About Face: Facial Recognition Technology
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Assistant Chief Deputy, Pinellas County Sheriff’s Office
Facial Recognition Program Best Practices: Video Executive Summary
AAMVA formed the Facial Recognition Program Working Group by Charter under the oversight of the Law Enforcement and Driver Standing Committees.

Meetings were held during FY 2014 & 2015.

The deliverable (DVD) contains:
- The video executive summary, and;
- The Best Practices document

Available on the AAMVA web site.
Copies of the DVD will be available at the end of this session.
About Face: Facial Recognition Technology

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Safe Drivers • Safe Vehicles • Secure Identities • Saving Lives
About Face: Facial Recognition Technology

FR Program Best Practices Guide – Content Overview:

Chapter 1: Benefits of Using a Facial Recognition System

Chapter 2: Program Development and Enhancement

Chapter 3: Implementation & Operations

Chapter 4: Technology
FR Program Best Practices Guide – Content Overview (continued):

Chapter 5: Training

Chapter 6: Privacy

Chapter 7: Access and Sharing of Images

Chapter 8: Stakeholders, Collaboration, and Outreach

Chapter 9: Success Stories
About Face: Facial Recognition Technology

FR Program Best Practices Guide – Content Overview (continued):

Appendix A – Facial Recognition Survey Results

Appendix B – Model Legislation

Appendix C – Sample MOU

Appendix D – Sample Application for Requesting a FR Comparison

Appendix E – Working Group Roster
NJ/NY “IFPIC”

Interstate Fraud Prevention Initiative – CDLs

“IFPIC”

A Cooperative Effort of

The New Jersey Motor Vehicle Commission
And
The New York Department of Motor Vehicles
NJ/NY “IFPIC”

Thomas F. Flarity
Director of Security, Investigations and Internal Audit
NJ MVC

Owen J. McShane
Director of Investigations
NYS DMV
NJ/NY “IFPIC”

Interstate Fraud Prevention Initiative – CDLs
“IFPIC”

- NJ and NY DMV complete legacy FR scrubs – convert to Daily Scrub/Daily Research

- By March of 2014, both jurisdictions have shifted completely to permanent maintenance of “one person, one record” data base integrity

- In early Fall, 2014, NJ/NY states enter into discussions to take FR to the next logical step: Interjurisdictional /FR scrubbing.

- October, 2014, IFPIC is launched.

- **Commercial Driver’s License system objective:** “To increase highway safety and reduce crashes by ensuring that only trained and qualified drivers are approved to operate CDL-applicable vehicles”

- **The IFPIC objective:** “For NY and NJ To determine the degree to which identity fraud and jurisdiction ‘hopping’ phenomena have infiltrated the CDL model between the two states (despite National Driver Registry / Problem Driver Pointer System)”.

Safe Drivers • Safe Vehicles • Secure Identities • Saving Lives
NJ/NY “IFPIC”

**CDL Statistics/Dynamics**

- **NJ’s Active CDL inventory** – 235k CDLS
- **NY’s Active CDL inventory** – 550k CDLS

**NJ CDL fingerprinting/background check/security menu**

- **Federal and State Prints/Criminal Background**

- **School Bus Endorsement (23,289)** = Every 4 years (NJ Department of Education)
  - **Federal Prints/Criminal Background Only**

- **Hazmat Endorsement (16,565)** = Every 4 years (Transportation Safety Administration)
  - **State Prints/Criminal Background Only**
  
  - **Passenger Endorsement (Limousine, Bus Driver/61,144)** = Every 4 years (MVC)
    - **No Prints/No Criminal Background**

**Tanker Endorsement (80,542)**

**Double Trailer Endorsement (45,168)**

**DL with no endorsements**
NJ/NY “IFPIC”

CDL Licensing System Generally

- Apply for permit and identify desired endorsements (haz mat, passenger, etc.)
- 6 points of identification – (Here is where fraud intercepts the system)
- Medical Certification –
  - Intrastate carrier: one medical examination, subsequent annual self certifications;
  - Interstate carrier: bi-annual medical examination by approved physician / Nat’l Registry of Cert. Medical Examiners.
  - Results of required medical examination are recorded at DMV
  - Road test administered
- Interstate Compact/Nat’l Driver’s Registry Inquiry (initial/renewal)
- Upon successful completion of all steps, driver is licensed
Multiple Identities Between Jurisdictions

We identified a total of 62 cases where subjects have license records in both jurisdictions with different names, DOB’s and/or Social Security Numbers.
Multiple Identities Between Jurisdictions

Non Criminal Reasons For Matches

• Victims of domestic violence
• Legal Name changes
• Victims of Identity theft
NJ/NY “IFPIC”

Lessons Learned

• Images collected by different vendors interacted well.

• Review process took longer than anticipated.

• Direct access to the other states database made process easier and faster.

• Inconsistency with traffic convictions.

• Inconsistency with suspensions.

• The value of CDLIS
NJ/NY “IFPIC”

“FIRST EVER INTER-STATE USE OF FACIAL RECOGNITION TECHNOLOGY LEADS TO ARRESTS OF THREE COMMERCIAL DRIVERS FOR IDENTIFICATION FRAUD”

“New York State Department of Motor Vehicles (NY DMV) Executive Deputy Commissioner Terri Egan and New Jersey Motor Vehicle Commission (NJ MVC) Chief Administrator Raymond Martinez today announced the arrests of three individuals for filing false instruments and falsifying business records, both of which are felonies. New York and New Jersey are the first two motor vehicle agencies in the nation to share photographs for use in their respective facial recognition systems…….”
Florida’s Facial Recognition Network

Hosted by Pinellas County Sheriff’s Office

FACES

Face Analysis Comparison & Examination System
Pinellas County Sheriff’s Office
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 cameras, and capabilities
- Photographs and videos depicting victims, suspects, and eyewitnesses are becoming the subject 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.
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...
FR-Net Partnership Expansion

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

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

*727-453-7103*
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
FR Network of Users

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

FR-NET QUARTERLY
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.

If your agency does not have facial recognition capabilities and would like to partner with PCSO and the FR-Net, please contact FRNET@pcsosnet.com for information.
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.*
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
  - 40 contributing Florida counties
  - 220 local, state and Federal partners with access
  - 4857 network users
  - Average 27,420 searches per month-FY2015

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

29,150,000 Images
Major Sean Jowell
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Questions?

Or Follow-up with AAMVA

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  703-342-7459 / gslagle@aamva.org

• Brian Ursino, Director, Law Enforcement
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About Face: Facial Recognition Technology
Tomorrow:

Traditional Past Chairs’ Breakfast

Courtesy of U-Haul International

7:30 AM in Grand Ballroom B