

# Neither Private nor Secure: Towards Sustainable Security

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# Privacy + Security = Zero Sum?

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Privacy and security often thought of as zero sum, mutually exclusive

**"Next, we'd like you to think about any loss of personal privacy air travelers may experience from going through a full-body scan or a full-body pat down. Do you think that loss of personal privacy is worth it or not worth it as a method to prevent acts of terrorism?"**

	<b>Worth it</b>	<b>Not worth it</b>	<b>Unsure</b>
	%	%	%
11/19-21/10	71	27	2



USA Today/Gallup, November 19-21, 2010





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### GOP Rep. Peter King On Boston Bombing: "We Need More Cameras"



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ANDREA MITCHELL, MSNBC: Congressman, briefly, do you think that this will lead to more cameras? I know it's controversial, there are privacy issues. Boston does have a lot of cameras. European cities, led by London, have the most. Are Americans going to have to get used to more surveillance on a daily basis?

**REP. PETER KING (R-NY):** I think we do because I think privacy involves being in a private location. Being out in the street is not an expectation of privacy. Anyone can look at you, can see you, can watch what you're doing. A camera just makes it more sophisticated, but it's no different from your neighbor looking out the window at you or a police officer looking at you walking down the street.

So, I do think we need more cameras. We have to stay ahead of the terrorists and I do know in New York, the Lower Manhattan Security Initiative, which is based on cameras, the outstanding work that results from that. So yes, I do favor more cameras. They're a great law enforcement method and device. And



# Unique in the Crowd: The privacy bounds of human mobility

SUBJECT AREAS:

APPLIED PHYSICS

APPLIED MATHEMATICS

STATISTICS

COMPUTATIONAL SCIENCE

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Received  
1 October 2012

Accepted  
4 February 2013

Published  
25 March 2013

Correspondence and  
requests for materials

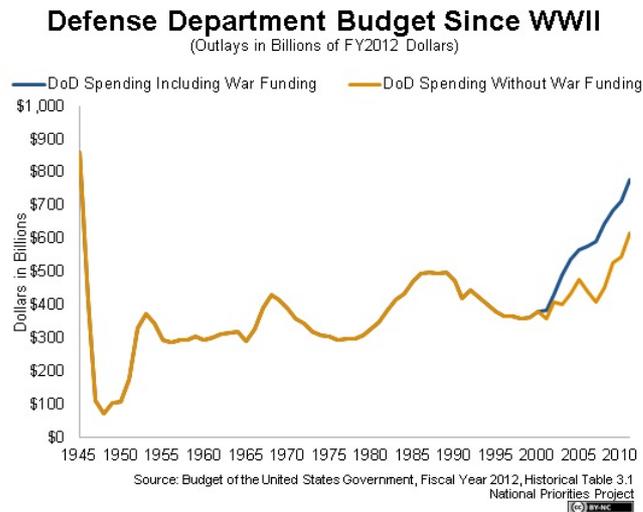
We study fifteen months of human mobility data for one and a half million individuals and find that human mobility traces are highly unique. In fact, in a dataset where the location of an individual is specified hourly, and with a spatial resolution equal to that given by the carrier's antennas, four spatio-temporal points are enough to uniquely identify 95% of the individuals. We coarsen the data spatially and temporally to find a formula for the uniqueness of human mobility traces given their resolution and the available outside information. This formula shows that the uniqueness of mobility traces decays approximately as the 1/10 power of their resolution. Hence, even coarse datasets provide little anonymity. These findings represent fundamental constraints to an individual's privacy and have important implications for the design of frameworks and institutions dedicated to protect the privacy of individuals.

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- ▶ So Americans (and Canadians, Brits...) will “give up” privacy, accept health risks, profiling, surveillance (“good idea”: 71%)
  - ▶ ...to “get” security
  - ▶ So we should examine what we get, whether it’s working, and is sustainable



# “Costs” of Security: what we pay

- ▶ An estimated \$1.2T annually:<sup>1</sup>
  - ▶ Military ~60% of federal budget, education 6.4%<sup>2</sup>



- ▶ \$791B on homeland security since 9/1
- ▶ 1 million “Top Secret” clearances for contractors
- ▶ 92 million classifications in FY2011, “trillions” of pages total<sup>3</sup>

<sup>1</sup>National Priorities Project

<sup>2</sup>Discretionary federal spending, FY2013

<sup>3</sup>Public Interest Declassification Board

# Is security working?

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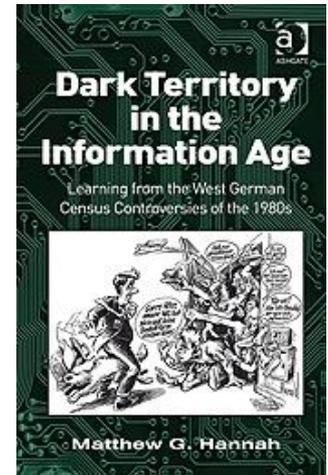
- ▶ **Outsourcing of security to private sector**
  - ▶ \$3.75 *trillion* in DoD contracts in last dozen years
  - ▶ Over 50,000 companies have contracts with DoD, I in every 2 zipcodes: “Alternative America” (Priest & Arkin)
- ▶ **Enrolling geographical research into securitization agenda, “weaponizing maps” (Denis Wood)**
  - ▶ Esri \$806m (\$437m from DoD), GeoIQ/Geocommons (CIA)
  - ▶ USGIF GEOINT Certificates, ABI, drone strikes...
- ▶ **Legal authorities, eg Patriot Act, CISPA, undermine civil liberties**
  - ▶ CISPA: “Eight critical problems...render the bill unacceptable” (Center for Democracy and Technology)\*
  - ▶ Obama DOJ Prosecution of whistleblowers exposing waste, illegalities



# What Can we Do?

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- ▶ Challenge state's presumptive right to knowledge (“epistemic sovereignty”—Matt Hannah), and informational asymmetries
- ▶ Refuse public/private distinction, as well as privacy/security
  - ▶ Especially at moment of data collection
  - ▶ Opt-in rather than opt-out (eg., only 1.6% of tweets are GPS'd)
- ▶ Have both citizens and the state “pay in” to “data producer collectives” reducing need to classify





**KH-9 Panoramic Camera Image of Tyuratam Missile Launch Site, Soviet Union, August 1984**



# What Can we Do?

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- ▶ Protect and reward whistleblowers, eg Bradley Manning
  - ▶ Support WikiLeaks and open government data advocates, EFF
  - ▶ Reduce government outsourcing to for-profit companies, democratize corporate data-sharing
  - ▶ Legal reform, eg, Electronic Communication Privacy Act
  - ▶ Understand and promote **sustainable security**
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Thanks!

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## Gen. Hayden: Boston-Style Attacks May Be ‘The New Normal’



Retired Gen. Michael Hayden, former Central Intelligence Agency and National Security Agency Director.

The former CIA chief said he has long feared that more numerous, less sophisticated attacks against the United States may be inevitable.

“This regrettably, if it does turn out to be al-Qaida based terrorism, might be the new normal,” said the intelligence expert who led the U.S. intelligence apparatus under former President George W. Bush. “I’ve been fond of saying that because of all the things that we’ve done well since 9/11, future attacks against the United States will be less complex, less likely to succeed, less lethal if they do succeed — but they’re just going to be more numerous.

