Biometric Performance: The DHS Perspective

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Know our enemies, understand ourselves: put the human in the equation

Central diagram with interconnected circles:
- Suspicious Behavior Detection
- Community Preparedness & Resilience
- Deter Predict Detect Respond/Defeat Mitigate
- Human Technology Integration
- Motivation & Intent
- Personal Identification Systems (biometrics)

Motivation & Intent
Enhance the capability of the Department to analyze and counter terrorist motivation, intent, and behavior.

Suspicious Behavior Detection
Improve screening by providing a science-based capability to identify unknown threats indicated by deceptive and suspicious behavior.

Personal Identification Systems (Biometrics)
Improve screening by providing a science-based capability to identify known threats through accurate, timely, and easy-to-use biometric identification and credentialing validation tools.

Community Preparedness & Resilience
Enhance preparedness and mitigate impacts of catastrophic events by delivering capabilities that incorporate social, psychological and economic aspects of community resilience.

Human Technology Integration
Enhance safety, effectiveness, and usability of technology by systemically incorporating user and public input.

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Drivers for the DHS Biometrics S&T Program

Prevent terrorists from operating effectively against U.S.

- Know who they are and what they are planning to do

- Impede their ability to recruit, train, obtain finances, acquire weapons (CBRNE), communicate and travel

- Disrupt their activities – surveillance, staging, rehearsal, attack – at all levels of the homeland security enterprise

- Remove dangerous people

Developing capabilities to consistently and positively identify those seeking entry into the U.S. is vital to this effort

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Drivers for the DHS Biometrics S&T Program

Prevent illegal entry of people, weapons or contraband into U.S.

- Deter those who would enter the country illegally or import contraband

- Encourage legal immigration and lawful, secure commerce

- Impede ability to cross border except at designated ports of entry

- Prevent admission of dangerous people while facilitating legitimate travel

Developing capabilities to consistently and positively identify those seeking entry into the U.S. is vital to this effort

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Drivers for the DHS Biometrics S&T Program

Protect continuity of systems fundamental to societal stability and security

- Impede the ability to disrupt or weaponize critical infrastructure

- Implement a cascading Federal/State/community/individual system of resilience through preparedness and integrated emergency management

- Ensure resiliency of functions critical to public health and safety, government and essential services

> *Developing capabilities to consistently and positively identify those seeking entry into the U.S. is vital to this effort*
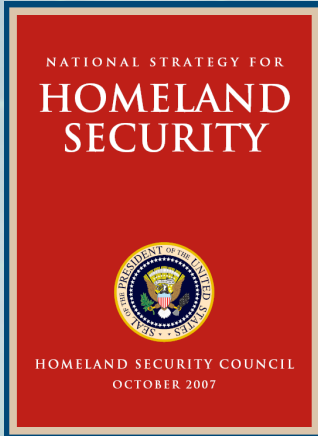
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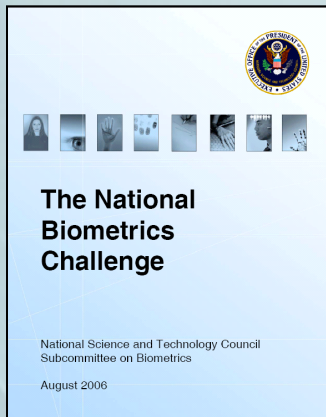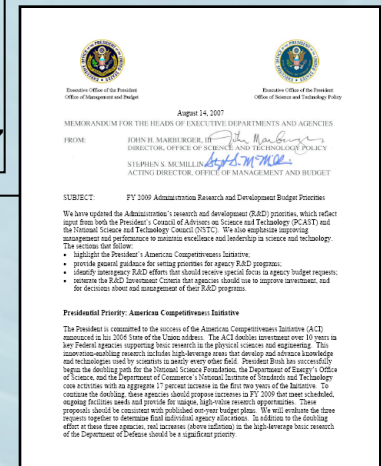
Drivers for the DHS Biometrics S&T Program

"In the face of resourceful terrorists, however, we must continue to expand the US-VISIT program's biometric enrollment from two fingerprints to ten fingerprints, as well as leverage science and technology to enable more advanced multi-modal biometric recognition capabilities in the future that use fingerprint, face, or iris data."
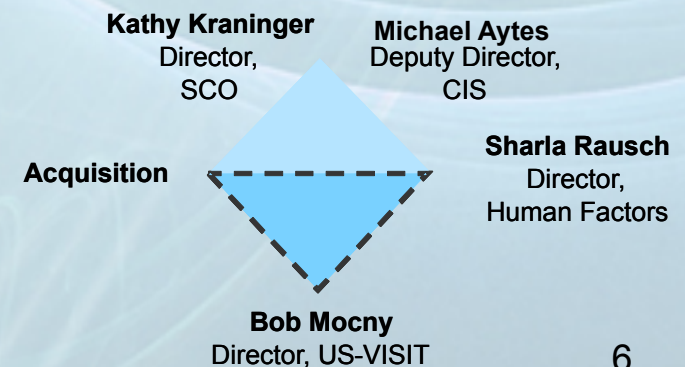
- National Strategy for Homeland Security, Homeland Security Council, October 2007

"…agencies are to place emphasis on the priorities outlined in The National Biometrics Challenge and the resulting agenda developed by the NSTC Subcommittee on Biometrics and Identity Management."
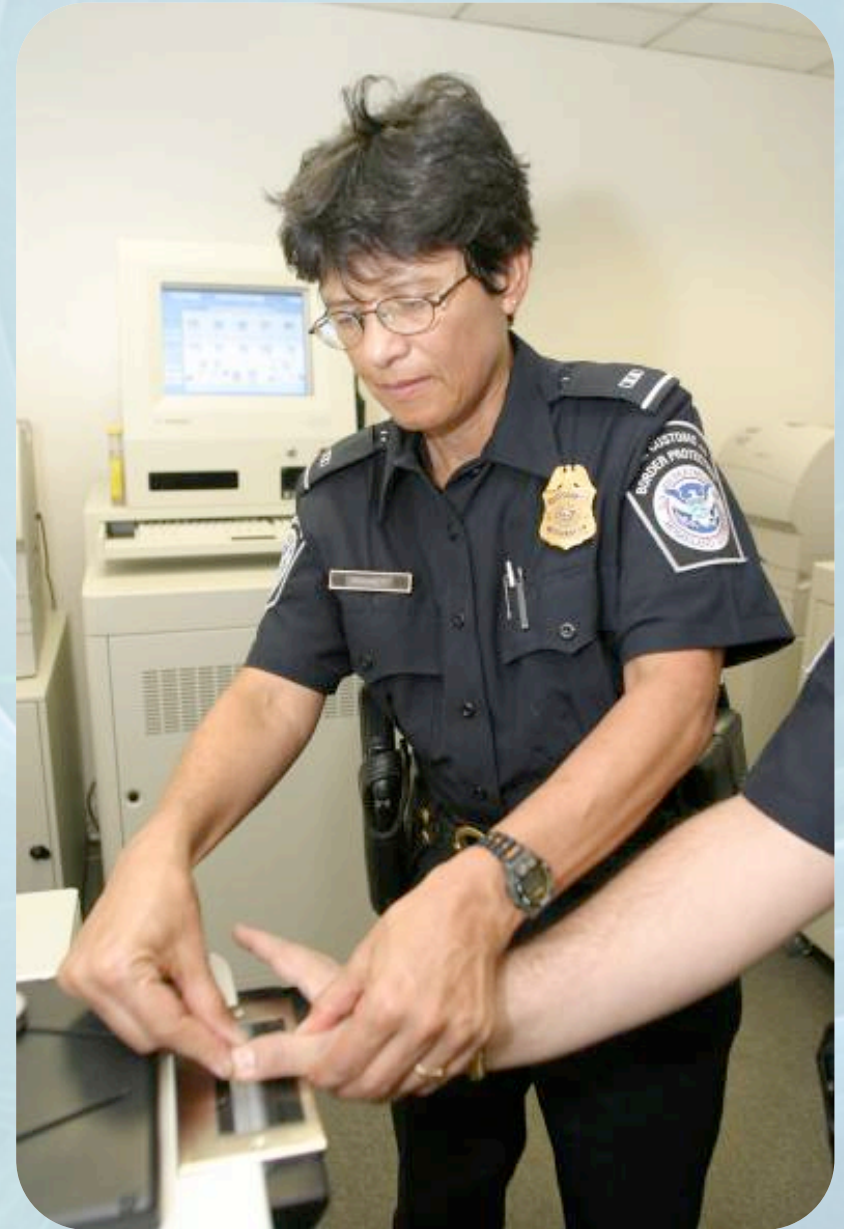
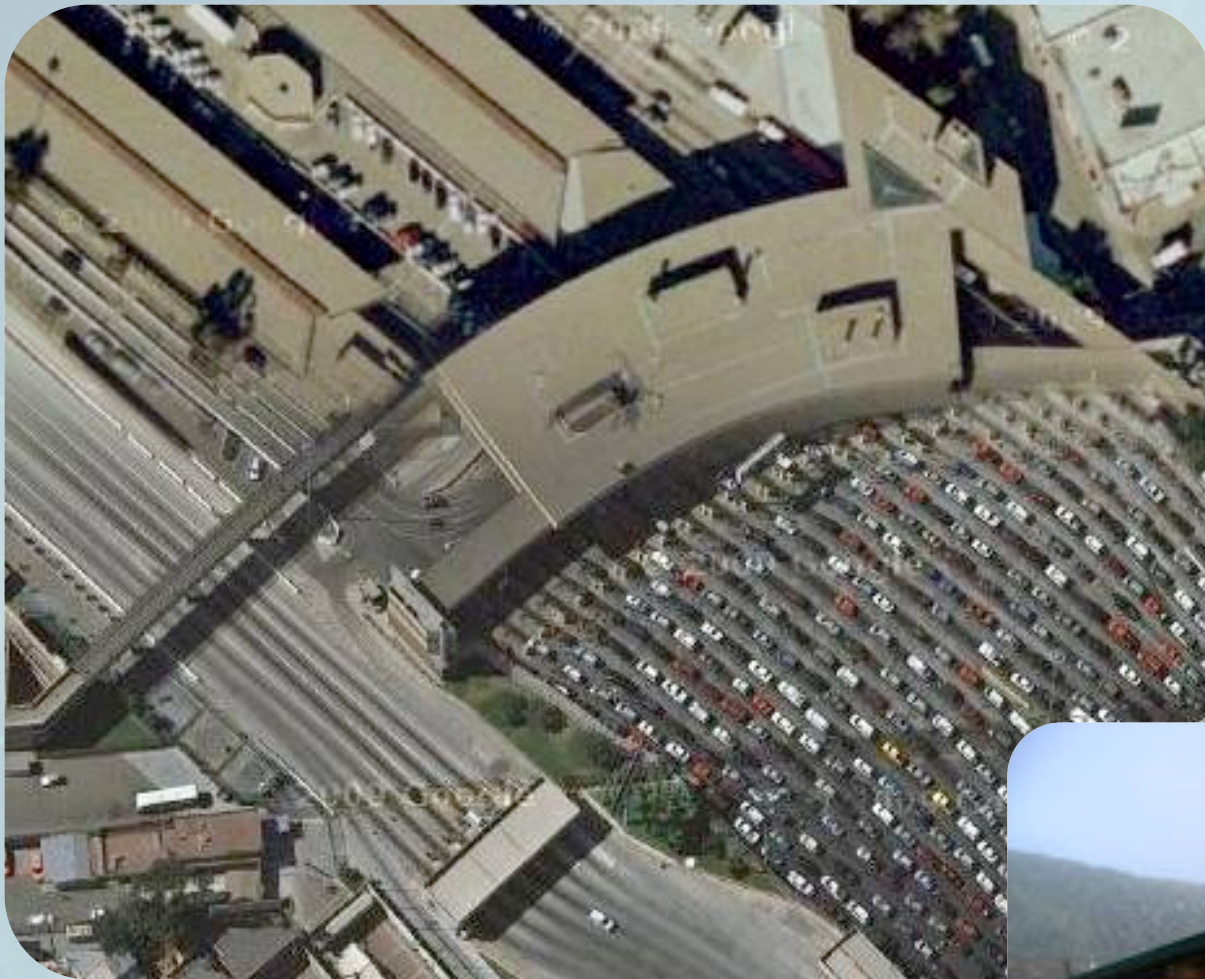**- OMB and OSTP FY2009 R&D Budget Priorities (www.ostp.gov)**

The National Biometrics Challenge

National Science and Technology Council Subcommittee on Biometrics

August 2006

THE WHITE HOUSE
PRESIDENT GEORGE W. BUSH

Homeland Security Presidential Directive 24 & National Security Presidential Directive 59

Biometrics for Identification and Screening to Enhance National Security

DHS People Screening IPT

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Acquisition

Sharla Rausch
Director, Human Factors

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Director, US-VISIT

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Biometrics: *DHS's Unique Challenges*

- DHS has some unique Biometric challenges for screening operations
  - Scale and diversity of screening sites
  - Accommodation of existing DHS practices
    - Workload, wait times and throughput
  - Harsh lighting and environmental factors
  - Extreme Outdoor Mobile Conditions
  - Non-cooperative users
  - Field-collected samples of mixed quality
  - Real-time access to match results across the DHS enterprise and interoperability with mission partners
- These challenges must be addressed for widespread deployment of biometrics

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