

# 2012 INTERNATIONAL OPEN GOVERNMENT DATA CONFERENCE



## Geospatial Data Standards: Successes and Challenges in the US

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# A Long History of Partnership



- Federal Geographic Data Committee
  - FGDC Standards Working Group
- Geospatial-Intelligence Standards Working Group
  - Leads DoD / IC standards governance process
- Open Geospatial Consortium
  - Working with ANSI/INCITS, helps lead US engagement with ISO on Geographic Information / Geomatics

## Has Brought Us Far...



- Metadata content standards are robust and widely used
  - International (ISO) standard available, profiles for multiple types of data
- Great availability of accuracy, data exchange and web service standards

## A good start on content standards



- A growing number of data content standards have been developed / endorsed for use by USG (*Partial Listing*)
  - **FGDC**: Cadastral, Utilities, Wetlands, Thoroughfare/Landmark/Postal Address, Orthoimagery, Trails
  - **DoD**: Spatial Data Standard for Facilities, Infrastructure & Environment (SDSFIE v 3.0)

## Some Challenges...



- These processes and workflows are top-down and take time to complete
- **Does a “National Spatial Data Infrastructure” work without a full suite of data content standards in place and widely utilized?**
- What about crowdsourcing / VGI ??

## Here Comes Everybody...



- The use of geospatial information technology has exploded
  - Huge adoption of consumer mapping
  - Market growing at ~35% per year
  - Adding 330,000+ jobs from 2008-2018 (DoL)
- **In a world where millions (billions?) of people could / will be producing geodata, how do we make sense of everything coming in?**
  - Crisis Mapping, OpenStreetMap, Esri Community Basemap, Google Transit

# Good work is being done



- Open Geospatial Consortium
  - Sensor Web Enablement
    - Make all types of sensors discoverable, accessible and usable via web services
  - GeoSynchronization
    - Allows data collectors to submit / modify data without directly affecting master data store until validated
- EPA National Environmental Information Exchange Network  
([www.exchangenetwork.net](http://www.exchangenetwork.net))

# Summary



- Top-Down standards development and implementation processes are strong
  - But they take time to develop and subsequently, to adopt
- Growing body of work and experience in agile development and use of new standards
- *Ensuring that US participates in and leverages work from the best of both worlds*