on FEMA Media Library and Data.gov
- Cross posting to Safety.Data.Gov
- Collaborated with external champion to create Fire Calendar Visualization

Other Key Next Steps
- Release of Hurricane Sandy Housing Assistance data for NJ & NY
- Launching www.fema.gov/open in March
- Looking into establishment of real time feeds (APIs)

The prototype Fire Calendar was developed by external champion Joni Graves from the University Wisconsin Madison. It allows the public to better understand major fire trends as they relate to safety and prevention.

To contact the OpenFEMA team email openfema@fema.dhs.gov
During Hurricane Sandy, Deputy Administrator Serino deployed an innovation team/think tank comprised of the whole of community that worked side-by-side with disaster survivors and Federal agencies to restore, rebuild and reinvigorate the communities of Red Hook, Staten Island, Brooklyn, Rockaways and Brighton Beach. This team built technology solutions:

- Mesh networks, community wifi, and increased bandwidth through Disaster Recovery Centers
- Communications solutions such as VSATs to improve cellular infrastructure, design mechanisms for streamlining the disaster survivor experience through re-thinking disaster recovery centers
- Community relations by getting iPads to FEMA corps members who individually registered residents in communities for assistance, and many other innovations still occurring.

Most importantly it brought the formal and informal channels together providing innovation as the vehicle to creating a whole of community response and recovery during Sandy.
GeoCONOPS

GeoCONOPS
- 5 year study provided by DHS
- 1000 Total Layers
  - 65+ FEMA-specific Layers
- Enter data once, view in multiple systems
- Information management

Common Storage
- Reduces operation and maintenance cost
- Enhances information sharing and distribution of work to Regions, IMATs, USAR, etc.
- Only limited by ideas, not technology

Dissemination
- Discovery
- Whole Community
- “Create your own” view
- Easily integrated in other mediums (i.e., mobile, web)
- FEMA GeoPortal Online

Business Process

Cloud
65+ Layers

Output
FEMA GeoPortal Online

Files are added to the Cloud
Program (non-GIS) Updates
“Lightweight” Tier
- Rapid
- Agile
- Collaborative
- Intuitive

“Heavyweight” Tier
- Robust
- Integrated
- Meets Statutory Requirements

Capture: E-Forms, Documents, etc.  Workflows
Collaboration  Document Management  Re-Use
Index/Search

Record?  Yes  No  Dispose
Retain

Index/Search  Records Management  Workflows
SAN  Back Up

FOIA  COOP  AUDIT
Questions & Answers
Appendix
GeoDissemination

Output

FEMA GeoPortal Online

Resource Center | Show: Web Content Only  | Help  | Sign in

HOME | GALLERY | MAP | GROUPS | MY CONTENT

Make a Map
Create a map that can be viewed in a browser, desktop or mobile device. Share it on a blog, via email, or embed it in a website.

ArcGIS Online for Developers
Build custom web and mobile applications that incorporate your maps and data.