



Geo-location Privacy and National Security Issues Associated with Geospatial Information

International Workshop
on Legal and Policy Frameworks
for Geospatial Information

Nuku'alofa, Kingdom of Tonga
10-13 April



Objectives

- Understand current geolocation privacy issues associated with geospatial information.
- Understand homeland/national security issues associated with geospatial information.

PERCEPTIONS OF PRIVACY IN PUBLIC ARE CHANGING...

St. Peter's Square - 2005



Luca Bruno/AP

...CREATING A LOCATION PRIVACY PARADOX

St. Peter's Square - 2013



Michael Sohn/AP

White House Big Data report

- 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”
 - Many of these relate to geospatial information, including:
 - video from . . . overhead drones
 - imaging infrared video
 - synthetic aperture radar (SAR)
 - LiDAR,
 - “precise geolocation in imagery from satellites and drones”

Examples of Evolving Legal Framework Regarding Location

- E.U. General Data Protection Regulation (GPDR) will protect location data.
- U.S. Federal Trade Commission initiates enforcement actions against companies collecting geolocation information without consent.
- Legislation in Australia that would criminalize re-identifying an individual from de-identified data sets.
- Government agencies publishing industry-specific laws/guidelines regarding data protection.
- Law enforcements use of “stingray” technology and mobile phone tracking being challenged in courts and media.

Raising Concerns Over Traditional Geospatial Technologies

https://www.buzzfeed.com/peteraldhous/fbi-video-freddie-gray-protests?utm_term=.vvY167eEW#jrd078JA

Here's What FBI Spy Planes Saw In Baltimore Above The Freddie Gray Protests

Extended video footage provides an unprecedented window on the activities of the FBI's surveillance aircraft — and raises concerns about the monitoring of protests protected by the First Amendment.

posted on Aug. 5, 2016, at 2:40 p.m.

Peter Aldhous
BuzzFeed News Reporter

29 APR 2015 23:23:31 UTC+0:00

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... Could Be Significant

www.governmentcontractinsider.com/drones-to-satellites-should-commercial-aerial-data-collection-regulations-differ-by-altitude/#page=1

GovCon Insider

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September 1, 2015
Drones to Satellites: Should Commercial Aerial Data Collection Regulations Differ by Altitude?

by [Janna J. Lewis](#) and [Lauren R. Caplan](#)

The news and social media commentary of late reveals considerable discomfort with the idea that "drones," or Unmanned Aircraft Systems (UAS), could be used to collect images and data for commercial purposes. The idea that a flying machine — say, a 6-inch quadcopter equipped with tiny cameras — might track people or record images and data about their movements and habits strikes many as invasive.¹

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2:03 PM 12/5/2016

Privacy/Data Protection Constructs

- Privacy laws and regulations around the world are based upon Fair Information Practice Principles (FIPPs)
- Elements of FIPPs include:
 - **“identified” and “identifiable”**
 - Notice and transparency
 - Consent and use limitation
 - Access and participation
 - Integrity and security
 - Enforcement and accountability
- Applying FIPPS to geoinformation is hard

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Challenges: Unique Aspects of Geoinformation

- ▶ Much more difficult to define
 - Compared to other protected information - social security number, health records, credit information
- ▶ Temporal component
 - Present vs. historical?
- ▶ Cultural, gender, age, religious, social components
- ▶ **Location information is collected in many more ways**
- ▶ Privacy challenges are much more varied.
- ▶ We regularly provide our location to others.

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Impact: Geospatial 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 .**

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Homeland/National Security Issues

- Many geospatial technologies were developed for military/intelligence purposes.
- As a result, technologies are considered “dual-purpose”.
 - Data can be used for both good and bad.
- Military/Intelligence agencies have a big say on potential risks.
 - Governments often give deference
 - E.g. commercial remote sensing policies
- Geospatial community has to develop mechanism to balance benefits of geospatial with perceived risks.
 - Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns

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Discussion Items

- How concerned is your organization with geolocation privacy issues?
- What steps are you taking to protect sensitive (privacy, national security) geospatial information?

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