



Federal Geographic Data Committee/ National Geospatial Advisory Committee

Geospatial Privacy Briefing

CIO Council Privacy Subcommittee Meeting
February 19, 2015

Overview

◆ Introductions

■ FGDC:

- ◆ Ivan DeLoatch - FGDC Executive Director
- ◆ John Mahoney - FGDC Senior Policy Advisor

■ NGAC:

- ◆ Kevin Pomfret – Executive Director, Centre for Spatial Law and Policy
- ◆ Doug Richardson - Executive Director, Association of American Geographers

◆ Geospatial Privacy

- Key Points
- Issues to Consider

◆ Conclusion

- Discussion/Next Steps



Federal Geographic Data Committee

◆ Established by OMB, Chaired by DOI

- 32 member agencies
- Advances the National Spatial Data Infrastructure (NSDI)
- Implements OMB Circular A-16 and Executive Order 12906

◆ Key Activities:

- NSDI Implementation
- National Geospatial Data Asset (NGDA) Management
- Geospatial Platform Implementation
- Geospatial Standards & Metadata
- Partnerships & Collaboration

NSDI Implementation



NGDA Management



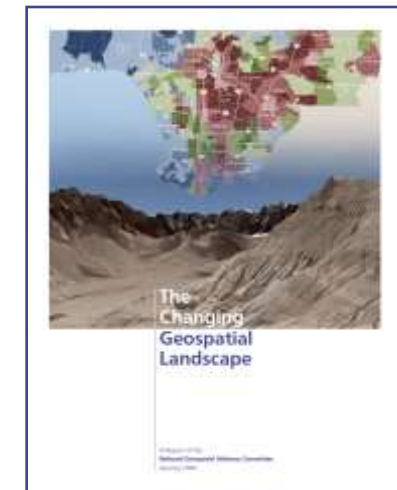
Geospatial Platform Shared Services



National Geospatial Advisory Committee

NGAC Products

- ◆ **FACA Advisory Body**
 - Sponsored by DOI, reports to FGDC Chair
 - Balanced membership – 30 members from all levels of government, private sector, non-profits, academia
- ◆ **Roles & mission**
 - Provides advice and recommendations on National geospatial policy & management issues
- ◆ **Current Activities**
 - NSDI Outreach/Communications
 - **Geospatial Privacy**
 - Crowd-sourced Geospatial Data
 - Landsat program
 - Elevation Data



Geospatial Technology and Information

Key Points:

- ◆ Geoinformation is critical to a wide variety of governmental, business, and societal needs – from homeland security to climate change, social networking, transportation, natural resource management, and many other purposes.
- ◆ Geospatial technology and services sector is a growing and important factor in the U.S. & global economies, driving significant benefits and providing high-wage jobs.
- ◆ A 2012 study* estimated the U.S. geospatial industry generated approximately \$73 billion in revenues and comprises over 500,000 high-wage jobs.
- ◆ U.S. Department of Labor recently identified the geospatial technology sector as one of the three technology areas that would create the greatest number of new jobs over the next decade.
- ◆ Geospatial data is often collected (and utilized) through partnerships involving multiple levels of government and other organizations



*Boston Consulting Group

Perceptions of Privacy are Changing...

St. Peter's Square – 2005



Luca Bruno/AP

...Creating a Location Privacy Paradox

St. Peter's Square – 2013



Michael Sohn/AP

Federal Government Increasingly Focusing on Geolocation Privacy

- ◆ White House released two “Big Data” reports in May 2014
- ◆ President's Council of Advisors on Science and Technology (PCAST) report:
 - Describes various types of geospatial technologies that collect born-analog data that contain “personal information”
 - The geospatial community relies on many of these for their products and services, including:
 - ◆ video from . . . overhead drones
 - ◆ imaging infrared video
 - ◆ synthetic aperture radar (SAR)
 - ◆ LiDAR, “precise geolocation in imagery from satellites and drones”



Federal Focus (cont'd)

- ◆ US v. Quattavarious Davis (11th Cir.)
 - Court finds reasonable expectation of privacy in cell phone location data
- ◆ AP reports that US Government health care website “leaks” personal information:
 - *“The scope of what is disclosed or how it might be used was not immediately clear, but it can include age, income, ZIP code, whether a person smokes, and if a person is pregnant”.*



Considerations: Geolocation Privacy Is Difficult to Define

- ◆ Federal Trade Commission (FTC)
 - Geolocation information is “sensitive” – but not defined
 - Children’s Online Privacy Protection Act – Recent amendment included “*geolocation information sufficient to identify street name and name of a city or town*” as protected information.
- ◆ Department of Energy
 - Proposed Voluntary Code of Conduct for Smart Grid
 - Protect “[a]ll geographic subdivisions smaller than a state, including street address, city, county, precinct, census block, zip code, and their equivalent geo-codes”;
- ◆ Federal Court Cases
 - US v. Jones – Does using a device to track a suspect in public places for 30 days violate 4th Amendment?
 - “Mosaic” theory – collection of location information over time



Considerations: Geoinformation is More Ubiquitous

Geoinformation is collected (or can be inferred) directly and indirectly, from many different sources and through a variety of means (sensors)

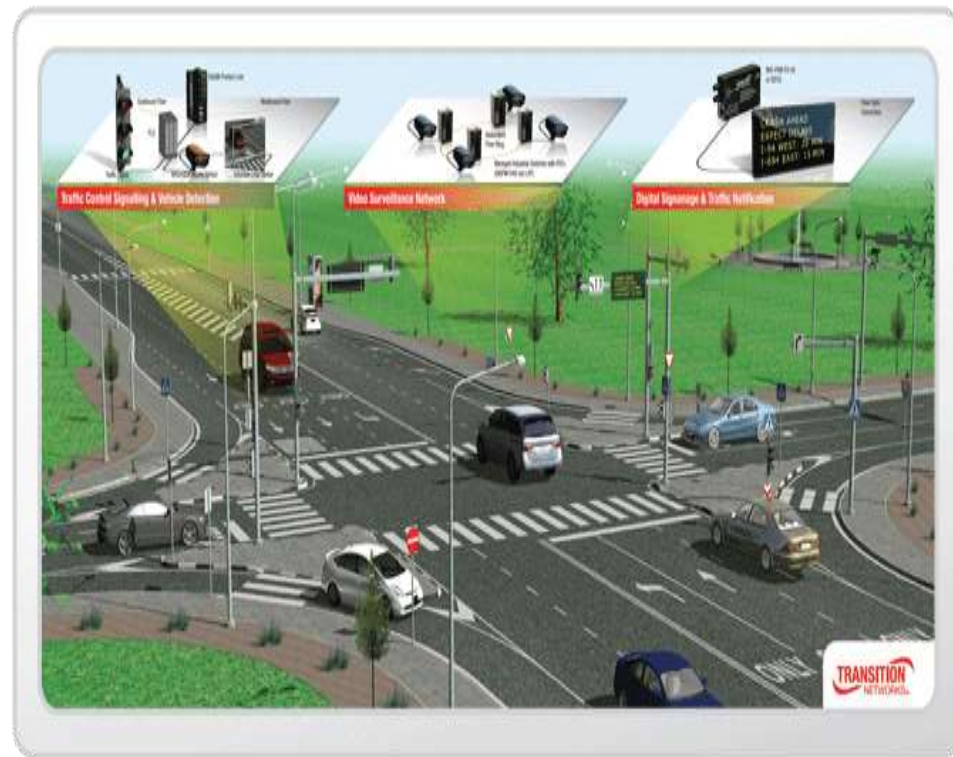
- Each time we go out in public, we share our location to strangers
- We would never disclose credit card information or medical records to them
- Can we regulate some collections but not others?



Considerations: Fragile Ecosystem

Government, industry and citizens are both providers and users of geoinformation

- They all collect, use and share geoinformation, often simultaneously
- Government relies upon private sector and increasingly the crowd to provide critical geoinformation
- Laws, policies, etc. that impact one segment will have a ripple effect throughout the entire geospatial ecosystem



Other Unique Characteristics of Geolocation From a Privacy Perspective

- ◆ Temporal component of geoinformation is often more important from a privacy perspective
- ◆ Location privacy concerns vary based upon age, gender, religion, culture, etc.
- ◆ Perceived privacy concerns involving geolocation information are much more varied
 - Range from stalking to spam texting



Concerns of Geospatial Community

- ◆ Embedded geospatial technologies and data are critical to existing and future functioning of the public sector, industry, and commerce
- ◆ Geospatial products and services are increasingly created using geospatial data from a variety of sources (Federal, State, local, Tribal, industry, crowd-sourced, etc.)
 - Different definitions of protected “geoinformation” will make it difficult and expensive to aggregate varying data sets.
- ◆ Regulatory or statutory changes affecting geospatial privacy, if not carefully crafted, could have significant adverse impacts
- ◆ Geospatial community has not been actively involved in policy discussions related to geospatial privacy



Conclusions/Next Steps

- ◆ Geospatial privacy is an emerging issue – needing collaboration & dialogue between privacy & geospatial communities
- ◆ Privacy community utilize FGDC/NGAC as a resource for input/reaction on geospatial privacy issues
- ◆ Identify points of contact in respective organizations
- ◆ Identify follow-up study questions/additional information needed
- ◆ FGDC/NGAC glad to brief individual agencies on geo privacy issues
- ◆ Invite CIOC privacy subcommittee to meet with FGDC



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