

**Commonwealth of Massachusetts  
Executive Office of Public Safety and Security  
Office of Grants and Research  
Highway Safety Division  
10 Park Plaza, Suite 3720  
Boston, MA 02116  
Tel: 617.725.3341**

**Application for Grant Funds (AGF)  
FFY 2011 Automated License Plate Reader Grant Program  
Deadline for Applications: Noon, November 29, 2010**

**All sections must be completed to be eligible.**

Name and Complete Address of Department or Municipality Randolph Police Department 41A South Main Street Randolph, MA 02368			
Chief's Last Name	First	Middle Initial	
Pace	William	F	
E-Mail Address	Telephone	Fax	
chief@randolphmapolice.com	781-963-1212	781-961-0971	
Grant Contact Last Name	First Name	Middle Initial	Title
LeGrice	Robert	C.	Sergeant
E-Mail Address	Telephone	Fax	
safety@randolphmapolice.com	781-963-1212	781-963-0968	
<b>Applicant Profile</b>			
Does your department currently have any ALPR units in use? If so, how many?		No	
Number of full-time officers		55	
Number of part-time officers		15	
What is the population of your community according to the 2009 census?		31,585	
How large is your community (square miles)?		10.32 sq miles	

**Problem Identification**

Category	2007	2008	2009
Number of unlicensed motorist citations	80	79	103
Number of uninsured motorist citations	113	87	109
Number of operating with a suspended license citations	157	128	251
Number of operating with a suspended license arrests	102	76	160
Number of stolen vehicles reports	78	57	34
Number of stolen vehicle arrests	2	7	15

## **Proposed Programming**

**Experience-** Provide a summary of previous experience your department has with highway safety initiatives (Click It or Ticket, Massachusetts Law Enforcement Challenge, crash reporting, etc.).

The Randolph Police Department has participated in Click It or Ticket, Over the Limit Under Arrest; You Drink, You Drive, You Lose, and Road Respect Mobilizations each year since 2001. We have also participated in Underage Alcohol Grants as well as the Bicycle Helmet distribution program.

The Traffic Mobilizations proved to be very successful. During the early mobilizations there was an education portion which proved to be an excellent way to work with the public, particularly in the area of seatbelt use. We conducted roadside surveys, information booths at community events and have incorporated it into our Citizen Police Academy. We saw a decrease in crashes and increase in seatbelt use during Mobilization periods.

During the Underage Drinking Grant period, we had numerous arrests, 13 in one night. More importantly we have seen more vigilance on the part of Alcohol Licensees which has helped to curb some underage drinking.

Another program we have participated in is the Child Passenger Safety Program. This has been an overwhelming success with hundreds of seats having been checked since the programs inception. Check points have been hosted here at the Police Department and technicians have supported other check points outside the Department.

**Timeline-** Provide your projected timeline for unit purchase, training, and implementation (January 2011-June 30, 2011).

If the Randolph Police should receive the grant for the Automated License Plate Reader we would plan on making the purchase by March 1, 2011 at the latest. Training would be conducted as soon as it could be arranged; preferably here at the Police Department. This would allow us to train a majority of our Patrol Officers. Once this is complete we would put the ALPR in the field for use.

**Project Activities-** Describe your proposed deployment use (how many hours per day, per week, etc.).

Deployment of the ALPR would be 24/7. The vehicle equipped would be on patrol on each shift daily. This will allow us to have this technology available at all times. During dedicated traffic enforcement periods, the vehicle will be assigned to the Traffic Unit in order to get optimum use of the APLR.

**Capabilities-** Describe your department's technical capabilities to implement this program.

Currently all Randolph Police Cruisers are equipped lap top computers capable of conducting CJIS RMV inquiries as well as LEAPS access. The ALPR would be able to interface with our system. We also have an Officer assigned to maintain our computer system and this has proven to enhance our technology capabilities.

**Goals-** Identify specific, measurable, attainable, realistic and time-bound goals and objectives for this program (i.e. increase uninsured motorist violations by 20% over 2009 levels by August 2011).

I would expect to see the following increases in Traffic Violations over 2009 levels from first use of the ALPR thru August 2011.

Uninsured Motor Vehicles	10%
Unregistered Motor vehicles	10%
Revoked Motor Vehicles	10%
Recovered Stolen Vehicles	10%
Unlicensed Operators	10%
Suspended/Revoked Licenses	10%

These numbers are dependant upon an early acquisition of the ALPR in order to deploy the unit as soon as possible.

The objective of the enforcement is to make the roads in Randolph safer and to protect all those who traverse our roads. This is done through the enforcement of the above motor vehicle laws in order to keep operators off the road who should not be driving as well as vehicles that are not covered by insurance. The effort may help to reduce the cost of motor vehicle crashes for those who are properly insured as well as cost for uninsured motorist to the Commonwealth of Massachusetts. I also would expect to see an increase in crime prevention and interdiction, since motor vehicle enforcement often results arrests as well as crime deterrence

**Evaluation-** Describe your evaluation plan (for example, a pre and post data comparison for your community during the grant period with the same time period in the previous year).

We will use current statistics to compare with any future statistics after the APLR is deployed to the field. A monthly comparison will be maintained and an annual report will be produced to evaluate the effectiveness of the ALPR system. By looking at the monthly information we will see how the ALPR has helped us in combating the motor vehicle offenses we have talked about in this grant application, by date, time of day, and location; giving us the ability to map incidents and deploy the unit for maximum effectiveness.

**Additional Information-** Provide any additional information about your current and/or proposed ALPR program you would like EOPSS to consider when evaluating your AGF response (major highways through community, commuter population).

The Town of Randolph is located in an area bordered by Route 24 to our west and Route 93 to our north. Routes 139 and 28 also run through our community. Traffic between Boston and points south such as Avon and Brockton flows frequently as well as heavily through our area. Motorists also use the streets of Randolph as a cut through when Route 24 is backed up, particularly during morning rush hour. Contributing to daily traffic are 3 industrial parks and a 4500 seat movie theater. We also have several liquor establishments and 2 night clubs which add to our nightly traffic conditions.

**BUDGET TEMPLATE**

**January 2011 - June 30, 2011-** also provide specification sheet from your chosen vendor

<b>Equipment</b>	<b>Cost/Rate</b>	<b>Total</b>
Automatic License Plate Reader/Software/Hardware	\$16350	\$16350
Operations License	\$600	\$600
<b>Total</b>	\$16950	\$16950

Total funding requested \$ \$16950

Please Note:

If your department does not have an officer safety belt policy, 50% of your total grant award will be deducted. If your department falls into this category, please provide a statement agreeing that the balance will be paid by your department or that no funds will be awarded.

Grant recipients are required to provide an in-kind (soft) match which represents 20% of the total project cost. For example if you receive \$5,000, your 20% match would be calculated as follows: \$5,000 divided by 80% = \$6,250 X 20% = \$1,250.

**FEDERAL IN-KIND MATCH REQUIREMENTS - REQUIRED**

<b>Item/Service</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total</b>
Additional Car Kit	1	\$350	\$350
Cruiser for ALPR	2	\$30,000 each	\$60,000
Computer	2	\$2,500 each	\$5,000
Four year service plan	1	Year1 free \$1600per yr	\$6,400
<b>Total</b>			\$71,750

Department's plan to pay for additional maintenance and warranty costs:

The Randolph Police Department will purchase the 4 year service/extended warranty plan offered by ELSAG North America Law Enforcement Systems LLC. The first year is free followed by a 3 year plan at \$1600 per year. This plan includes maintenance as well as software updates.

**For EOPSS/HSD Use:**

Revised Total Request:

\$ \_\_\_\_\_

Applications due on or before November 29, 2010 at noon to:

Dan DeMille, Program Coordinator  
Executive Office of Public Safety and Security  
Office of Grants and Research  
Highway Safety Division  
10 Park Plaza, Suite 3720  
Boston, MA 02116

**CHECK LIST**

- Completed Application (original and 8 copies)
- Required Signatures
- Safety belt policy or commitment to establish one by DATE
- Contract Authorized Signatory Listing

Please note that in the event that your department or municipality is selected for an award, a Standard Contract Form and General Sub recipient Conditions will be provided for your signature at that time.

Before signing below, or obtaining signature, please be sure the entire application is complete.

**ASSURANCES**

The Randolph Police Department/municipality acknowledges and agrees to comply with all grant contract requirements and performance measures. This municipality or department understands and agrees that a grant received as a result of this application is subject to the regulations governing highway safety projects and grant management requirements and will comply with all State and Federal Guidelines. Funding is based on availability of federal funds. I hereby acknowledge my understanding of the above grant requirements and will comply with the best of my ability:

Robert C. LeGrice Sergeant  
Authorized Representative Name and Title (please print)

Please note that the signatory must be authorized to enter into a contract with the Commonwealth.

Robert C. LeGrice  
Authorized Signature in blue ink

November 29, 2010  
Date signed in blue ink

**Deadline:** An original application form with attachments, along with three copies, must be received by HSD by **noon on November 29, 2010**. Faxed and electronic responses will **NOT** be accepted.

\*It is suggested that departments verify with EOPSS-HSD receipt of application prior to deadline (this is because of recent mail delivery problems). Please email Dan DeMille at [Daniel.DeMille@state.ma.us](mailto:Daniel.DeMille@state.ma.us) to verify receipt.

# COMMONWEALTH OF MASSACHUSETTS CONTRACTOR AUTHORIZED SIGNATORY LISTING



CONTRACTOR LEGAL NAME :  
CONTRACTOR VENDOR/CUSTOMER CODE:

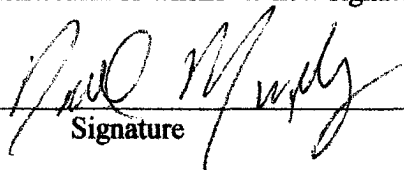
**INSTRUCTIONS:** Any Contractor (other than a sole-proprietor or an individual contractor) must provide a listing of individuals who are authorized as legal representatives of the Contractor who can sign contracts and other legally binding documents related to the contract on the Contractor's behalf. In addition to this listing, any state department may require additional proof of authority to sign contracts on behalf of the Contractor, or proof of authenticity of signature (a notarized signature that the Department can use to verify that the signature and date that appear on the Contract or other legal document was actually made by the Contractor's authorized signatory, and not by a representative, designee or other individual.)

**NOTICE:** *Acceptance of any payment under a Contract or Grant shall operate as a waiver of any defense by the Contractor challenging the existence of a valid Contract due to an alleged lack of actual authority to execute the document by the signatory.*

For privacy purposes **DO NOT ATTACH** any documentation containing personal information, such as bank account numbers, social security numbers, driver's licenses, home addresses, social security cards or any other personally identifiable information that you do not want released as part of a public record. The Commonwealth reserves the right to publish the names and titles of authorized signatories of contractors.

AUTHORIZED SIGNATORY NAME	TITLE
William F. Pace	Chief
Robert C. LeGrice	Sergeant

I certify that I am the President, Chief Executive Officer, Chief Fiscal Officer, Corporate Clerk or Legal Counsel for the Contractor and as an authorized officer of the Contractor I certify that the names of the individuals identified on this listing are current as of the date of execution below and that these individuals are authorized to sign contracts and other legally binding documents related to contracts with the Commonwealth of Massachusetts on behalf of the Contractor. I understand and agree that the Contractor has a duty to ensure that this listing is immediately updated and communicated to any state department with which the Contractor does business whenever the authorized signatories above retire, are otherwise terminated from the Contractor's employ, have their responsibilities changed resulting in their no longer being authorized to sign contracts with the Commonwealth or whenever new signatories are designated.

  
Signature

Date: 7/21/10

Title: Town Manager

Telephone: 781-961-0911

Fax: 781-961-0905

Email: dmurphy@randolph-ma.gov

[Listing can not be accepted without all of this information completed.]

A copy of this listing must be attached to the "record copy" of a contract filed with the department.

# COMMONWEALTH OF MASSACHUSETTS CONTRACTOR AUTHORIZED SIGNATORY LISTING



CONTRACTOR LEGAL NAME :  
CONTRACTOR VENDOR/CUSTOMER CODE:

## PROOF OF AUTHENTICATION OF SIGNATURE

**This page is optional and is available for a department to authenticate contract signatures.  
It is recommended that Departments obtain authentication of signature for the signatory  
who submits the Contractor Authorized Listing.**

**This Section MUST be completed by the Contractor Authorized Signatory in presence of notary.**

Signatory's full legal name (print or type):

Title: *Town Manager*

**X** *Paul Murphy*

Signature as it will appear on contract or other document (Complete only in presence of notary):

**AUTHENTICATED BY NOTARY OR CORPORATE CLERK (PICK ONLY ONE) AS FOLLOWS:**

*Linda M. Sproules*  
*Linda M. Sproules*

I, Linda M. Sproules (NOTARY) as a notary public certify that I witnessed the signature of the aforementioned signatory above and I verified the individual's identity on this date:

7/21/10, 20  .

My commission expires on: *March 19, 2017*

AFFIX NOTARY SEAL

I, \_\_\_\_\_ (CORPORATE CLERK) certify that I witnessed the signature of the aforementioned signatory above, that I verified the individual's identity and confirm the individual's authority as an authorized signatory for the Contractor on this date:

\_\_\_\_\_, 20 \_\_\_\_.

AFFIX CORPORATE SEAL



**Robert D. Churchill**  
Chief of Police

# Town of Randolph Police Department

41 South Main Street  
Randolph, MA 02368-4820  
(781) 963-1212

To: All Personnel

October 16, 2002

From: Chief Robert D. Churchill

Re: Updated Department policy regarding the use of Seat Belts

All personnel will obey Chapter 90 section 13a as it pertains to operators and passengers in emergency vehicles, while on duty. It is recommended that all personnel wear safety belts when operating department vehicles.

## LPR BID SPECIFICATIONS



### **1 Technical Equipment Specs**

- \* System shall be composed of 1-4 cameras with integrated OCR processor along with a power distribution and network communication unit, and all necessary cabling and mounting hardware for a use in a patrol vehicle setting.
- \* The system will perform OCR processing on the camera, eliminating the need for special cables between the cameras and processor; thus eliminating EMI interference with analog devices.
- \* Camera cables will be shielded to eliminate RF interference and use military specification (MIL-SPEC) connectors.
- \* Power specification is 12 VDC; Power consumption will not exceed 25W.
- \* The system shall be designed and installed to be immune from the temporary drop in DC power during vehicle starts and will not reboot or lose connectivity with the vehicles system.
- \* In each nitrogen sealed enclosure, there are two different cameras; one color and one black and white.
- \* Cameras will be available in 740nm, 810nm, or 880 nm Infrared Illuminator Wavelength utilizing high current pulses which are synchronized with the camera shutter.
- \* LPR system should have operating temperature range of -20+55°C (-4+131°F).
- \* Cameras will be available in configurations that can view across one or two lanes.
- \* Cameras shall be externally mounted with secure magnetic base including optional alignment bracket and variable direction system. The variable direction system allows the camera to be locked into a forward or backward facing position.
- \* Infrared illuminator shall be a Class 1 Illuminator, according to EN 60825-1.
- \* Communications between the cameras and user interface will consist of IP, TCP and UDP over 100Mb Fast Ethernet.
- \* The system separately captures, interprets, processes, displays, and stores images of license plates within range of the equipped vehicle without action from the end-user.
- \* The system will continue to read license plates during all functions except for a diagnostic mode.
- \* The system shall provide a GPS device, compliant with NMEA 0183 version 2.0 or later.
- \* The LPR cameras should utilize Fresnel lens technology to maximize IR illumination power.

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# LPR BID SPECIFICATIONS

## 2 User Interface Specs

- The user interface software (GUI) must be able to be loaded on existing MDT or laptop computer and not require additional interface hardware.
- The system must be installed and function on an MDT within the minimum specs for the user interface software. The minimum specs are a Pentium III 700 MHz processor, 512 MB Ram, 800x600 minimal display Resolution, 5 GB disk space available, 1 - 100Mb Fast Ethernet, and 1- USB 2.0 port.
- The system must function with full capabilities with an operating system environment of XP Professional SP2 or Windows 2000 Professional SP4.
- Each license plate read will consist of one color overlay image of the entire target vehicle, one black/white of the license plate, a time and date stamp, GPS coordinates, and any associated "hit" information.
- The system must allow storage of plate reads for at least 1 month and up to 9 months and retain those records after data transfer to a server for long term storage.
- The system shall provide the ability to store at least 4 million records in its "hotlist" database.
- Hotlists shall be merged externally then loaded to the car system.
- The system will be multi-user capable with user and password management available through the in-car interface.
- Hotlists must be able to be loaded via USB flash drive, wi-fi (802.11) and long-range (cellular, modem) with no user intervention.
- Reads that are on the hotlist ("hits") must alert the user with both an audible and visible alarm in under a second.
- The system will allow the end-user to query stored reads against time and date and full or partial plates.
- The system will allow query results to be displayed and include a time and date stamp, an infrared image of the plate, a color image and corresponding GPS coordinates of the read placed on a map including any associated information with the hotlist database match.
- The system will allow multiple results from a query to be shown on a map.
- The system will interpret and report only one license per scanned plate. Systems that provide multiple responses for each read plate are not acceptable.
- The system shall provide multiple layers of security and configuration so that certain matches may alert only those officers with appropriate privileges.
- The system shall be able to capture an image with a manual trigger by the end-user.
- The system will allow the ability to toggle between the black/white (IR) image and the corresponding color image on the user interface.
- The system will be configurable to choose the default image displayed after system startup as either the black/white or the color image.
- The system is able to simultaneously process images and data from multiple sets of cameras, fixed and mobile.
- The system retrieves new or updated hotlist files automatically on an agency-defined schedule, via the wireless network connection, and without operator intervention.

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## SPECIFICATIONS

### 2 User Interface Specs *(continued)*

- \* The system will have at least 10 multiple classes of alarms to differentiate between "hit" types.
- \* The GUI will allow the end-user to manually insert a plate, state and additional description data. The GUI will also search through in-car stored read for inserted plates and display any and all past reads on that that plate.
- \* The system will provide on-board cartography
- \* The system will allow the creation of a virtual barrier around sensitive or restricted areas by connecting GPS coordinates
- \* The system will generate alarms on existing reads each time a new Hot List is received.
- \* The system will export data in HTML

### 3 Server Specs

- \* The software will allow searches of stored reads via time and date, plates (including partials), location radius, and map location. Queries will be able to be defined for partial plate searches using Regular expressions.
- \* The software will allow the display of a thumbnail of the original image with query results.
- \* Each query result will link to a details page that includes original color image, black/white image, and map location.
- \* Software has built-in trouble management system to alert support personnel of potential problems.
- \* The software provides data mining functions including: Convoy Analysis, Unique/Duplicate plates time frame analysis, and Nested searches.
- \* Communications protocols to accompany different bandwidth requirements.
- \* The system can generate emails on alarms to cellular devices.
- \* The software can manage multiple hotlists.
- \* The software will allow Pending alarms that are not managed in a configurable time frame to be transmitted to the server and automatically change the class to Deferred.
- \* The software allows for Multiple Login roles.
- \* The software allows for customized menu selection based on role.
- \* The software will provide an activity log of user functions.

### 4 Company Performance

- \* The LPR provider must have experience in large camera network systems and have a least two 100+ networked camera systems installed and currently operational in North America.
- \* The LPR provider will manufacture and service the system in the United States of America.

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