



American Association of
Motor Vehicle Administrators

FACIAL RECOGNITION PROGRAM BEST PRACTICES



FACIAL RECOGNITION WORKING GROUP

AAMVA's Facial Recognition Working Group developed Facial Recognition Program Best Practices to offer recommendations to all Departments of Motor Vehicles (DMVs) having or beginning a facial recognition (FR) program. It offers an overview of facial recognition technology, and best practices for DMVs who already have adopted an FR program, and a blueprint for building an effective program for DMVs preparing to implement an FR program.

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Introduction

Identity fraud and theft account for an estimated \$24.7 billion in economic losses to consumers and business in the U.S. alone. Facial recognition technology—software that automates the process of photo image matching, or determining whether a person in one photograph likely is the same as in another—is used by the majority of U.S. and Canadian DMVs to prevent and detect fraud. It has proven effective in protecting vulnerable populations, enhancing public safety and detecting benefit fraud, identity theft and other crimes.

Facial Recognition Program Best Practices and Best Practices for the Deterrence and Detection of Fraud (March 2015) are intended to be used together to ensure fraud detection and remediation programs are as robust as possible.

FR programs have a wide variety of benefits, including:

- *Identity fraud/theft prevention* – The software minimizes the risk of duplication.
- *Internal fraud prevention* – Fraud often can be tracked back to a DMV staff member.
- *Clerical error minimization* – Error trends can be traced.

- *Improved highway safety* – Decreases the number of disqualified drivers on the road using false identification.
- *Benefit/financial fraud prevention* – Decreases likelihood of fraudulent employment and unemployment benefits collection (by-product fraud) scams.
- *Improved identification following disasters* – Assists medical personnel and coroner offices in identifying deceased, homeless, lost, disoriented or unconscious victims of a crash or natural disaster.
- *Law enforcement assistance* – Aids in criminal investigations.

Throughout 2010, 2011 and 2012, the New York DMV analyzed 12,300 cases involving drivers with multiple license records to determine if they posed a serious traffic safety risk on NY roadways. The study found that 67 percent had been involved in a crash (compared to 43 percent of all NY licensed drivers).

Program Development and Enhancements

Effective FR program development has five important stages:

- *Business Case Development* – DMVs complete feasibility studies, conduct legislative assessments, determine fiscal needs and policy requirements, complete procurement and plan stakeholder outreach.
- *Project Planning* – DMVs create a common understanding of the project’s objectives for key stakeholders and a project roadmap broken into stages with measurable goals: (1) develop business, functional and technical requirements, (2) identify risks, (3) plan for data conversion.
- *Implementation* – Careful execution will consider software development and delivery, IT infrastructure construction, and staff preparation and rollout.
- *Deployment* – Jurisdictions can launch a smaller pilot program prior to full system deployment, giving them a chance to test effectiveness and discover flaws, or a full

As of the printing of this document, 47 of 69 North American jurisdictions have implemented some form of FR technology in their motor vehicle agency, despite opposition from civil liberties groups and privacy advocates.

system deployment with immediate program-wide benefits but a potential for decline in customer service.

- *Maintenance* – This includes technology upgrades and troubleshooting and may be managed by a vendor or by the jurisdiction’s IT staff.

Implementation and Operations

Jurisdictions should consider the following best practices regarding implementation and operations:

- *Legacy Cleanse/Scrub* – A legacy photo cleanse, or “scrub,” is the process of performing a 1:N identification for every image in the DMV database, giving DMVs the ability to identify and cleanse data errors and identify past and potential fraudulent acts.

Detailed best practices related to legacy cleansing/scrubbing, staffing considerations, exceptions processing, thresholds, reporting/trending, operational reports, analytical reports and auditing can be found in Facial Recognition Program Best Practices, pp. 14-16.

- *Staffing Considerations* – An FR program requires significant personnel, including experienced analysts and investigators, preferably with a variety of ethnic backgrounds.
- *People and Processes* – FR technology incorporated into a credential issuing system works best when a centralized issuance structure is established.

Technology

Incorporating the right technology is critical to the success of an FR program. Major considerations include understanding how FR technology works, standards, recommended data elements, data formatting, technology limitations, performance metrics, image capture consistency, image compression, search engine technology, devices and equipment, and networks/bandwidth/communication. For more detailed recommendations regarding FR technology considerations, go to *Facial Recognition Program Best Practices*, pp. 21-31.

FR programs often compress facial images for data storage efficiency purposes, but the degree and method of compression can minimize typical data loss. For more information, go to www.jpeg.org.

Training

Comprehensive and ongoing training is required for various levels of staff and management, including additional training for external users. Topics should include technology limitations, ethical use and

Appendices C and D of Facial Recognition Program Best Practices contain a sample Memorandum of Understanding and a sample Application for Requesting an FR Comparison.

privacy, processes and procedures, user access and security, application usage, comparing faces, specialized facial comparison,

case management, photo requirements, biometric technology, systems and software, refresher training as needed and prosecutor training.

Privacy

It is imperative that DMVs address the privacy concerns of our citizens, including by developing strict use policies, implementing ethical and confidentiality policies and agreements, and conducting regular program audits. The United States and Canada have different laws addressing privacy.

Access and Sharing of Images

Sharing of FR data can play an important role in public safety by creating a stronger relationship between law enforcement and DMVs. Only certain data elements that may be shared with approved external entities and strict agreements, policies and guidelines must be in place to ensure security.

Stakeholders, Collaboration and Outreach

Stakeholders (law enforcement, legislators, prosecutors, agency directors, public health and benefit agencies, etc.) should be identified early in the pre-planning stages and invited to participate in the development of laws, policies and procedures, as well as continued communication throughout implementation and beyond.

For examples of successful jurisdictional and cross-jurisdictional partnerships, go to Facial Recognition Program Best Practices, pp. 44-48.

Conclusion

If planned, implemented and maintained effectively, facial recognition software can help DMVs and other stakeholders better prevent, detect and prosecute fraudulent crimes. By addressing and implementing the guidelines outlined in *Facial Recognition Program Best Practices*, DMVs increase the success of their programs.

About AAMVA's Facial Recognition Working Group

Facial Recognition Program Best Practices was developed by AAMVA's Facial Recognition Working Group. Members include DMV administrators, fraud prevention professionals, biometrics technology company representatives and law enforcement officials from across North America.

**safe drivers
safe vehicles
secure identities
saving lives!**



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