Square Miles: 279
Population: 917,000
Seasonal Pop
Background

Detention and Corrections Bureau

- Facial Recognition 2001
- Grant Funding
- Scott McCallum and Jake Ruberto

- Daily Inmate Intake
- Daily Population
- Yearly Inmate Intake
Background

PCSO Facial Recognition Components:
• *Corrections Processing* – Identification and Verification at Booking
• *Mobile Identification* – Street Level Identification
• *Investigations* – Investigative Browser Web Based Search Tool
• *Statewide FR Partnership* - to Authorized Users via FR-Net

2001 - 2008
✓ Implemented Facial Recognition enabled mugshot system
✓ Deployed web-based Image Query and Facial Search
✓ *Initiated Statewide data sharing expansion effort*
✓ Deployed Mobile Identification Systems (MIS)
✓ Contract with DoD Irregular Warfare Support Program
What’s Driving the Need for FR?

- Ease of capturing, storing, copying, and sharing images
- Proliferation of surveillance cameras, media, mobile phones, still and video camera capabilities
- Photographs and videos depicting victims, suspects, and eyewitnesses are becoming subjects of investigations

Face is the Most Collected Biometric
Why Facial Recognition

With other biometric solutions available, why FR?

- Face is the most collected Biometric
- Less constraint for sharing face data (Within law enforcement)
- Lack of physical evidence (Sometimes face is all we have)
- Interaction at safe distance.

Vein Pattern  Ear Pattern  Fingerprint  Iris  Hand Geometry  Gait  Vein Pattern
Forget fingerprints: New security technology tracks body odor

By Cheryl K. Chumley - The Washington Times

Friday, February 7, 2014

Fingerprints and iris scans — those are so 2013. The newest security technology to hit the lines of passport presenters takes an entirely different tack: odor.

Scientists in Spain say they’ve created an “electronic bloodhound” that can sniff out the identifying qualities of one human over another. And, they say, in The Daily Mail, their system is so accurate and simple that it could one day replace fingerprinting and iris scanning.
Facial Recognition Limitations

Affects Review
- Twins
- Aging

Will not work:
- Masks

Affects Performance:
- Poor Image Quality
- Significant Aging
- Sunglasses
- Facial Hair
- Plastic Surgery
Human role in making a match

Automated Face Recognition and obvious matching

YOU... determine what a match is...
PCSO has established a growing partnership expansion program Florida Sheriff's, Florida Department of Corrections, Fairfax Virginia NOVARIS, Drug Enforcement Administration and the Florida DHSMV.
Background 2009-Present

Florida’s Facial Recognition Network
Hosted by the Pinellas County Sheriff's Office

FACES
Face Analysis Comparison & Examination System

The Pinellas County Sheriff’s Office (PCSO) has implemented the largest Facial Recognition (FR) system dedicated to law enforcement and corrections in the country. PCSO’s FR project began in 2001 and has grown to include biometric components for identification and verification in booking processes, investigations and mobile identification. An expansive resource of image data is possible through multi-jurisdictional partnerships. PCSO provides open access to Image Query and authorized access to Facial Recognition via the FACES application.

*Preview the new FACES application, coming soon*

**Image Query**
Multi-jurisdictional image query and retrieval tool

**Investigative Browser**
Facial Recognition enrollment and search tool

**“Authorized Users”**

If your agency has a case where facial recognition may assist contact

Scott McCallum

Phone: 727-433-7191

*3/26/2014*
FR-Net available through CJNET

FR-Net is available through the law enforcement links section of CJNET

1500+ Florida LE users and growing
FACES: web-based FR search tool that can search against 28+ million faces from 40 sources.

PCSO administers FACES and grants open access to authorized trained users.

PCSO provides LE training of best practices for automated facial search and manual face comparisons.
FR-Net Partnerships & Expansion
Outreach and Access

Growth and expansion has driven the need for a collaborative forum.

In 2010 PCSO established Florida’s Face Recognition Network (FR-Net) with a purpose to inform the LE community on pertinent FR activities, educate users, demonstrate successes and collaborate via a quarterly newsletter.
ANOTHER STEP CLOSER TO ORWELL'S "1984"?

Smile. Seattle cops to use facial recognition software

March 14, 2014

(SEATTLE, WA) -- So you thought all those wonderfully clear photos of yourself, not to mention all the personal details of your life that you willingly plastered all over Facebook and lord knows where else would never come back to haunt you.

Facial recognition software is the new holy grail of the law enforcement (LE) business. It's this era's new fingerprint technology and all the badges want it bad -- from the feds down to your local cop shop in some areas.
Facial Recognition DMV Expansion Project

BIG CHALLENGE
Integration of civilian data into a law enforcement FR system.

Driver’s license data is paramount to LE investigations and identification processes.

*As of January 2013, entire state of Florida driver’s license and ID cards are available for search, which is close to 19 million images.
DHSMV provides a service to Pinellas to allow face recognition search against driver’s license.

All records remain with DHSMV for the pilot. No driver’s license records have been transferred to the Pinellas County Sheriff’s Office.

Pinellas submits an image for search against the DHSMV face recognition system.

DHSMV returns the face recognition result to Pinellas for review.
Privacy Concerns and Responsibilities

- Access to 19 million Civilian images
- System users
- Legal and ethical use of dataset
- Organizational oversight

- Checks and Balances
- Agency MOU
- Agency On-line Training
- User Agreements
- Bi-annual User Confirmation
- Non-use access termination
Florida Facial Recognition Network

- Network Users
  - 35 contributing Florida counties
  - 193 local, state and Federal partners with access
  - 3400 network users

- Images available for FR Search
  - PCSO-2,020,000
  - Partners-8,130,000
  - DHSMV-19,000,000

29,150,000 Images
Facial Recognition

Questions?

Face Analysis Comparison & Examination System
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