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	7	
Upil Delice Department			
Hull Police Department			
I School Street			
Hull, MA 02045			• • • •
Chief's Last Name	First	Middle I	nitial
Billings	Richard	K	
E-Mail Address	Telephone	Fax	
rbillings@hullpolice.org	781-925-1212	781-925-	-1216
Grant Contact Last Name	First Name	Middle	Title
		Initial	Patrolman/Grant Contract
Sweeney	Andrew	J.	Manager
E-Mail Address	Telephone	Fax	
	-		
asweeney@hullpolice.org	781-773-3872	781-925	-1216
	Applicant Profile		
Does your department current	ntly have any ALPR units i	n No	
use? If so, how many?			
Number of full-time officers		24	· · · · · · · · · · · · · · · · · · ·
Number of part-time officers		10-15	(Summer only)
What is the population of you	ir community according to th	e 11,123	Same and the second
2009 census?			
How large is your community	(square miles)?	2.97 sc	u miles

Problem Identification

Category	2007	2008	2009
Number of unlicensed motorist citations	37	29	48
Number of uninsured motorist citations	18	31	23
Number of operating with a suspended	14	19	10
license citations			

Number of operating with a suspended	40	35	30
license arrests			
Number of stolen vehicles reports	11	9	9
Number of stolen vehicle arrests	9	11	10

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 Hull Police Department has been very active in Massachusetts highway safety initiatives. We have been participating in the various Click It or Ticket, You Drink You Drive You Lose, etc safe driving enforcement campaigns for over ten years. The department always participates in all available mobilizations and has completed several additional mobilizations on our own. The department has also been participating in the Massachusetts Law Enforcement Challenge since it was first introduced in the Commonwealth. The Hull Police Department has placed at an award earning level each year it has entered the challenge.

The department has participated in numerous other highway safety initiatives over the years including pedestrian and bicycle safety programs. We conduct an annual bicycle rodeo where children are issued free bicycle helmets to encourage safe riding habits. The department has two child safety seat technicians on staff to install child safety seats and instruct parents on their proper use.

The Hull Police Department always makes a diligent effort to apply for and participate in any additional grant programs that become available that can assist us in ensuring the continued safety and security of our citizens and visitors.

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

Upon being awarded grant funding, the department will begin making arrangements to purchase a unit from our chosen vendor by the end of January 2011. Unit installation should be completed by the end of February. Officer training on the operation of the ALPR will commence upon completion of installation. All personnel should be trained in its use by the end of March. The ALPR unit should be fully implemented by April 1, 2011. **Project Activities-** Describe your proposed deployment use (how many hours per day, per week, etc.).

If the Hull Police Department receives funding for an ALPR, we plan to make the deployment of this equipment a priority. The ALPR will be installed in a marked patrol car with the goal that the unit will be on patrol twenty-four hours a day and seven days a week as long as the vehicle and equipment is not down for service. Since the department does not have a designated traffic unit/division, the ALPR cruiser will be deployed in the busiest sections of town. Depending on staffing levels, the unit will be assigned to townwide roaming patrol when possible; otherwise it will be assigned to the south sector where the heaviest amount of vehicular traffic and parking occurs.

The department currently institutes one hour of directed patrol on each shift. It is likely that the ALPR unit will be utilized as a directed patrol instrument, where it will patrol for an hour specifically for violations without being side-tracked by service calls.

During selective enforcement campaigns, such as Click It or Ticket, the ALPR unit will be the primary cruiser used during enforcement patrols.

Upon being awarded this grant, the department will begin a public information campaign announcing the grant award and educating the public about the risks and consequences of driving unlicensed, uninsured, etc. This campaign will be reimplemented at the actual deployment of the ALPR into active use and at times of selective enforcement campaigns.

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

The Hull Police Department has done its best to stay abreast of technological advancements in law enforcement. Each patrol cruiser is currently equipped with a laptop computer with access to the RMV and CJIS databases as well as internal records management and dispatch software. Several cruisers are also equipped with RADAR units. By the end of 2010, the department will have upgraded our in house computer servers with the most modern technology, allowing us to expand our technical capabilities and stay current with technological needs.

The department has a full time IT officer that is very capable and experienced. He also is supported by IT staff working for the town and school systems.

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).

While the numbers of violations for unlicensed, uninsured, and stolen vehicles have fluctuated between 2007 and 2009, the averages have remained consistent. This demonstrates a clear problem that exists with these crimes occurring in our community.

The Hull Police Department's primary goal in the ALPR program is to increase the quality of life of residents and visitors in the town by increasing the safety of travelling upon our roads. We will do this by pursuing the following objectives:

- 1. Increase the number of violations for unregistered vehicles being driven on public roads by 10% over 2009 levels by June 30, 2011 and by 20% by December 31, 2010.
- 2. Increase the number of violations for uninsured vehicles being driven on public roads by 10% over 2009 levels by June 30, 2011 and by 20% by December 31, 2010.
- 3. Increase the number of violations for unlicensed operators driving on public roads by 10% over 2009 levels by June 30, 2011 and by 20% by December 31, 2010.
- 4. Decrease accidents involving unlicensed operators and uninsured vehicles by 5% over 2009 levels by June 30, 2011 and by 10% by December 31, 2010.
- 5. Increase the number of recovered stolen vehicles by 2.5% over 2009 levels by June 30, 2011 and by 5% by December 31, 2010.

We have chosen different goal percentages at different times of the year to reflect the end of the official grant contract and the end of the calendar year. Our community has significantly higher amounts of vehicular traffic over the summer and thus better opportunity to achieve our goals during that time just after the contract end date.

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).

The Hull Police Department will compare data on violations, crashes, and stolen vehicles during the grant period with the data from the previous years to evaluate program progress. We will measure data based on the actual time period that the ALPR is in use versus the same time period in previous years. 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 Hull is a small community surrounded almost entirely by ocean and beaches. One of these beaches is Nantasket Beach which is partially a DCR Reservation. Because of this large, public beach and the expanse of town maintained beaches, the town experiences a massive influx of tourists and beach goers all summer long. On any given day during summer months, the population can increase up to ten fold or more. This surge in population includes a surge in vehicles passing through the town and increased traffic resembling that of downtown Boston. Visitors come to Hull from all over the South Shore, metro Boston area, and even the North Shore. With these visitors, comes an increased demand for public safety, particularly on the roads where traffic violations occur almost constantly. The department deploys additional seasonal officers on foot and bicycle patrol to compensate for parking and pedestrian issues. Although the DCR Reservation is patrolled by the State Police, their presence has been significantly scaled back in recent years with budget and manpower issues leaving much of the responsibility for patrolling the reservation to the Hull Police. The Hull Police Department has been seeking an ALPR system and believes it can be an incredible asset to our efforts to keep the community and streets of Hull safe, including the areas of the DCR Reservation, unfortunately our own budget constraints have left us, as of yet, unable to purchase a system.

BUDGET TEMPLATE

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

Equipment	Cost/Rate	Total
PIPS 3 Camera ALPR System	19,707.00	19,707.00
Enhanced Mapping Capability	755.20	755.20
Total		

Total funding requested \$ _____20462.20_____

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 \times 20\% = $1,250$.

Item/Service	Quantity	Cost	Total
Grant	60 hours	40.92/hr x 60 hrs	\$2,455.2
administration			
Equipment	8 hours	IT: 40.92/hr x 8 hrs	
training – IT &		Maint: 19.86/hr x 8 hr	\$486.24
maintenance			
Equipment	1 hour per officer (21	Patrolman: 27.28/hr x	\$604.23
training – police	officers)	16= 436.48	
operators		Supervisor: 32.73/hr x	
		4= 130.92	
		Lieutenant: 36.83/hr x	
		1=36.83	
2 year warranty	1	1,900.00	\$1,900.00
Fuel while	5,475 gallons (15g/day	2.75/gallon	\$15,056.25
operating ALPR	x 365 days)		
· ·			
		Total	\$ 20,501.92

FEDERAL IN-KIND MATCH REQUIREMENTS - REQUIRED

6

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

The department will pay for current year maintenance and warranty costs out of our existing operational and equipment budgets. Future costs will be budgeted for in the following fiscal years' budgets as well as through a purchased extended warranty.

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 Subrecipient 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 <u>Hull</u> 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:

Richard K. Billings, Chief of Police

Authorized Representative Name and Title (please print) Please note that the signatory must be authorized to enter into a contract with the Componeealth.

Authorized Signature in blue ink

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 to verify receipt.

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): Richard K. Billings

Title:Chief of Police

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:

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

, 20_____.

My commission expires on:

AFFIX NOTARY SEAL

mouth

(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:

kovenber 24,20 10.

AFFIX CORPORATE SEAL



COMMONWEALTH OF MASSACHUSETTS **CONTRACTOR AUTHORIZED SIGNATORY LISTING**

CONTRACTOR LEGAL NAME : CONTRACTOR VENDOR/CUSTOMER CODE:

Issued May 2004

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		
Richard K. Billings	Chief of Police		
	· · ·		

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.

Date: November 24, 2010

Signature

Telephone: 781-925-2000

Fax: 781-925-0224

Title: Town Manager

Email:plemnios@town.hull.ma.us

[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.

HULL POLICE DEPARTMENT POLICY AND PROCEDURE <u>#51.0 THE PATROL VEHICLE</u>

51.0 THE PATROL VEHICLE

51.1 GENERAL CONSIDERATIONS AND GUIDELINES

To a police officer the patrol vehicle serves as one of the most necessary and important tools required for the proper performance of his/her duties and responsibilities. It is an office, a method of public access, a transport vehicle, a storage and resource facility, and a communications center. As such it becomes the dual responsibility of the officer and the Department to ensure that the vehicle is conspicuous in its markings, operationally safe, mechanically maintained, and fully equipped both internally and externally with the devices and equipment which insure this proper performance. All vehicle used in routine or traffic patrol, for selective enforcement, and prisoner transportation shall meet the criteria as outlined within this Policy. The Department is responsible for providing the equipment and maintenance, and those assigned to operate the vehicle are responsible for the proper care of the vehicle and its equipment, and for notification of need for repair or replacement.

51.2 PROCEDURES

51.2.1 INSPECTIONS OF PATROL VEHICLES: In order to help ensure that criteria is being met, all Officers, Detectives and Supervisory personnel assigned to patrol shall inspect their vehicle prior to operation, including the trunk, making note of any missing or damaged equipment or previously unreported exterior or interior damage to the vehicle. Information uncovered shall immediately be reported to the Sergeant or Shift Supervisor. Sergeants and Shift Supervisors shall inspect cruisers daily in accordance with the procedures as contained within Policy # 32.0 (INSPECTIONAL SERVICES). Cruisers will be formerly inspected weekly by the Lieutenant, a Sergeant or a Shift Supervisors as assigned by the Executive Officer. The Weekly Cruiser Inspection Checklist Form (copy attached to this Policy, see HPD Form #065) shall be returned to the Executive Officer. (see also Policy #31.0, Inspectional Services)

51.2.2 FUELING OF VEHICLES ETC: ALL OFFICERS, DETECTIVES AND SUPERVISORY PERSONNEL assigned a cruiser or unmarked unit are responsible for filling the gas tank (prior to completing their shift). The correct vehicle mileage, gasoline usage, and meter reading shall be recorded on the gasoline usage sheet as required and in a timely manner.

51.2.3 OPERATION OF POLICE VEHICLES: Due to the damages, expenses, safety considerations, and out of service time resulting from the operation of police vehicles in various wooded areas, rough terrain and muddy areas, and areas containing an inordinate amount of road hazards throughout the Town, the following directive is to be adhered to by all personnel, in addition to all other requirements as contained within this Manual and as governed by law relative to the operation of police vehicles:

POLICE VEHICLES ARE NOT TO BE OPERATED ON THE UNPAVED AREAS LISTED BELOW UNLESS EXIGENT CIRCUMSTANCES EXIST:

A) within the area commonly known as the "dungeons", which is the area located between the cemetery and Farina Road which contains World War I gun emplacements and concrete bunkers, barracks and other structures;

B) within the area used for dumping purposes at the sanitary landfill at the end of the Access Road;

C) within the wooded area off Worrick and Eastman Road and Priscilla Way;

D) Any other similarly situated wooded, rough terrain or muddy areas containing an inordinate amount of road hazards.

HULL POLICE DEPARTMENT MANUAL

HULL POLICE DEPARTMENT POLICY AND PROCEDURE #51.0 THE PATROL VEHICLE

All three of the unpaved areas referred to above are accessible by foot patrol. In the event of a situation arising or an incident that requires a police response to any of the above referred to areas or locations and the responding police vehicle has to be left unattended, said vehicle shall be properly secured as well as any equipment left inside, shall be parked in an illuminated area if same is available, proper notification shall be made to Headquarters and to the Sergeant or Shift Supervisor and proper radio communication procedures are to be followed.

51.2.4 EXTERIOR EQUIPMENT AND MARKINGS: All patrol vehicles shall be conspicuously marked as directed by proper authority with the guidelines being established as follows: "HULL POLICE" and shall have a large replica of the Hull Police Department Badge on the front doors of each side. EMERGENCY DIAL 911 and the vehicle number shall also be conspicuously displayed. Each vehicle will have an exterior spot light, a set of blue/red emergency bar lights on the roof, a siren, a loud speaker system, alternating flashing headlights (wig-wags), and a set of alley lights for nighttime use. All lettering will be of reflectorized paint or material. One patrol vehicle to be utilized primarily by the Sergeants or Shift Supervisor shall be conspicuously marked PATROL SUPERVISOR OR COMMAND.

51.2.5 INTERIOR EQUIPMENT: All patrol vehicles shall be equipped with a complete UHF radio transceiver, an interior dome light, and a prisoner restraint screen with plexiglass shield which separates the front and rear compartments. The "Patrol Supervisors" vehicle also contains a Bearcat 16 Channel Scanner to enable Sergeants and Shift Supervisors to routinely monitor other public safety agencies such as the Hull Fire Department and also to monitor the radio transmissions of the Hull Light Department and Hull Highway Department. Said scanner also allows the monitoring of the Quincy and Weymouth Police Departments as well as BAPERN (inter-city).

<u>51.2.6</u> TRUNK EQUIPMENT: All patrol vehicles, the Detective's vehicle (460) and the Police Chief's vehicle (451) shall carry the following items within the trunk and/or within the Trunk Organizers:

a) A Companion 360 Oxygen Regulator/Resuscitator w/tank containing an absolute minimum pressure of 500 PSI in duffel bag carrying case;

b) Seat belt cutter;

c) Flares (minimum of six);

d) 1 Laerdal pocket mask with 2 spare mouth pieces;

e) 1 box of sterile latex disposable gloves;

f) Evidence tags, labels, and bags;

g) 1 Roll Police line barricade tape;

h) A spare tire with jack and lug wrench;

i) 2 disposable emergency blankets stored in a clean plastic bag;

j) A fire extinguisher with holding bracket;

k) A "bullet proof" vest stored inside a protective bag;

1) Protective eyewear, needle and syringe point protectors, and masks;

m) Jim-Buoy rescue life-saving can with attached rope.

n) One (1) O.B. Kit;

o) Yellow marking crayon, chalk & fluorescent spray paint;

p) A Emergency Medical Supply Kit.

(<u>NOTE</u>: The Hull Fire Department responds to all traffic accidents scenes. Their vehicles contain all necessary extracation devices and equipment.)

<u>51.2.7 EMERGENCY MEDICAL SUPPLY KIT CONTENTS</u>: The following items are the minimum requirements for the 1772 Emergency Medical Supply Kits (First Aid Kits) as contained within the trunk of each vehicle:

HULL POLICE DEPARTMENT MANUAL

HULL POLICE DEPARTMENT POLICY AND PROCEDURE <u>#51.0 THE PATROL VEHICLE</u>

(1) PAIR OF SCISSORS	(1) EYE AID	(4) JR ICE PACKS
(10) ANTISEPTIC WIPES	(4) 4" STERILE KLINGS	(1) 1" TAPE
(2) 2" STERILE KLINGS	(6) 4" x 4" STERILE PADS	(10) 2" x 2" STERILE PAPS
(1) TWEEZERS	(1) RESCUE BLANKET	(24) 1" x 3" BAND AIDS
(10) LATEX GLOVES	(3) 5" x 9" SURGI PADS	(1) PEN LIGHT
(3)TRIANGULAR BANDAGES	(2) EYE PADS	(1) WIRE SPLINT
(1) FIRST AID CREAM	(1) 250 ML STERILE H20	(1) 1/2" TAPE

51.2.8 REPLENISHMENT OF FIRST AID SUPPLIES ETC: In addition to the inspectional duties and reporting requirements as specified in section 51.2.1 of this Policy and as enumerated within Policy #31.0, INSPECTIONAL SERVICES, a designated officer has been assigned to check each trunk organizer and Emergency Medical Supply Kit on a regular basis and replenish items as needed. A regular basis shall be deemed to be no less than every other day of the designated officer's four day schedule. The Sergeants and/or Shift Supervisor as designated during weekly inspections shall ensure that this is being accomplished. In addition, personnel utilizing and/or exhausting supplies of items contained within said trunk organizers, first aid kits etc. shall inform said designated personnel in order that items may be replaced and available to the next officer needing same.

A check off form to be utilized for this purpose is attached to this policy. See HPD Form #064 as attached to this policy. This form is to be submitted to the Executive Officer upon completion.

51.2.9 USE OF SEAT BELTS IN POLICE DEPARTMENT VEHICLES: On January 4, 1994 the legislature passed Chapter 387 of the Acts of 1993, which became Chapter 90, section 13A of the Mass. General Laws. The purpose of the law is to provide for the use of safety belts in certain vehicles with an effective date of February 1, 1994. All personnel shall familiarize themselves with the law and its enforcement procedures and shall take appropriate action in compliance with this new law. In addition and in order to remain in compliance with the law and its intent, to maintain a professional level of confidence in ourselves, to provide a role model for the public that we serve, and in the interest of officer and public safety, the following shall be strictly adhered to by all personnel of this Department:

A) Effective upon February 1, 1994 all personnel, operating or otherwise occupying police department vehicles whether on or off duty, and/or personnel operating or otherwise occupying non-police department vehicles while on duty shall wear a safety seat belt which is to be properly adjusted and fastened. This would include police officers, civilian employees, and non-police personnel.

B) The police officer who is <u>operating</u> the police department vehicle <u>shall</u> also be <u>responsible</u> for properly adjusting and fastening the safety belt on subjects who are in custody or under arrest and are being transported within a police department vehicle.

C) The above paragraph "**B**" shall not apply in situations where the subject is physically unable to use safety belts, provided however that such condition is duly certified by a physician as outlined in Chapter 90, section 13A, subsection "c" or in situations where the subject in custody or under arrest resists in such a manner as to make it dangerous or impossible for the officer to fasten or adjust the safety belt. All reasonable efforts however are to be made to have the subject wear the safety belt as required.

D) Any malfunction of a safety belt is to be reported forthwith to the Sergeant/Shift Supervisor, who shall inform the Commanding Officer, who will take the necessary action to have same repaired.

ALL PERSONNEL SHALL STRICTLY COMPLY WITH THE PROVISIONS OF THIS POLICY AND THE ENFORCEMENT OF THIS LAW RELATIVE TO SEAT BELT USAGE AND ITS ENFORCEMENT PROCEDURES. (SECTION 51.2.9 ADDED 4/18/95, PREVIOUSLY COVERED BY GENERAL ORDER)

HULL POLICE DEPARTMENT MANUAL

Quotation

Adamson Industries Corp. 45 Research Dr. HAVERHILL, MA 01832

Quote Number: 8946

Quote Date: Nov 24, 2010

Page: 1

Quoted to: HULL POLICE DEPT 1 SCHOOL STREET HULL, MA 02045-3223

7

Customer ID	Good Thru	Payment Terms	Sales Rep
HUL MA PD	12/24/10	Net 30 Days	DAWN

Quantity	Item	Description	Unit Price	Extension
1.00		PIPS TWO CAMERA SYSTEM	17,665.00	17,665.00
1.00	ţ	PIPS THREE CAMERA SYSTEM	19,707.00	19,707.00
		ABOVE SYSTEM INCLUDES		
	•	CAMERAS, HARDWARE, SOFTWARE, PIPS, BACK		
		OFFICE SYSTEM, INSTALLATION AND		
		TRAINING		
		OPTIONAL EQUIPMENT UPGRADES		
' 1.00		TWO YEAR WARRANTY	1,900.00	1,900.00
1.00		THREE YEAR WARRANTY	4,607.00	4,607.00
1.00		ENHANCED MAPPING CAPABILITY	755.20	755.20
				•
				· .
	•	•		
	· · ·			
•	,			
· · ·				
т	EL # 978-681-0370	· · ·	Subtotal	44,634.20
			Sales Tax	
FAX	K # 978-975-7168		Freight	
	t		Tetel	11 621 20
			IOTAI	44,004.20

PAGIS® Automated License Plate Recognition Software



Federal Signal PIPS is the only provider in North or South America to design, manufacture and support a complete range of ALPR equipment, software, and services — the result is a unique engineered solution designed to provide superior performance even in the harsh environments of a patrol application.

The Federal Signal PIPS Police ALPR Graphical Interface System (PAGIS) consists of up to four PIPS P362 dual-channel (color and infrared) cameras connected to a PIPS SupeRex trunk-mounted processor, and the PAGIS in-car officer software interface.

Patented PIPS Platefinder[®] and TripleFlash[®] technologies, along with proprietary PIPS advanced OCR engines tailored to the state or region of interest, complete the package. PAGIS is the only solution to offer seamless integration with PIPS Back Office System Software (BOSS).



> Features

PAGIS packages Federal Signal's industry leading ALPR technology and superior performance from PIPS into a complete mobile law enforcement solution

High volume, accurate, license plate capture at speeds up to 160 mph

Instant plate check against specified databases, (NCIC Stolen, Felony Warrants, Amber Alerts, local hot lists, etc.) with immediate alerts to the officer of any "hits"

Seamless operation with PIPS' Back Office System Software (BOSS) for data management, querying and mining, mapping and networking with other agencies

Electronically chalk vehicles for timed parking enforcement, while simulaneously checking for scofflaws

"Almost 7.4 million plates have been checked since we adopted the system. In addition to recovering over 1,000 stolen vehicles and making almost 200 arrests, the system has helped us improve the parking situation within the City by enabling us to better enforce the rules - the people are less likely to break the law when they know they will get caught. In the past twelve months, we have begun using the system to enforce parking regulations downtown. Over 700 vehicles with almost \$350,000 in outstanding parking citations have been identified and towed using the PIPS solution. The revenue helps us to justify purchase of additional equipment to improve the safety of our City"

Sgnt. Chris Morgan, Long Beach Police Department



SLATE[™] ALPR CAMERA



The Federal Signal ALPR Slate camera.

The Federal Signal automated license plate recognition (ALPR) Slate[™] camera delivers high performance in a compact, low-profile design that does not hinder lightbar visibility.

The Slate camera incorporates patented infrared illumination in an infrared camera for effective license plate imaging and a color camera for a vehicle overview image. Patented filter and flash techniques provide excellent suppression of headlights and bright sunlight, while field-by-field control of camera parameters enables the use of patented TripleFlash[™] technology to reduce plate-to-plate variation issues. The Slate camera reduces the ALPR processor burden by pushing analytics to the network edge.

Federal Signal Slate cameras can achieve the highest performance plate capture and plate read rates available in the industry.



> Features

Dual-lens camera for infrared license plate image and color vehicle overview

Patented Platefinder[®] and TripleFlash[®] technologies

Small, compact, low-profile, weatherproof design with no moving components

Robust optical character recognition (OCR) engine

> Benefits

Compensates for headlights, sun glare, variances inambient and license plate conditions for superior image quality and more accurate performance

Provides durability and longevity in extreme operating environments

Maintain lightbar visibility Relatively covert



European Union Headquarters PIPS Technology Ltd.

t or visit us thrology reement and itic license effective tool to combat criminal activity, enhance productivity and improve officer safety.

With PIPS Technology you can:

- Capture up to 3,600 reads per minute
- Capture plates at up to 160 mph differential speed
- Alert officers immediately if a vehicle is suspect
- Identify suspended and revoked drivers
- Capture data that aids in witness identification, watch list development, placing suspect at a scene, terrorist interdiction, pattern recognition
- Assist in stolen vehicle recovery
- Identify felons or wanted individuals
- Monitor school and playground perimeters for sexual predators
- Assist in amber alerts
- Identify delinquint citations for revenue enforcement
- BOLO suspects
- Crime scene intelligence and surveillance
- Monitor gang activity and locations
- Assist in drug enforcement

Sgt. John Gaw of the Los Angeles County Sheriff's Department ASAP Unit notes, "ALPR from Federal Signal PIPS Technology is generating incredible results that go far beyond the recovery of stolen vehicles, which is the most commonly discussed benefit of the technology. The recovery of stolen vehicles, while important, is only the tip of the iceberg when it comes to the use of ALPR. The data collected by the system is incredibly valuable for investigations and has helped us in many cases."

-

The highest quality equipment, industry leading performance, and unpumakes PIPS Technology the only choice for ALPR. A Federal Signal Comstanding history in public safety that ensures we will design integrated meet and evolve with your needs.

Increase productivity

Each PIPS Technology ALPR system acts as a force multiplier. While an aggressive officer could enter in a few hundred plates per day, PIPS Technology is capable of logging tens of thousands of plates per shift.



With remarkable capture and read rates, even at vehicle speeds up to 160 miles per hour, the system frees up officers for other duties.

Improve officer safety

PIPS Technology instantly provides historical data on a license plate to better arm your officers with information.

By making officers better informed and alerting them to potentially dangerous situations, ALPR can help to avoid conflicts and save lives.

Boost identification speed and accuracy

PIPS Technology makes accessing up-to-the-minute data fast and seamless.

Databases can be easily maintained and new information quickly uploaded – across all deployed units for improved enforcement – all with a PIPS' Back Office System Software (BOSS).



Police Chief James O'Connor of the Lyndhurst Police Department noted "I've worked with Endered Signal through

> Specifications



- Up to four dual-lens cameras at once
- Vehicle record contains infrared image of plate with corresponding OCR translation, color image of vehicle, date and time stamp, GPS coordinate, and relevant information from the database (in the event of a hit)
- User configurable audio and visual alarms
- Integration with existing MDC/laptop, or touch screen monitor with on-screen keyboard
- Support of wireless data transfer to/from the BOSS system for more frequently updated hotlists and to offload captured data for immediate intelligence use
- Ability to prioritize databases so simultaneous hits are displayed by priority order as defined by the customer
- Data encryption to eliminate possibility of evidence tampering
- Ability to manually enter data enables immediate use of new intelligence



Electronic Chalking Violation



PIPS TECHNOLOGY

A Federal Signal Company USA: 804 Innovation Drive, Knoxville, TN 37932-2562 USA UNITED KINGDOM: York House School Lane, Chandlers Ford, Eastleigh, Hampshire SO53 4DG 800.548.7229 • pipstechnology.com For more public safety information, visit federalsignal.com/publicsafety

- Officer efficiency exponential productivity improvement as the system can capture up to 3,600 plates per hour
- Officer safety providing officers with better awareness of their surroundings and of vehicles they are approaching
- Intelligence through the BOSS system, the intelligence possibilities are expanded as multiple patrol deployments, fixed site cameras and other agencies are networked
- Provide information to efficiently manage parkig enforcement and generate revenue
- Elimination of profiling claims the system looks at every vehicle regardless of the condition or the driver
- Improved license plate enforcement better enforcement results due to identification of more suspect vehicles



Parking Scofflaw Violation



Back Office / Information Technology Information:

The ALPR system consists of two software components; PAGIS or Mobile LPI is installed in the vehicle on a SupeRex computer (PIPS) or a laptop. A Back Office System Server is installed on an existing server or desktop computer depending on the use case.

Server Side ALPR System Design

When considering the design of an ALPR configuration take into account the architecture of the system. A functional diagram of the PIPS ALPR System is depicted in Figure 1.



FIGURE 1: PIPS ALPR Functional Diagram

The ALPR system design process should include;

- Coordination of access to ALL databases which will be used in the ALPR system. Databases from government agencies require contracts and authorization to access the data. Begin seeking access to data sources as early as possible in the design process, authorization and contract negotiation may take more than a month. Access to data for BOSS can be in one of three forms; Local (resides on the server(s) in your network), HTTP resides on the internet such as state DOJ and NCIC files, and FTP resides on a secure server.
- Identify a server which will house BOSS. The server should have a large capacity hard disk to store the images collected by PAGIS. PAGIS records the color photo, license plate image (infrared), and textual data (date, time, GPS coordinates, user name) for every license plate the system encounters in addition to the database hit information. PAGIS on average can collect 3000 reads in a single 10 hour shift per ALPR vehicle. Each read size is about 12K bytes resulting in approximately 36MB of data per 10 hours of usage per ALPR vehicle. If the server has a 100 GB drive the data storage capacity is approximately 7 years if only one ALPR vehicle is in operation.

- 7 -

- Most agencies will not need to save 7 years of data. As a general rule one year is sufficient as most cases related to the data should have cleared in a year. Establish a policy to determine the amount of data to retain from PAGIS. BOSS ships with Microsoft Data Exchange (MSDE) as the SQL database engine. MSDE has a 2 GB limit on data therefore the data storage capability is about 56 days for one ALPR vehicle. For an evaluation or a department with only one ALPR vehicle MSDE should serve the storage needs. For departments with more than one ALPR vehicle it is recommended to purchase BOSS PRO. BOSS PRO employs Microsoft's SQL Server which does not have a cap on data capacity. With BOSS PRO and a server with a large hard disk (100 GB+) a department with 5 ALPR vehicles could expect to store data for approximately 550 days or eighteen months before reaching the capacity of the drive.
- When sizing the server for data storage consider installing BOSS on one server and the PAGIS files on a separate file server. If you already use SQL Server there is no need to purchase BOSS PRO. BOSS will work with your existing SQL Server.
- BOSS and BOSS PRO have the ability to map the GPS coordinates from each vehicle encountered by PAGIS. The coordinates are display in BOSS using either Microsoft Map Point or Google Maps. The advantage to Microsoft Map Point is the server does not require a connection to the internet and the maps display rapidly. Google Maps provide the ability to zoom in and out of the map, as well as create hybrid maps. A hybrid map overlays satellite imagery from Google with the street maps resulting in a very powerful tool. Google Maps will require the domain name of the server running BOSS to be provided in advance of the installation so Google can issue a software key for the server.

The BOSS software requires the following minimum system requirements:

- Pentium 4, 2.0 GHz or faster computer or server with a minimum of 1 GB of onboard RAM.
- Operating System; Windows XP Professional with Service Pack 2 installed, Windows Server 2000 with Service Pack 4 installed, or Windows Server 2003 with service Pack 2 installed and all require the installation of Internet Information Services.
- Web browser (Microsoft Internet Explorer or Mozilla Firefox).
- Microsoft SQL Server 2000, SQL Server 2003, or SQL Server 2005.
- With SQL Server 2005, you need to purchase a single processor license instead of using the Client Access License approach. As for the specific version of SQL Server 2005 to purchase, it depends upon the tools the you want from Microsoft. The most basic package is all that is required.
- 40 GB Hard Disk Drive
- Microsoft Windows 2000 or XP Professional operating system with Internet Information Services installed
- SVGA display with a minimum resolution of 800x600 pixels
- One user assessable USB 1.1 or higher (2.0 preferred) USB or parallel (printer) port for the hardware dongle.

- 8 -

- Internet access for Google mapping option.
- Keyboard and mouse