



Deval L. Patrick, Governor
Richard A. Davey, Secretary & CEO

massDOT
Massachusetts Department of Transportation

September 2, 2014

Nashwa Gewaily
ACLU of Massachusetts
211 Congress Street
Boston, MA 02110

Re: Public Records Request/personal information dissemination and facial recognition procedures

Dear Attorney Gewaily:

The Registry of Motor Vehicles responds to your request for public records as follows:

Request 1: All records, including written communications, legal memos, memoranda of understanding, training materials, and operating procedures, describing the dissemination, sharing or disclosure of personal and biometric information to or with the National Counterterrorism Center. This includes the Center's Directorate of Terrorist identities.

Response 1: There are no records responsive to this request.

Request 2: Any written communications, including memoranda of understanding or agreement, between the RMV and the FBI relating to the use of facial recognition technologies or the dissemination of licensee photographs.

Response 2: There are no records responsive to this request.

Request 3: Any written communications, including memoranda of understanding or agreement, between the RMV and any other federal, state or local agencies, or any private corporation, relating to the use of facial recognition technologies.

Response 3: See the attached documents.

Request 4: All records of grants and grant applications relating to facial recognition technologies and their use for FY 2015 and preceding years.

Response 4: See the attached documents.

Request 5: Records describing standards and procedures relating to requests by law enforcement or any government agency for licensee photographs, facial recognition searches, or access to the photograph repository by law enforcement personnel. "Law enforcement" includes federal, state and local law enforcement agencies.

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

Response 5: See the attached documents.

Request 6: Training materials (including trainer notes, outlines, curricula, and/or PowerPoint presentations) describing the dissemination, deletion, or retention of both face prints and facial recognition search results.

Response 6: See the attached documents.

Request 7: Any audits or reports relating to the use of facial recognition technologies.

Response 7: There are no records responsive to this request.

Request 8: Records concerning complaints about, investigations of, and/or disciplinary actions related to the misuse or abuse of facial recognition technologies.

Response 8: The RMV objects to this request as written as it requests information relating to "investigatory materials necessarily compiled out of the public view by law enforcement or other investigatory officials the disclosure of which materials would probably so prejudice the possibility of effective law enforcement that such disclosure would not be in the public interest" (M.G.L. c. 4, §7(26)(f)). In addition the request is for documents contained in "personnel . . . files or information; also any other materials or data relating to a specifically named individual, the disclosure of which may constitute an unwarranted invasion of personal privacy; (M.G.L. c. 4, §7(26)(f)). such information and records is specifically exempt by statute from public disclosure. Without waiving its objection the RMV states that it has no documents or records responsive to this request.

Request 9: Legal justifications or memos concerning the dissemination of licensee photographs, face prints, and or facial recognition outputs to outside agencies.

Response 9: There are no records responsive to this request. The RMV relies upon the Driver Privacy Protection Act at 18 USC 2721 et. seq. in regard to the dissemination of this information.

Request 10: Privacy policies, guidelines, or directives regarding the use of facial recognition technologies, and the retention and dissemination of data produced by such technologies.

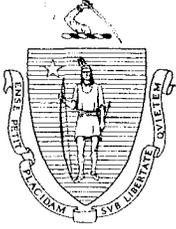
Response 10: See documents responsive to requests 3, 5 and 6 generally. In addition to the attached documents, the federal Driver Privacy Protection Act, 18 USC 2721 governs the dissemination of photoimages by motor vehicle agencies.

Very truly yours,

A handwritten signature in black ink that reads "Jean Berke". The signature is written in a cursive style with a large, looping initial "J".

Jean Berke
Deputy General Counsel

Encls.



The Commonwealth of Massachusetts

Executive Office of Public Safety

One Ashburton Place
Boston, Massachusetts 02108

Tel: (617) 727-7775

TTY Tel: (617) 727-6618

Fax: (617) 727-4764

www.mass.gov/eops

Mitt Romney
Governor

Edward A. Flynn
Secretary

Kerry Healey
Lieutenant Governor

June 14, 2005

BY HAND

Secretary John Cogliano
Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, MA 02116

Dear Secretary Cogliano:

Enclosed please find an original **Memorandum of Agreement relating to Homeland Security and Criminal Investigative Efforts related to Motor Vehicle Functions.**

Please sign and date the original Agreement together with Registrar Hinden at your meeting on Thursday, June 16, 2005 and return the original to me.

Thank you for your prompt attention to this matter. Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan M. Prosnitz", written over a horizontal line.

Susan M. Prosnitz
General Counsel

MEMORANDUM OF AGREEMENT

RELATING TO HOMELAND SECURITY AND CRIMINAL

INVESTIGATIVE EFFORTS RELATED TO MOTOR VEHICLE FUNCTIONS

AGREEMENT made as of this 16th day of June 2005, by and between THE DEPARTMENT OF THE STATE POLICE (hereinafter "the State Police"), an agency of the Commonwealth of Massachusetts, pursuant to Chapter 22C of the General Laws, having a usual place of business at 470 Worcester Road, Framingham, MA 01702, and THE REGISTRY OF MOTOR VEHICLES (hereinafter "the RMV"), also an agency of the Commonwealth of Massachusetts, pursuant to Chapter 16, section 9, of the General Laws, having a usual place of business at One Copley Place, Boston, MA 02116

WHEREAS: The State Police is a state law enforcement agency authorized by the laws of the Commonwealth to provide for the safety of the public and homeland security for the Commonwealth; and

WHEREAS: The State Police pursuant to Chapter 412 of the Acts of 1991 are the police agency for the RMV; and

WHEREAS: The RMV is the state agency authorized by law to issue driver's licenses, permits and other identification documents to citizens of the Commonwealth; and

WHEREAS: In November 2004, the RMV implemented a new RMV license which will be extremely difficult to counterfeit for the purpose of preventing fraudulent identification from getting into the hands of terrorists and other criminals.

WHEREAS: A cooperative and focused effort put forth by members of the Executive Office of Public Safety, Registry of Motor Vehicles and Department of State Police resulted in the creation of this new license.

WHEREAS: The State Police and the RMV seek to address homeland security issues highlighted by the 9/11 attacks that relate to driver's license issuance, administration, and authenticity.

WHEREAS: The State Police and the RMV seek to detect and apprehend terrorists and others who use the driver's license for criminal purposes.

WHEREAS: The State Police and the RMV, with the support of the respective Secretariats, the Executive Office of Public Safety (hereinafter "the EOPS") and the Executive Office of Transportation (hereinafter "the EOT"), do hereby declare that homeland security dictates the necessity of coordination and cooperation between the State Police and the RMV.

NOW, THEREFORE, WITNESSETH that the State Police and the RMV, for and in full consideration of keeping and performing the mutual covenants and conditions hereinafter stated, do hereby agree as follows:

A. In accordance with G.L. c. 22C, the MSP Compliance Unit shall be reorganized, the duties revised, and the name changed to be an investigative unit within the Division of Investigative Services. For purposes of this MOA, the term "MSP Compliance Unit" shall refer to the current unit and the unit it will be changed to. The MSP Compliance Unit Commander shall report directly to the Lt. Colonel of the Division of Investigative Services, or the Lt. Colonel's designee.

B. The Registry shall be responsible for investigating purely administrative violations of its employees such as attendance issues, insubordination, or rudeness to customers. The MSP shall be responsible for investigating allegations/complaints where there is any indicia of possible criminal activity, such as fraud by a RMV employee, an applicant of an RMV document, or a licensee, theft, or illegally selling RMV licenses, or allegations/complaints which have potential homeland security implications.

1. Screening at in-take shall take place by a designated MSP Compliance Unit member, together with a designated RMV employee at the MSP Compliance Unit. At in-take, those allegations/complaints deemed by the MSP to have any indicia of possible criminal activity/homeland security implications shall be immediately submitted directly to the MSP Compliance Unit. The remaining allegations/complaints that are deemed purely administrative shall be immediately submitted to the RMV SIU, provided however, that if the RMV SIU upon investigation finds that what was initially deemed to be a purely administrative matter turns out to have any indicia of potential criminal activity/homeland security implications, the RMV SIU shall immediately refer that case to the MSP Compliance Unit. The RMV and MSP shall develop a protocol for screening so investigations are initiated as soon as possible.
2. Any criminal or homeland security allegations shall be investigated solely by the MSP. The MSP Compliance Unit Commander shall routinely update the Registrar or the Registrar's designee about the status of investigations to ensure that the Registry takes no administrative action, send any correspondence, or interview any witnesses that may potentially compromise an investigation. The MSP Compliance Unit Commander shall notify promptly the Registrar or the Registrar's designee of all instances in which a Registry employee is the subject of an investigation. In instances when an RMV employee is the subject of an investigation and the RMV has suspended administrative action at the request of

the MSP Compliance Unit, the MSP Compliance Unit Commander shall inform the Registrar or the Registrar's designee when the employee can be notified of termination, terminated or subject to any other administrative action by the Registry. The Registrar and Registrar's designee shall keep investigation information confidential.

3. Any investigations deemed non-criminal/non-homeland security allegations shall be forwarded to the RMV Special Investigations Unit by the MSP Compliance Unit for appropriate administrative action.
4. The RMV shall in consultation with the MSP, create a bulletin and e-mail notification informing RMV employees that they shall report any indicia of possible criminal activity, such as fraud by a RMV employee, an applicant of an RMV document, or a licensee, theft, or illegal selling of RMV licenses, directly to the MSP Compliance Unit and the MSP Compliance Unit's number shall be provided. The Registry shall also inform its staff on how to report to the RMV, purely administrative violations, having no indicia of potential criminal activity, of its employees such as attendance issues, insubordination, or rudeness to customers.

C. The MSP shall ensure that secure computers are put into the MSP Compliance Unit that can only be accessed by MSP personnel and be linked to MSP securely. Such computers shall be a communication link to the Fusion Center and shall include, but not be limited to, facial recognition technology information, as it becomes available. All costs for such equipment, necessary cabling, network administration, upkeep and maintenance and any other associated costs shall be borne solely by the MSP.

D. The RMV shall provide the MSP with full access to Document Direct which includes ALARS, GREENBAR, the Suspension Decision Screen (SD Screen), which is a RMV database that tracks license suspensions, revocations, and reinstatements of drivers licenses, and any other screen, code or database it needs to access to investigate or deter potentially criminal activity or any activity that could negatively impact homeland security.

1. The Commander of the MSP Compliance Unit shall give the names of the unit members who need such access to the Registrar or the Registrar's designee.
2. The RMV shall provide individualized passcodes to each unit member for access.

E. Unverified Social Security Numbers on Drivers Licenses

1. The RMV is verifying its entire driver license database on an accelerated basis for social security number verification.

2. The RMV shall create a list of unverified social security numbers categorized by the reason that the social security number fails to verify. The list shall be provided to the MSP Compliance Unit. For renewals, the RMV shall provide a categorized list of unverified social security numbers to the MSP Compliance Unit in a mutually agreeable time period prior to the license renewal date.
3. The MSP Compliance Unit shall coordinate with the RMV regarding processing of licenses with unverified social security numbers. The MSP and RMV shall develop and implement as quickly as possible a process to suspend appropriate licenses with unverified social security numbers. The process shall take into account notifications and the flagging of licenses so the driver will not be able to convert an unverified Massachusetts license to that of another state's. The process shall also explore handling unverified social security numbers in a similar way as done by the New York Department of Motor Vehicles. The MSP and the RMV understand that this suspension activity is absolutely necessary in order to report the issue to the National Driver Register (NDR), which will prevent the driver from converting a Massachusetts license to that of another state's.
4. The RMV and MSP shall develop and implement as quickly as possible a process for licenses to be cleared.

F. Visas

1. The RMV shall establish at each branch location a separate window for first time applicants converting an out-of-state license or coming from another country. It shall be the goal of the RMV for each branch to have technology that will detect fraudulent documents, subject to funding for technical and staff resources, which the RMV shall make best efforts to procure. Until such time, the 5 document verification machines currently possessed by the RMV shall be used at those branch windows that process the most first time applicants converting an out-of-state license or coming from another country. As the RMV acquires more document verification machines it shall continue to place them at those branch windows processing the highest volume of first time applicants converting an out-of-state license or coming from another country.
2. Each branch window as described above shall have authorized RMV personnel at the window who have completed training in fraudulent visa and license documents that has been approved by the RMV, in consultation with the MSP.
3. The MSP and RMV shall develop and implement as quickly as possible a process by which quick response troopers can make arrests of those who try to obtain

driver's licenses or other RMV identification using fraudulent documents.

4. The RMV shall seek as soon as possible to have the ICE SAVE program put in place which is an on-line verification of visa status similar to that of the on-line social security number verification system.

G. Facial Recognition

1. The RMV shall implement a facial recognition system for driver's licenses and other RMV issued identification. The RMV shall run the facial recognition program to ascertain individuals with multiple driver's licenses and other RMV issued identification. The RMV shall make best efforts to procure funding so that a database scrub can be done as quickly as feasible. As soon as such funding is procured, the RMV shall work with the MSP to identify a manageable "scrub" protocol that will review the entire license image database, starting with priority licenses. The RMV shall make best efforts to explore all available funding sources within the Executive Office of Public Safety, the Executive Office of Transportation and by state and federal grants so that the entire license image database is scrubbed as quickly as possible after the start date of the vendor's contract.
2. The RMV shall run every applicant and renewal through the facial recognition program .
3. The MSP Compliance Unit shall be immediately and directly notified of any individual with multiple driver's licenses and/or other RMV issued identification.
4. The RMV and MSP shall work with the facial recognition software vendor to screen the images from covert licenses beforehand so that they are not on the list of those individuals with multiple driver's licenses and/or RMV issued identification.
5. The MSP Compliance Unit shall investigate all individuals with multiple driver's licenses and/or other RMV issued identification and shall inform the Registrar or the Registrar's designee of the results of these investigations in order for the RMV to take the appropriate administrative actions.

H. Covert Licenses and Confidential Plates

1. The Colonel of the MSP shall designate an individual who shall determine the eligibility and issuance of covert licenses and confidential plates to MSP personnel. Any civilian who has a need-to-know access to covert license or plate

information shall be required to pass a background check by the MSP, which shall be updated as needed, such determination to be made by the MSP Compliance Unit but in no event more than two years. Prior to access, each civilian shall sign a statement saying that he/she will affirmatively inform the RMV and MSP Compliance Unit if they have been arrested or charged with any criminal violation. The RMV shall ensure that the MSP Compliance Unit has an updated list of those with access to covert license or plate information. The MSP shall ensure that the background check is currently valid for each person on the list. The Registrar shall be notified by the MSP of any employee that fails a background check immediately upon that determination being made by the MSP. With the exception of the disclosure to the Registrar or Colonel, the results of any of the background checks performed by the MSP shall be strictly confidential.

2. The MSP Compliance Unit shall coordinate with the RMV to create the histories of covert licenses, correct LTH screens of covert licenses as required, and have a designated RMV employee be the sole entry point for data input regarding covert licenses.
3. The RMV will maintain the covert licenses in a secure area with access only to RMV personnel, who have passed the MSP background check, and a trooper assigned to that area by the Colonel. The RMV shall maximally protect the confidentiality of those individuals coming to the secure spaces for covert licenses. The data shall be maintained in a database only accessible to RMV personnel who have passed the MSP background check. The MSP Compliance Unit shall have access to all MSP covert licensees/confidential plates and all covert licensees/confidential plates of those agencies that have provided written authorization to the RMV authorizing such access to the MSP, and as needed for criminal investigations.
4. The RMV shall have tracking software in the covert license and confidential plate database that shall identify the person inquiring, the time of inquiry, and the target of the inquiry whenever an inquiry is made of this database. Any RMV authorized employee shall be mandated by a policy developed by the RMV in consultation with the MSP to immediately notify the MSP Compliance Unit whenever any unauthorized person is inquiring about, or asking them to query a covert license, confidential plate or requesting information about the holders, as long as the holder has provided written authorization to the RMV for the agency to disclose the matter to the MSP. Whenever an inquiry is made in any form regarding a covert license/confidential plate of any MSP employee, any other state employee, or victim, a RMV representative and MSP Compliance Unit member shall immediately notify the target of the inquiry and provide the relevant information. The MSP Compliance Unit shall investigate immediately. The MSP

shall do the same for any federal agency that has given the MSP authority to do so in writing. It shall be the responsibility of the RMV to immediately obtain such written authorization and immediately inform the MSP of such authorization upon receipt. The RMV shall immediately provide to the MSP a list of federal agencies that have personnel with covert licenses or confidential plates.

I. Temporary Licenses and Learners Permits

1. The RMV shall eliminate paper temporary licenses and paper learners permits as soon as practical but not later than three years.
2. For the interim, as soon as possible after the signing of this MOA, the RMV shall have on the back and front of temporary paper licenses and paper learners permits, the words, "Not Valid for ID Purposes," and put the licenses and permits on security paper.

J. This Agreement shall be effective upon the date of final signatures and will remain in effect unless modified by mutual written agreement or terminated at the proposal of either party, with the written approval by both the Secretary of Public Safety and the Secretary of the Executive Office of Transportation, provided however, that after one year from the effective date, the two Secretaries may review the MOU to determine whether it is necessary. If they determine it is not necessary, they can terminate this MOU at that time by a mutually executed written document stating as such. Any proposed amendments to this agreement shall require prior written approval by both the Secretaries of the Executive Office of Public Safety and of the Executive Office of Transportation.

K. If any part of this Agreement is determined to be invalid, illegal, or unenforceable, such determination shall not affect the validity, legality, or enforceability of any other part of this Agreement, and the remaining parts of this Agreement shall be enforced as if such invalid, illegal, or unenforceable part were not contained herein.

L. Whenever, by the terms of this instrument, notices may or are to be given either to the other, such notices shall be deemed to have been given if in writing and either delivered by hand or by United States mail, to the State Police, to:

Office of the Superintendent
Department of the State Police
470 Worcester Road
Framingham, MA 01702
cc: Office of the Chief Legal Counsel

and to the RMV to:

Office of the Registrar
Registry of Motor Vehicles
One Copley Place
Boston, MA 02116
cc: Office of the Registry Liaison to the MSP

or to such other address or addresses as may be specified by either party to the other by like notice.

M. Modifications or amendments to this Agreement shall be in writing and duly executed by both parties to be effective.

N. The rights, liabilities, agreements and obligations herein granted and set forth shall inure to the benefit of and be binding upon the successors, assigns, agents, representatives, and transferees of the Commonwealth of Massachusetts, as applicable, and shall inure to the benefit of and be binding upon the successors, assigns, agents, representatives, and transferees, as applicable, and upon all other persons claiming by, through or under the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in duplicate originals under seal as of this 16th day of June, 2005.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF THE STATE POLICE



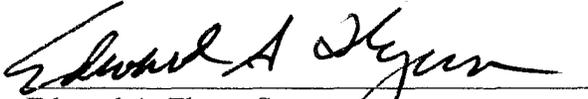
Thomas G. Robbins, Colonel

COMMONWEALTH OF MASSACHUSETTS
REGISTRY OF MOTOR VEHICLES



Kimberly Hinden, Registrar

APPROVED:



Edward A. Flynn, Secretary
Executive Office of Public Safety

APPROVED:



John Cogliano, Secretary
Executive Office of Transportation



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF TRANSPORTATION
REGISTRY OF MOTOR VEHICLES

EOT

MITT ROMNEY
GOVERNOR

KERRY HEALEY
LIEUTENANT GOVERNOR

JOHN COGLIANO
SECRETARY

ANNE L. COLLINS
REGISTRAR

TO: Massachusetts Law Enforcement Personnel
FROM: Anne L. Collins, Registrar
DATE: October 31, 2006
RE: Facial Recognition Assistance at RMV

I am writing with good news. The RMV, with the help of Massachusetts State Police, has implemented an amazing Facial Recognition System that allows a digital image – such as a license photo – to be compared against the 9.5 million images in the RMV database to identify potential “matches.” State Police and RMV staff have been using this tool since May 2006 and have successfully identified many individuals who have fraudulently applied for multiple licenses or IDs.

The newest improvement to the Facial Recognition System may help your law enforcement team. We are now able to accept digital images – such as digital mug shots – by email and compare them against the photos in the RMV database. For example, State Police recently used this tool to assist a medical examiner who was trying to identify a “John Doe.”

If you would like an image run through the Facial Recognition System, please **email** a request to RMV-DL-FacialRecES@MassMail.State.MA.US. All requests should include:

- the name of your law enforcement department,
- the name of a contact person, and
- a call-back number.

Only requests received from official law enforcement email addresses can be accepted. (No personal emails will be answered.) Although the Facial Recognition Team may be reached by phone at 617-973-8952, we ask that you call only in emergencies.

When the Facial Recognition Team has run your subject and reviewed the potential matches, they will contact you by telephone. As appropriate, they will direct you to the CJIS Web so you can see the image of the subject or compare multiple images. If you are still uncertain about the results, you may come to the Facial Recognition office at the State Transportation Building, 10 Park Plaza, Boston, MA to compare hard copies of the matches. You may also prefer to have the hard copies for court purposes. Due to privacy issues, however, we are unable to send the results over the internet.

I look forward to the successes that will arise out of this collaboration and I assure you the Facial Recognition Team will do our best to assist you.

Although it appears the Facial Recognition System is “looking” at the photos, it actually converts each face into a map of thousands of data points, then compares those points. For example, it maps each subject’s eyes and measures the distance between the pupils, then searches for other images with the same distance. The System does not compare some factors that might otherwise distinguish one person from another, such as height, age, or ethnicity. Therefore, the better the quality of the image you can send, the better the potential matches will be.

The following guidelines should be used when sending images to be run through the system.

Facial Recognition Email Address: RMV-DL-FacialRecES@MassMail.State.MA.US

Ideal Image Parameters

1. Maximum Size

- a. 1024 by 1024 pixels
- b. 2 megabytes

Note: Image properties in MSPAINT can be used to display actual image size.

2. Type

- a. JPEG minimum compression (to fit 2 MB)
- b. BMP

3. Cropping/ Zoom

- a. Head comprises approximately 80% of image height (small bit of shoulders)
- b. Head comprises 70% of width

4. Direction

- a. Subject should be facing directly into camera
- b. Slightly left or right is acceptable (maximum 10 degrees)
- c. Never from below

5. Lighting

- a. Lighting should be as bright as possible
- b. Avoid dark shadows near the bottom of the face

6. Originals vs. Copies

- a. The original image should be submitted for optimum results.
- b. Every time the image is copied it is changed slightly
- c. The investigating officer should only use Photo Shop or similar software on the original image if an adjustment is required.

7. Eyeglasses

- a. If images are available with and without glasses, both should be sent.

FMCSA Grant Approval

Proposal: Fraud Prevention – Facial Recognition Technology- \$250,000

The attached CDL Grant Proposal meets OMB Requirements and will substantially improve the integrity and effectiveness of the Commercial Driver's License Program in Massachusetts.

This proposal will address fraud which is one of the 2005 CDL Program Priorities. The MA RMV has identified and initiated legal action on fraudulent activities in the past and seeks to obtain the tools necessary to prevent fraudulent activities in the future. This funding would serve to prevent compromising the integrity of the Commercial Driver's License Program. The MA RMV is committed to preventing fraud as demonstrated by their commitment of additional state resources to this program.

The project will further enhance the RMV attempts to reduce the an individual from attempting to gain a fraudulent license, however the funding requested does not seem proportional to the population of CDL licensed drivers.

Richard R. Bates, Division Administrator – Massachusetts





U.S. Department
of Transportation

Federal Motor Carrier
Safety Administration

Commercial Drivers License Program

The _____ Massachusetts Registry of Motor Vehicles _____ (State Lead Agency) hereby applies to the Federal Motor Carrier Safety Administration for a Federal grant authorized in Title XII of the Commercial Motor Vehicle Safety Act of 1986 (P.L. 99-570) and subsequent amendments thereto to enhance a Commercial Drivers License Program as described in this application.

- The State Agency plans to carry out the implementation of a Commercial Drivers License Program during Federal fiscal year (FY) _____ as described in the attached plan.
- The State Agency plans to carry out special projects of the Commercial Drivers License Program as described in the attached plan.

The Federal share will not exceed 80 percent of the total participating costs, unless otherwise indicated herein, incurred in performing the effort described in the attached State Plan. The State agrees to submit vouchers for the reimbursement of funds expended.

Kimberly Hinden
(Typed Name)

Registry of Motor Vehicles
(Organizational Unit)


(Signature)

P. O. Box 55889
(Address or P.O. Box)

Registrar
(Title)

Boston, MA 02205
(City, State & Zip Code)

May 11, 2005
(Date)

617-351-9000
(Phone Number)

The collection of this information is authorized under the provisions of P.L. 97-424; P.L. 99-570; 49 U.S.C. 31101-31104 and P.L. 105-178.

Public reporting for this collection of information is estimated to be 30 minutes per response, including the time for reviewing instructions and completing and reviewing the collection of information. All responses to this collection of information are mandatory, and will be provided confidentiality to the extent allowed by law. Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The valid OMB Control Number for this information collection is 2126-0010. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-MBI, U.S. Department of Transportation, Washington, D.C. 20590.

FMCSA Grant Application – Fraud Prevention – Facial Recognition Technology

The Massachusetts Registry of Motor Vehicles (RMV) hereby applies to the FMCSA for a portion of funding, (\$250,000), toward the purchase and implementation of facial recognition technology to be used in RMV daily business operations.

MA has 4,634,521 active licensed drivers in the state, of which 155,204 are licensed as Commercial Drivers. There are currently 2,626,873 driver’s licenses in renewal status, not necessarily active.

Long term goals for improving the MA CDL program include:

- Continue to review and evaluate MA CDL program with an eye toward increasing security screening
- Improving customer service
- Expanding and improving on-line processes to provide the most secure and efficient system to customers
- Continue to explore technology opportunities and solutions with Federal partners to expand and improve ways of communicating electronically, in an effort to create a secure processing system for all involved; specifically with regard to exchanging information and image files
- Continue to build and implement an information system to incorporate all CDL license functions, CMV enforcement functions, and court functions

Examples of processes that are in place to ensure coordination between all parts of the CDL program (Licensing, Enforcement and Courts):

- The Massachusetts Registry of Motor Vehicles currently has the electronic capacity to process administrative per se and chemical test refusals from law enforcement agencies through CJIS links and the Office of Alcohol Testing.
- The RMV can also provide images and text back through that system for police and court prosecutors. The “missing link” continues to be the lack of automation within the courts.
- The RMV Chief Technology Officer is involved in planning and committee meetings with Criminal History Systems Board, Information Technology Division and Court personnel to attempt to identify and establish a solution to this problem.

The last compliance review at the MA RMV revealed the following issues which needed to be addressed. Following each issue, is the progress which has been made to date to correct the identified issue:

**CDL Compliance Review Issues – Progress to Date April 2005
Federal & State Requirements**

CDL Fingerprinting – TSA	Project successfully completed and implemented to date
School Bus Endorsement – “S” designation	Major complications in adding this endorsement to 15-year old system. Paper knowledge testing to begin last week in May. Will be completed by 9/30/05
Driving Records Request – CDL Holders	Accomplished in conjunction with AAMVA with PDPS process using unique identifier – major problem: specs not yet received from AAMV
Notification of CMV violations to home state	Part of ACD working group convened by IT staff – working with AAMVA -project on-going – All CDL violations already electronically transferred to state of record
Notification of all traffic violations to home state	Same as above
FMCSA Revocation Periods – OUI – CTR – Admin Per Se	Part of ACD working group – dependent upon AAMVA compliance and specifications
State Revocation Periods OUI – CTR – Admin Per Se	Legislation submitting by RMV attorneys to Governor’s office for filing; have been advised that filing will take place in the next few weeks with the legislature
CDL Hardship Licenses	Massachusetts does not issue CDL hardship licenses
CDLIS Reporting and Record Check Requirements	Project Implementation successfully completed May 18, 2005
Immediate Threat Status	The MA RMV Registrar currently has the authority to implement this, and is now done through posting on CDLIS

Problem/ Need Statement

In light of recent arrests at the MA RMV for licensing fraud, the agency has worked closely with (its previous Secretariat), the Executive Office of Public Safety, (EOPS), to explore business solutions to curb fraud. If unchecked, license fraud rears its head in many devastating directions: identity fraud, underage drinking, licensing of undocumented aliens, licensing of unqualified and dangerous drivers, to name a few potential problem areas.

After many months of meetings with and demonstrations from the company who currently produces MA licenses and identification cards, the RMV has received the support and an agreement from EOPS for some funds to purchase and implement facial recognition technology at the MA RMV.

This technology is part of a comprehensive strategy to support the notion of one license, one identity, as well as to ensure that dangerous drivers, who are often the perpetrators of license fraud, are eliminated from the licensed driving population.

The end result of these efforts will be a reduction in the potential numbers of accidents caused by erroneously licensed passenger and commercial vehicle drivers.

As license sanctions and identity requirements have become more strict over the past few years, there has been an increasing number of incidents of fraud perpetrated to obtain a license in the first place. Convictions and arrests that may not previously have resulted in loss of license, now may mean the loss of livelihood and license for commercial drivers and Hazmat carriers. For someone whose adult life has been spent employed primarily as a truck driver, these consequences may lead that driver facing loss of license to attempt to obtain a license fraudulently, or to try to transfer their revoked or suspended license from another state, before the court conviction is recorded and recognized.

Objective

The implementation of facial recognition technology will identify attempts at license fraud that involve:

- 1) an individual with two or more licenses under different names
- 2) different individuals holding the same license
- 3) attempts to alter signatures and facial features

The RMV wants to incorporate facial recognition technology into its daily business operations, believing that better upfront validation (which should occur with fraudulent document training and document authentication), along with production of a secure license, (new release in September, 2004), in combination with facial recognition technology will result in a truly secure licensing process. None of these solutions alone would enable the RMV to make that claim of security. But combined, these solutions can make a huge difference in the fight against fraud.

While no technology alone can combat this enormous threat, a comprehensive solution, carefully planned, can stop licensing fraud. If even one CDL holder, particularly one with an “H” endorsement, is stopped from skirting the laws and legitimate licensing issue, then the MA CDL program will have been improved, and public safety impacted (by keeping this driver off the road).

While the RMV is currently examining the purchase and implementation strategy which will be used to procure Facial Recognition technology, the RMV has been given cost estimates for implementation, services and purchase over a four-year time period.

While the funding from EOPS will not cover the entire cost of implementation of Facial Recognition technology completely, the RMV is currently considering what amount it can budget, and is seeking other funding assistance to procure this technology. Hence this request for a portion of the total \$2,879,832.50 cost for a four-year implementation strategy. While imaging each license and permit applicant for facial recognition purposes can begin immediately, and those images can be matched one at a time against the entire current RMV database, a long-term strategy is needed in order to “scrub” the existing licensing database and that population who will not be coming in “new” or for renewal until their license expiration in five years or less.

The overall goal is to decrease the numbers of licensees who currently have, or attempt to gain, a fraudulent license. In addition, the RMV is in the process of redefining its Special Investigation unit, and establishing a direct link with state police special investigators, since both parties will need to investigate the records and people turned up as suspicious by the facial recognition technology.

Project Description

The RMV will develop a comprehensive business plan that incorporates document authentication technology, staff training, an on-line document verification system and facial recognition technology toward the end goal of establishing that every MA licensed driver, whether Commercial or passenger vehicle, has the legitimate right to be licensed and has one identity, and one license.

The facial recognition part of this plan works like this: the RMV is already positioned for facial recognition because its current license production vendor has a special software that it uses at every one of the RMV capture stations in the branch offices. This is where each person’s photograph is taken and their signature is digitized, along with their photo in the license production process. For facial recognition to work, every photograph has to be placed and cropped specifically; RMV photos have been taken in that particular manner for the last four years. Photos not in this format will need to be prepared from the Registry’s database of 7,261,394 images of licensed Massachusetts drivers.

As each person comes into the RMV to be licensed, first, all of their identity documents will be verified, then they will be photographed, regardless of whether they will actually receive a license or not. This means that if it is determined that a person is attempting to perpetrate fraud, both their documents and photograph have been captured and stored, and can be retrieved for an investigation.

At night, when all of the images captured that day are batched and sent to license production, every image is run through facial recognition software, that seeks to match every submitted image to one that is already in the database. Any questionable applicants or matches that appear problematic are again batched, removed from production, and returned to the RMV for examination.

The RMV will have their internal special investigation unit review these returned files, in order to identify any administrative anomalies, such as name change, twins, incompatible image structure, and the remaining images will be turned over to a state police investigative unit for further investigation, potentially arrest and maybe prosecution, dependent on the outcome of the investigation. It is estimated that the RMV will return approximately 500-600 images each night for next day examination, requiring full-time staff for the purpose of clearing or referring these images. The internal RMV investigator will gather all of the relevant driver history and other information useful to a police investigation, prior to turning the files over.

Timeline

Activity	Responsible Party	Date for Completion
Establish and convene procurement team to create RFR and/or determine whether contract can be sole-sourced	RMV legal staff , Deputy Registrar Erin Deveney and Chief Fiscal Officer Mary Ellen Kelley	June 30, 2005
Begin procurement process, select company qualified from which to purchase facial recognition system and services	Mary Ellen Kelley and Procurement Team	July 30, 2005
Decide customization (options) and integration of Facial Recognition with existing IT systems	John Fuller, Chief of IT in conjunction with all impacted managers including Lorraine Lague and Deputy Registrar Rachel Madden	August 15, 2005

Activity	Responsible Party	Date for Completion
Decide whether you want any other agency to be able to have access to your enrolled facial recognition images	Registrar and other high-level secretariat staff should meet with law enforcement agency officials and determine this issue	August 15, 2005
Once decision above is made, decide HOW you want any other agency to be able to have access to your enrolled facial recognition images	Same as above, but once decided, John Fuller and Deputy Registrar's Rachel Madden and Erin Deveney should be involved	August 30, 2005
Within available funding, what can you accomplish?	All impacted RMV managers	August 30, 2005
Create audit system and solutions to inhibit fraud/continued mistakes – this should also serve as evaluation tool for program monitoring on an on-going basis	Cheryl Surrette, Audit Manager, Paula Tosca, Director of Special Operations, Deputy Registrars Erin Deveney and Rachel Madden, Director of Branch Operations Lorraine Lague	Prior to implementation of system in branches
Determine access to system and create security levels	John Fuller, Lorraine Lague, Rachel Madden, Cheryl Surrette, Registrar, Paula Tosca	Prior to implementation of system in branches
“Install” system and begin facial recognition matching	John Fuller, in cooperation with Lorraine Lague and all branch managers	Begin September 1 – end September 30, 2005

Evaluation

The Director of Special Operations, in cooperation with the Directors of Audit and Branch Operations, will develop a process to audit and monitor all suspected fraudulent activity. This will include specially created reports and tracking that can be used to evaluate the results of the implementation of facial recognition technology.

A contracted person familiar with the CDL program and the facial recognition program will work in cooperation with the RMV Chief Fiscal officer and Information Technology staff to conduct interviews, gather information and write the quarterly reports to be submitted to the FMCSA.

This person will also interview involved branch managers and staff to gather relevant implementation and operations data.

The final investigative data will be analyzed to determine the outcome of investigations, which will specifically determine the usefulness, or not, of having facial recognition technology at the Registry of Motor Vehicles.

All recommendations will be in written form and distributed to all involved managers to use in senior staff decision-making efforts toward program improvement or change.

Executive Summary/Abstract

Herbert Osgood, Director of Driver Licensing, is the contact person whose telephone number is 617-351-9028, and whose address is P.O. Box 55889 Boston, MA 02205.

The RMV is seeking a portion of the funding needed in the amount of \$250,00 to acquire facial recognition technology at the RMV. It has another commitment for some funding from the Executive Office of Public Safety, but not enough to meet the costs involved.

This system has the potential to be programmed with photographs and identification information from outside entities of terrorists and other people who may be on some type of targeted arrest or warrant list. In addition, a police or other law enforcement department or agency can give the RMV an artist's rendering of a suspect to run against the database and it will find that person if they are in the files.

What makes this project enormously expensive is the option to "scrub" the existing database. In other words, to determine how many licenses already IN the database, have a duplicate or questionable match in the database. Preliminary pilot testing of 120,000 images returned 96 such "matching" images.

This was "controlled" testing, in that the RMV selected a specific demographic in choosing which images to run against the database. This had a specific "positive" result in the number of matches returned. During this pilot testing the RMV learned that another state that has been using facial recognition for more than one year now, returns about 1- 3 cases that require full investigation, after the images are reviewed for clerical errors, name changes, etc. While this is not a huge number, it only takes one person to create irreparable harm. If the RMV and the police can remove this one person from the driving population, the CDL program, the RMV in general, and the public at large are more secure.

Any system might have great potential, but it is only through effective planning and management that this full potential can be realized.

There are many issues to be faced and resolved by the agency decision-makers to ensure the success of any and all of these strategies to combat licensing fraud.

Here are just a few examples of the elements Facial Recognition Program Development must and will include:

- Deciding customization options and integration of facial recognition with existing IT systems
- Deciding whether "outside" agencies should and can have access to enrolled images
- Within available funding, deciding what can be accomplished
- Creation of an audit system and solutions to inhibit fraud and clerical mistakes

All CDL license applicants, as well as renewals and out-of-state transfers will be enrolled in facial recognition software, and their images checked against the existing database, then stored in it. Of course, any suspicious finds will be investigated.

Budget Narrative:

As previously described, an integral part of facial recognition is the administrative burden to investigate and examine the identified images. Therefore, any cost analysis must include the establishment and funding of that administrative, investigative unit. This unit, along with the existing Audit unit of the RMV are crucial to the development of formal evaluation of facial recognition technology and the impact it has on licensing fraud.

In addition, there are one-time set-up costs that include hardware image stations, software development and licensing.

The cost for this technology has been priced at \$1,493,275, this is an all-inclusive price, with the exception of the cost to perform a “scrub” of the database. This “scrub” would mean that images would be run against each other in the existing database, to determine where there are people with more than one image, with more than one name and demographics, whether someone is in the database with the same image and signature, but under two completely different names or license numbers.

In other words, this scrub would identify people in the database now who have multiple identities. This process will be on-going, while facial recognition is implemented for all new passenger license applicants, transfers from out of state, and renewals, as well as for all new CDL license applicants, renewals and out of state transfers. While this is a one-time cost, to perform the scrub of approximately 7 million images, it will take four years to complete the scrubbing of the entire database. This is because this process has to happen overnight, when normal licensing production is not in process.

The RMV has a commitment of partial funding from the Executive Office of Public Safety (EOPS), toward this facial recognition purchase, and is seeking \$250,000 from the FMCSA to add to that figure. The \$250,000 the RMV is seeking from FMCSA will pay for the \$100,000 “scrub,” and two investigators with a law enforcement background. It will be the job of these investigators to investigate all of the cases found when the images are run in the facial recognition software, where fraud appears to be have been perpetrated. It is hoped that prosecution will result, where necessary, from these in-depth investigations.

Special note:

There are proprietary issues with regard to the licensing software currently in use that would make it extraordinarily difficult, time consuming and far more expensive, if the RMV were *to not* sole-source this contract to the vendor who currently provides license production services to the MA RMV



Budget Detail Worksheet

Purpose: The Budget Detail Worksheet may be used as a guide to assist you in the preparation of the budget and budget narrative. You may submit the budget and budget narrative using this form or in the format of your choice (plain sheets, your own form, or a variation of this form). However, all required information (including the budget narrative) must be provided. Any category of expense not applicable to your budget may be deleted.

A. Personnel - List each position by title and name of employee, if available. Show the annual salary rate and the percentage of time to be devoted to the project. Compensation paid for employees engaged in grant activities must be consistent with that paid for similar work within the applicant organization.

Name/Position	Computation	Cost
Investigator, law enforcement experience/background	Comparative annual state salary 100%	\$60,000.00
Investigator, law enforcement experience/background	Comparative annual state salary 100%	\$60,000.00
Postition 3		
Postition 4		
Postition 5		
Postition 6		
SUB-TOTAL		\$120,000.00

B. Fringe Benefits - Fringe benefits should be based on actual known costs or an established formula. Fringe benefits are for the personnel listed in budget category (A) and only for the percentage of time devoted to the project. Fringe benefits on overtime hours are limited to FICA, Workman's Compensation, and Unemployment Compensation.

Name/Position	Computation	Cost
Investigator	25% of annual salary = fringe	\$15,000.00
Investigator		\$15,000.00
Fringe benefit 3		
Fringe benefit 4		
Fringe benefit 5		
SUB-TOTAL		\$30,000.00
Total Personnel & Fringe Benefits		\$150,000.00

C. Travel - Itemize travel expenses of project personnel by purpose (e.g., staff to training, field interviews, advisory group meeting, etc.). Show the basis of computation (e.g., six people to 3-day training at \$X airfare, \$X lodging, \$X subsistence). In training projects, travel and meals for trainees should be listed separately. Show the number of trainees and the unit costs involved. Identify the location of travel, if known. Indicate source of Travel Policies applied, Applicant or Federal Travel Regulations.

Purpose of Travel	Location	Item	Computation	Cost
Travel entry 1, two lines per entry				
Travel entry 2				
Travel entry 3				
Travel entry 4				
Travel entry 5				
Travel entry 6				
Travel entry 7				

TOTAL \$0.00

D. Equipment - List non-expendable items that are to be purchased. Non-expendable equipment is tangible property having a useful life of more than two years and an acquisition cost of \$5,000 or more per unit. (Note: Organization's own capitalization policy may be used for items costing less than \$5,000). Expendable items should be included either in the "supplies" category or in the "Other" category. Applicants should analyze the cost benefits of purchasing versus leasing equipment, especially high cost items and those subject to rapid technical advances. Rented or leased equipment costs should be listed in the "Contractual" category. Explain how the equipment is necessary for the success of the project. Attach a narrative describing the procurement method to be used.

Item	Computation	Cost
Equipment entry 1, one line per entry		
equipment entry 2		
equipment entry 3		
equipment entry 4		
equipment entry 5		

TOTAL \$0.00

E. Supplies - List items by type (office supplies, postage, training materials, copying paper, and expendable equipment items costing less than \$5,000, such as books, hand held tape recorders) and show the basis for computation. (Note: Organization's own capitalization policy may be used for items costing less than \$5,000). Generally, supplies include any materials that are expendable or consumed during the course of the project.

Supply Items	Computation	Cost
Hardware desktop image stations	one-time cost \$1,600 x 4 units	\$6,400.00
Licensing for non-Digimarc (license vendor) products	one-time cost \$255. x 4	\$1,020.00
supply item 3		
supply item 4		
supply item 5		
supply item 6		
supply item 7		
supply item 8		
supply item 9		
TOTAL		\$7,420.00

F. Construction - As a rule, construction costs are not allowable. In some cases, minor repairs or renovations may be allowable. Check with the program office before budgeting funds in this category.

Purpose	Description of Work	Cost
four lines per entry, use boxes below or an additional page for more space if required		
TOTAL		\$0.00

G. Consultants/Contracts - Indicate whether applicant's formal, written Procurement Policy or the Federal Acquisition Regulations are followed.

Consultant Fees: For each consultant enter the name, if known, service to be provided, hourly or daily fee (8-hour day), and estimated time on the project. Consultant fees in excess of \$450 per day require additional justification and prior approval from OJP.

Name of Consultant	Service Provided	Computation	Cost
Designated Info Technology staff person	development of software to support image file transfer - one-time development costs	\$82 per hour x 1050 hrs	\$86,100.00
Supply item 1, one line per entry			
Supply item 1, one line per entry			
Supply item 1, one line per entry			
<i>Subtotal</i>			\$86,100.00

Consultant Expenses: List all expenses to be paid from the grant to the individual consultants in addition to their fees (i.e., travel, meals, lodging, etc.)

Item	Location	Computation	Cost
	maximum of three lines		
	maximum of three lines		
Consultant expense entry 1, one line per	maximum of three lines		
<i>Subtotal</i>			\$0.00

Contracts: Provide a description of the product or service to be procured by contract and an estimate of the cost. Applicants are encouraged to promote free and open competition in awarding contracts. A separate justification must be provided for sole source contracts in excess of \$100,000.

Item	Cost	
Contract with Digimarc Corporation to purchase Facial Recognition software business solution to implement in RMV daily operations. This is an all-inclusive price, with the exception of \$100,000 to perform a "scrub" of the existing database	\$1,493,275.00	
Contract with Digimarc, in addition to the purchase contract for facial recognition, to provide the service which would take all of the current license images (more than seven million) and attempt to determine whether or not there is a duplicate identity or fraudulent license currently in the database. This is a one-time cost. This "scrub" can only be performed at night, when license production is not on-going, and therefore, will take four years to complete.	\$100,000.00	
<i>Subtotal</i>		\$1,593,275.0
TOTAL		\$1,679,375.0

H. Other Costs - List items (e.g., rent, reproduction, telephone, janitorial or security services, and investigative or confidential funds) by major type and the basis of the computation. For example, provide the square footage and the cost per square foot for rent, or provide a monthly rental cost and how many months to rent.

Description	Computation	Cost
four lines per entry, use boxes below or an additional page for more space if required		
TOTAL		\$0.00

I. Indirect Costs - Indirect costs are allowed only if the applicant has a Federally approved indirect cost rate. A copy of the rate approval, (a fully executed, negotiated agreement), must be attached. If the applicant does not have an approved rate, one can be requested by contacting the applicant's cognizant Federal agency, which will review all documentation and approve a rate for the applicant organization, or if the applicant's accounting system permits, costs may be allocated in the direct costs categories.

Description	Computation	Cost
one line per entry		\$0.00
one line per entry		
TOTAL		\$0.00

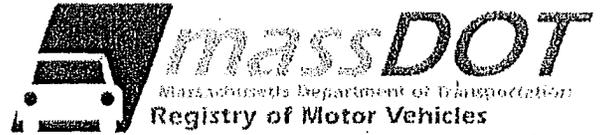
Budget Summary- When you have completed the budget worksheet, transfer the totals for each category to the spaces below. Compute the total direct costs and the total project costs. Indicate the amount of Federal requested and the amount of non-Federal funds that will support the project.

Budget Category	Amount
A. Personnel	<u>\$120,000.00</u>
B. Fringe Benefits	<u>\$30,000.00</u>
C. Travel	<u>\$0.00</u>
D. Equipment	<u>\$0.00</u>
E. Supplies	<u>\$7,420.00</u>
F. Construction	<u>\$0.00</u>
G. Consultants/Contracts	<u>\$1,679,375.00</u>
H. Other	<u>\$0.00</u>
Total Direct Costs	<u>\$1,836,795.00</u>
I. Indirect Costs	<u>\$0.00</u>
TOTAL PROJECT COSTS	<u>\$1,836,795.00</u>

Federal Request	<u>\$250,000.00</u>
Non-Federal Amount	<u>\$1,586,795.00</u>



Deval L. Patrick, Governor
 Richard A. Davey, Secretary & CEO
 Rachel Kaprielian, Registrar



REQUEST FOR DIGITIZED IMAGE PRINTOUT

DRIVER LICENSE/ ID INFORMATION (OF THE PERSON WHOSE IMAGE IS BEING REQUESTED)

NAME: _____ LICENSE ID # _____

ADDRESS: _____

REQUESTOR INFORMATION

REQUESTOR'S NAME _____

SIGNATURE: _____ DATE: _____

CORI APPROVED AGENCY: _____

ADDRESS: _____

TELEPHONE #: _____ FAX #: _____

REQUEST REASON (THIS SECTION MUST BE COMPLETED WITH AN OFFICIAL BUSINESS REQUEST)

UPON COMPLETION OF INVESTIGATION, PLEASE RETURN LICENSE / ID TO THE RMV

Request details

What type of image do you need ?

What date do you need the image by ?

Color

Black & White

Both

Attention: Cori requests may be sent anytime, but RMV personnel are only available to process requests from 8:45 a.m. to 4:30 p.m. Monday thru Friday. If there is an emergency reason for more expeditious handling, please indicate this reason in the line below.

RMV Contact Information (office use only)

Cori Fax : 857-368-0649

Cori Information: 857-368-9500

Picked Up

Faxed

Mailed

Image Not on File

Date Completed: _____

Processed By : _____



Department of State Police Superintendent's Memo

Effective Date February 21, 2008	Number 08-SM-07
Subject Revised Access to Facial Recognition System	

The Registry of Motor Vehicles has revised the e-mail address that Law Enforcement Agencies may utilize to send requests to have an image run through the Facial Recognition System. The e-mail address is:

MSP-DL-FacialRecES@MassMail.State.MA.US

Requests shall include name, rank, ID #, current station or duty assignment and a call back number. As before, only requests received from official, department assigned e-mail addresses will be accepted. (Requests being made via personal e-mail accounts will not be accepted or answered.)

After the Facial Recognition Team has determined if there is a hit on the subject, the sender will be contacted by telephone with the results. The sender will then be directed to CJIS Web so the image of the subject can be viewed or compared with multiple images. If the sender is still uncertain regarding the results, they may come to the Facial Recognition office at the State Transportation Building: 10 Park Plaza, 2nd Floor, Boston, MA to compare the hard copies of the images. For court purposes, it may be preferable to have the hard copies. Due to privacy issues, requests to send the results over the internet will not be accepted.

The existing ideal image parameters should be followed when sending images to be run through the system:

- **Maximum Size:**
 - a. 1024 by 1024 pixels
 - b. 2 megabytes

Note: Image properties in MSPAINT can be used to display actual image size.
- **Type:**
 - a. JPEG minimum compression (to fit 2 MB)
 - b. BMP
- **Cropping/ Zoom:**
 - a. Head compromises approximately 80% of image height (small bit of shoulders)
 - b. Head comprises 70% of width

- Subject should be facing directly into camera:
 - a. Slightly left or right is acceptable (maximum 10 degrees)
 - b. Never from below
- Lighting should be as bright as possible:
 - a. Avoid dark shadows near the bottom of the face
- The original image should be submitted for optimum results:
 - a. Every time the image is copied it is changed slightly
 - b. The investigating officer should only use Photo Shop or similar software on the original image if an adjustment is required.
- If images are available with and without glasses, both should be sent.

All inquires must be related to an ongoing criminal investigation. In addition, officers may want to utilize SP 627, the Facial Recognition Request Form as part of their investigation. In cases of emergencies only officers may call the Facial Recognition Team directly at 617-973-8952.

OFFICIAL:

Mark F. Delaney
Colonel / Superintendent



Facial Recognition Request Form

Directions:

- 1) Fill out all information as completely as possible.
- 2) Fax completed form to the MVRS-Facial Recognition Team at 617-973-8982.

Date: _____ Case #: _____

Requesting Agency: _____

Requestors Name: _____

ID #: _____ Phone #: _____ Fax #: _____

Official E-mail Address: _____

Probe Information:

License #: _____ SS #: _____

Last Name: _____ First Name: _____

Notes: _____

Contact the Facial Recognition Team at 617-973-8952 upon completion of case for license(s) revocation, flagging, and activity hold placement on record(s).

For MVRS-Facial Recognition Team Use Only:

Date of search: _____	Performed by: _____
<input type="checkbox"/> Record Flagged	<input type="checkbox"/> Record Released
	<input type="checkbox"/> FR Notes added



The Commonwealth of Massachusetts
Department of State Police
Compliance Unit

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

10 Park Plaza 2nd Floor
Boston, Massachusetts 02116

MARY ELIZABETH HEFFERNAN
SECRETARY

COLONEL TIMOTHY ALBEN
SUPERINTENDENT

October 1, 2012

To: All Local, State and Federal Law Enforcement Agencies
From: Sergeant Jeffery C. Joachim, Commanding Officer Compliance Unit
Subject: Access to the Facial Recognition E-Mail Address

-
1. The Registry of Motor Vehicles has created an e-mail address that Law Enforcement may send requests to have an image run through the Facial Recognition System. The e-mail address is MSP-DL-FacialRecES@massmail.state.ma.us. Please include the department making the request along with the contact persons name and call back number. Only requests received from official Law Enforcement e-mail addresses will be accepted. (No personal e-mails will be answered.)
 2. After the Facial Recognition Team has determined if there is a hit on the subject they will contact you by telephone or by e-mail with the results. If there is a hit on the system they will direct you to CJIS Web so you can see the image of the subject or compare multiple images. If you are still uncertain with the results you may come to the Facial Recognition office at the State Transportation Building 10 Park Plaza Boston, MA to compare hard copies of the hit. It may also be preferred to have the hard copies for court purposes. Due to privacy issues we are unable to send results over the internet.
 3. The following guidelines should be used when sending images to be run through the system.
 4. For Emergencies only call the Facial Recognition Team at 857-368-8605.

MSP-DL-FacialRecES@massmail.state.ma.us



The Commonwealth of Massachusetts
Department of State Police
Compliance Unit

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

Boston, Massachusetts 02116

MARY ELIZABETH HEFFERNAN
SECRETARY

COLONEL TIMOTHY ALBEN
SUPERINTENDENT

September 21, 2012

To: Facial Recognition Personnel
From: Sgt. Jeffery C. Joachim #0369, Compliance Unit, Commanding Officer
Subject: Policy for Photo Arrays

-
- 1.) To avoid any conflict with respect to court testimony and the continuity of evidentiary court presentation, the following policy will be adhered to from all Facial Recognition (FR) personnel.
 - 2.) Any officer from any agency/police department when requesting a photo array will fill out and complete the "Photo Array Request Form." That officer will be given an appropriate time to appear at the facial recognition unit. FR personnel will use the suspect as a probe and print a galley of potential candidates for a photo array. The investigation officer shall make all choices for the candidates of photo array. If the officer requests and time is available FR personnel may print the color photographs of the selected candidates.
 - 3.) The "Photo Array Request Form" with a copy of the gallery shall be kept and filed in a folder with the month and year and maintained by the Supervisor.
 - 4.) Any questions or concerns please call 857-368-8605 or fax form to 857-368-0645.

Jeffrey C. Joachim #0369

Massachusetts State Police Compliance Unit
Commanding Officer



SECURE CREDENTIALING DIVISION

Biometric Identification User Guide

Version 4.1

Document Number 641344A
Revision 1.0

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About this Guide

The *Biometric Identification User Guide* describes how the Massachusetts Registry of Motor Vehicles uses version 4.1 of L-1's Biometric Identification (BI) system. BI helps prevent the issuance of more than one driver license or ID to an individual. The system provides a way for driver license/ID issuers to work with law enforcement in the fight against identity theft and fraud.

Who Should Read this Guide

This Guide is intended primarily for people who use the L-1 BI to investigate cases that have been flagged for further review. Investigators who need to upload images from other external sources to support their investigations can also benefit from information in this Guide.

There are different levels of L-1 BI users with different responsibilities. Levels include auditor, examiner, investigator, senior investigator, supervisor, watch investigator and external watch investigator. See *Understanding Roles and Permissions* for detailed information.

This Guide assumes that you do not have any prior knowledge about BI. However, this Guide does assume that you are familiar with the basic features of Microsoft® Windows®.

This Guide does not provide information for how to use devices not specifically supplied or supported by L-1. Refer to the document(s) available with each device for the respective set up, operation, maintenance, and troubleshooting instructions.

Differences Between the Guide and the BI Software

You may notice differences between the L-1 BI features that are described in this Guide and those in your system.

L-1 BI can be customized to suit different purposes. For example, an organization may allow for different BI devices. These different functions are easily modified during installation to provide a custom environment for the user's specific purpose.

As well, your user role may not give you access to all of the features and functions that are available and described in this Guide. Your organization can set up user roles with permissions to use certain functions of BI. Depending on your role, you may or may not have access to the features described. For more information about permissions, see *Understanding Roles and Permissions*. If in doubt about your role or the permissions that you have been assigned, ask your administrator.

Because of these customization and security differences, the screen shots that are shown in this Guide may be different from the images you see in your system. If you have any questions about the differences you may see between this Guide and the system, ask your administrator.

Revision History

Rev	Date	Comments
0.1	July 16, 2010	Preliminary review draft.
0.2	May 2011	Added information on case investigations.
1.0	June 2011	Initial release to customer.

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Chapter 1. Introduction

This chapter provides general information about Biometric Identification (BI). Specifically, it contains the following topics:

- BI Workflow
- BI Devices

BI Workflow

Biometric Identification is a system that enrolls an image in the form of a *template* and then compares that template to all other templates in the BI database. Matching candidates are listed from high score to low score.

BI workflows include image enrollment, image validation, probe investigation, watch list and my group reviews.

Image Enrollment

After an image is captured, the *enrollment* process creates and stores a template of the image with demographic information on the Central Image Server (CIS). BI maps the image (using up to 80,000 points of contour) like a 3-D modeling of a face for a video game.

Note: Any template that is used to compare against the other templates in the BI database is described as a *probe* during that comparison/investigation.

The probe is compared to all stored templates on the BI server. To make optimum use of computer bandwidth, this process is run at night. This comparison is based on a probability of match, not an exact match.

Note: It is important to note that this investigative tool does not positively identify individuals; it provides the basic information needed to make a possible fraud assessment.

Image Validation

The number of matches or *candidates* that are found to be possible matches to the probe depends on the setting of the match level. The higher the match level or threshold, the fewer candidates that are matched and there is less likelihood of getting false positives.

If no matches are found that satisfy the specified conditions, other than the image itself, then no duplicates were found and the candidate case is marked as passed.

If one or more matching images are found, the group of images is put on a *candidate list* for viewing by an investigator or senior investigator. This list is automatically created each night from the day's new image probes.

BI cannot positively match images. It can only calculate the likelihood of a match.

Probe Investigation

An investigator uses the probe and candidate images to determine if there is fraud. The investigator marks each image that is determined to be fraudulent and saves the result to the CIS.

An investigator may have a special interest in a particular image that was captured and stored sometime in the past. This image can be interactively retrieved using the related driver license number, identification number, or name.

Watch List and My Groups Reviews

Watch List and My Groups are mechanisms that allow a senior investigator, external watch investigator, and supervisor to view the automatically generated probe list, as well as allowing supervisors to view the uploaded probes in a personal group list (My Group list).

BI Devices

Your facial recognition workstation must be connected to the facial recognition server and central image server.

Note: There may be other devices in use that are not included in this list. Consult with your administrator if you have any questions.

For information about the device(s) that your organization uses, or instructions about how to use them, refer to the documentation provided for the device.

