LICENSE PLATE READER (LPR)

Participant Guide

March 2015

PRA - LPR0001

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Module I: Introduction to LPR

Duration

1 Hour

Scope Statement

This module reviews the history of License Plate Reader (LPR) technology, common terminology, LPR system components, traditional LPR system deployment and the difference between simple and complex systems.

Terminal Learning Objectives (TLO)

Upon successful completion of this module, students will be able to explain the history of LPR systems, the method of operation, and common deployment models listing the advantages and disadvantages of each.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Define common LPR terms
2. Explain the basic mode of operation of an LPR system.
3. Describe the difference between a simple and complex LPR system.

Lesson Topics

This block includes the following topics:

- Course Overview
- Housekeeping
- Introductions
- History of LPR
- How LPR works
- LPR components
- Terminology

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer

Projector
Projection Screen
Handouts:

- USB thumb drive containing more than 130 student resources (information contained on enclosed DVD)
- Terrorist Screening Center (TSC) Information Card

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

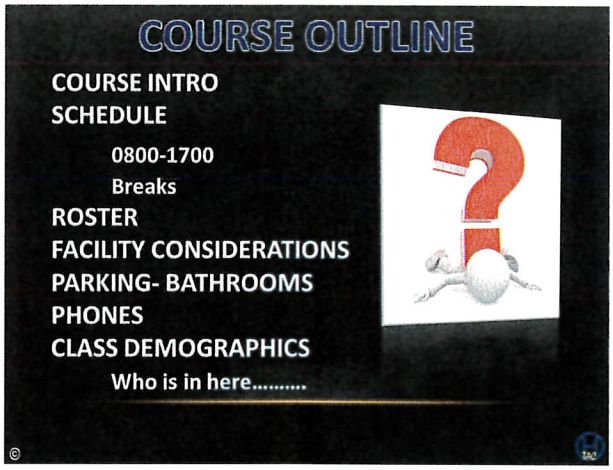
Assessment Strategy

Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Participant's Note:

Participant notes are contained throughout the lesson plan as appropriate.

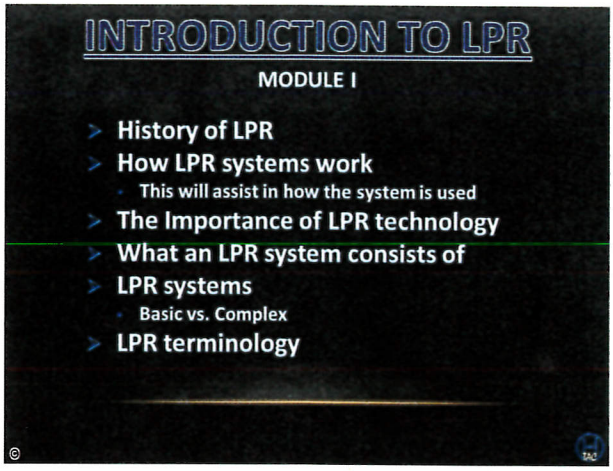
PARTICIPANT NOTES



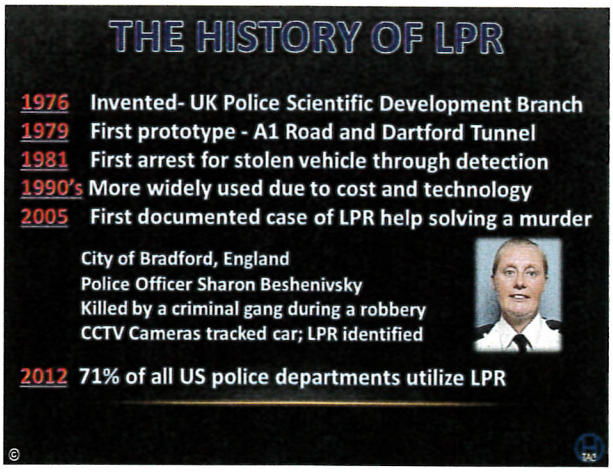
LPR is not a new or novel idea; it simply enhances typical law enforcement duties through the use of technology. To illustrate this concept you can look at the simple process of conducting a records check of a license plate. Using the tradition methods an officer can run a few hundred plates during the course of a shift to see if they are wanted or have alerts associated with them. With LPR it is possible to run a far greater number of plates in a shift. As an example of an LPR's efficiency, an LPR car scanned an entire parking lot of 8,000 plates in an hour.

During patrol briefings vehicles-of-interest license plates are told to officers who write them down in the hopes they may locate them during their shifts. If

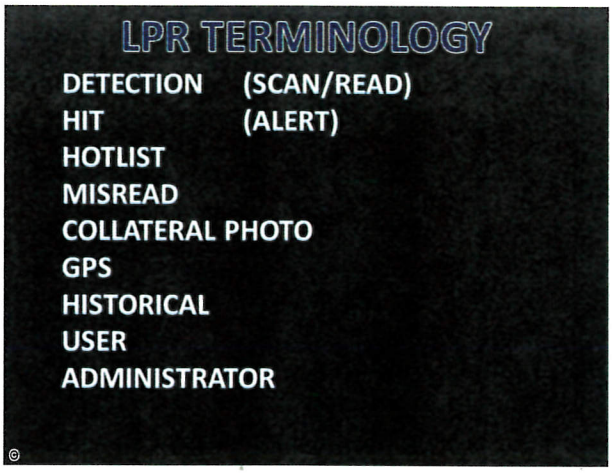
located, these officers either take enforcement action or notify the person who issued the Be On the Look Out (BOLO). The LPR system makes this process seamless by allowing the person to enter the plate in the system, which automatically notifies them when the LPR system scans the plate.



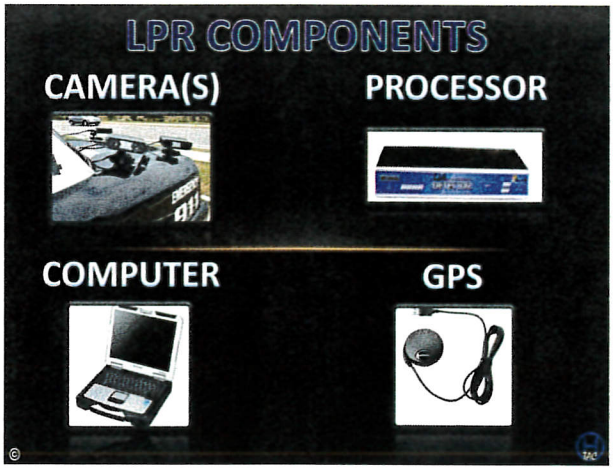
LPR technology is widely used in Europe and is a part of their security infrastructure. LPR technology has rapidly developed since the 1990s. With equipment costs decreasing to a more affordable level, a 2012 survey showed 72% of departments were utilizing LPR equipment. Since this survey is a few years old, the percentage of agencies has most likely risen. As an example, every agency (except for one) in the Sacramento area utilize LPR (85%).



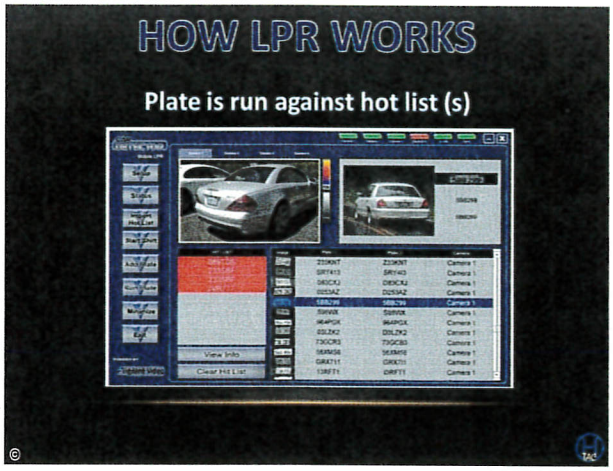
- DETECTION - Also referred to as a SCAN or READ, is simply the result of one of the LPR cameras recognizing alphanumeric characters where it was translated (all or in portion)
- HIT - Also referred to as an ALERT, is a detection of a license plate where that particular plate has been entered into the system to trigger a notification
- HOTLIST - A list which contains numerous HITS
- MISREAD- A detection where the text is not translated accurately due to numerous factors (out-of-state plate, imperfection in the plate, similar character, etc.)
- COLLATERAL PHOTO - Surrounding photo captured during the detection of a license plate or text
- GPS - Global Positioning System
- HISTORICAL - Any detection which did not trigger an active alert
- USER - A person who is operating a vehicle equipped with an LPR system or who is using the LPR database
- ADMINISTRATOR - A person or group who administers a particular agency's LPR program



The LPR system consists of a computer (which most law enforcement vehicles are equipped with), one to four camera pods, a processor, and a GPS. With new LPR technology the processor can be contained in the camera, eliminating the need for a separate processor. The newer systems are powered over the Ethernet, minimizing the need for additional equipment.



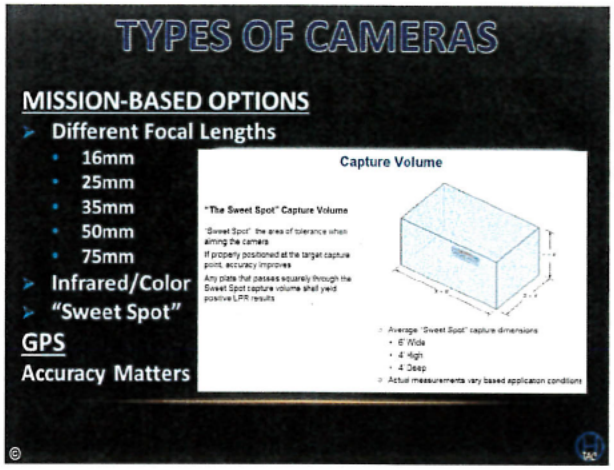
LPR cameras are traditionally affixed to the top of law enforcement vehicles and constantly capture video. When a license plate or text passes in front of the camera pod, a still photograph is taken of the characters. Each LPR camera pod contains two cameras and infrared emitters. Only one camera (Infrared) recognizes characters by identifying the dead area caused by when the infrared emitters flash a light to create a reflection off of the plate. Once the characters are detected, the color/black-and-white camera takes a photograph to be used as a reference of what vehicle the plate was on. Once the two photos are captured, the location is set by the GPS device. All of this information is put together to include the identifying information of the agency, user, and system to be stored for a set period of time.



The LPR system will capture all kinds of alpha numeric characters as that is its sole purpose.

While this is one vendor's in-car LPR system, it serves as an example of how the unit works in the field. In addition to the traditional LPR system, this one incorporates private data, which will be covered later in the class.

It is very important to deploy the correct camera based on your mission needs. If a camera is deployed and not set up for your mission, you will not be successful in scanning plates. The focal point increases with the millimeter of the lens. In addition to the correct deployment of cameras, it is important to use the most current GPS hardware and software. The most accurate GPS hardware currently can have a 30-foot deviation. This could be the difference between neighborhoods when attempting to locate a vehicle which was scanned.

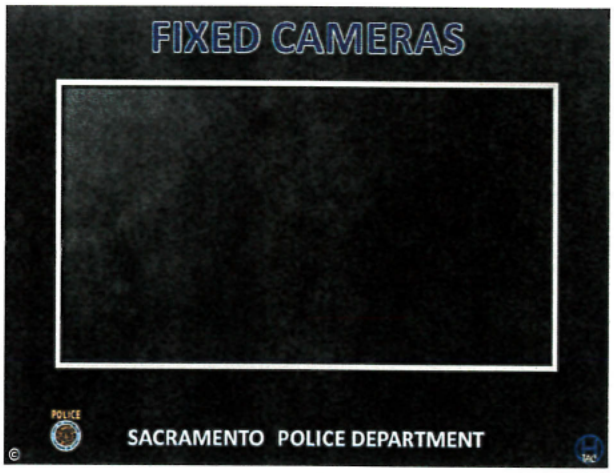


Once the proper cameras are deployed, they must be aimed to maximize the scan rate. It is suggested that departments creating an LPR program construct an LPR aiming pad. This will ensure that every camera is aimed on its appropriate field of view.

The traditional LPR deployment is where the camera pods are mounted on top of the police patrol car or parking enforcement car. These three slides demonstrate how agencies are utilizing [redacted] vehicles with [redacted] LPR camera installations. This allows the units to be used by [redacted] units operating in plain view, undetected.

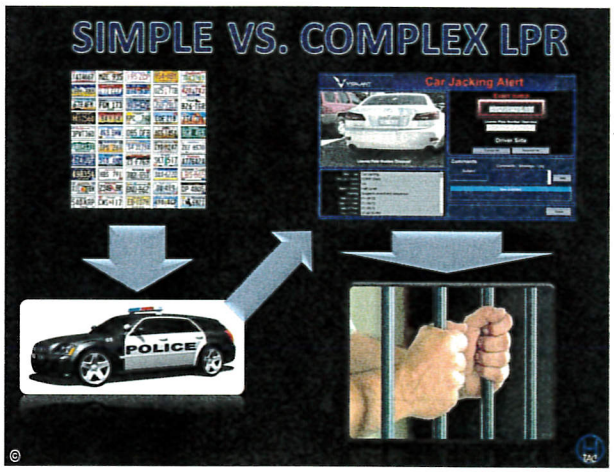
LPR systems can be deployed as a fixed asset. Law enforcement agencies are deploying LPR as a fixed asset in lieu of mobile for numerous reasons. Once the systems are deployed, there are almost zero man hours involved in their maintenance. The fixed units are traditionally deployed in highly travel intersections capturing a great amount of data with little to no impact on the citizen's reasonable expectation of privacy.

This fixed asset covers only one lane of traffic in a highly traveled intersection in the city of Sacramento. During the first month, this one camera system captured over 120,000 license plates yielding approximately 300 hits. As a reference, the Sacramento County Sheriff's Department scans between 270K to 350K plates a month with its 17 mobile LPR cars that are equipped with 2 to 4 cameras each.

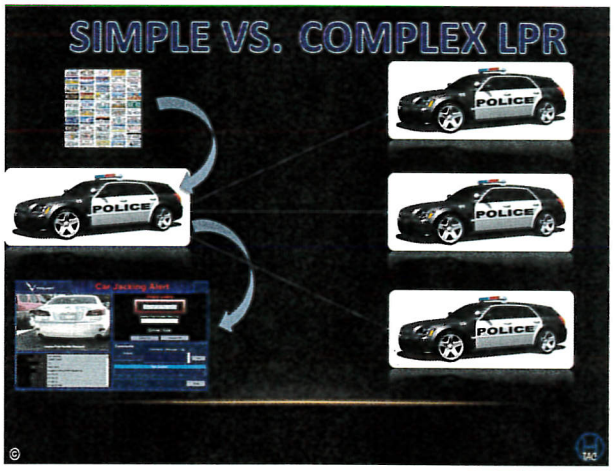


Each one of these slides is an example of the LPR system simply translating alpha numeric characters into text. These examples will help you conduct research utilizing the LPR databases. Limiting yourself to the exact plate you are attempting to locate will end up reducing the search results.

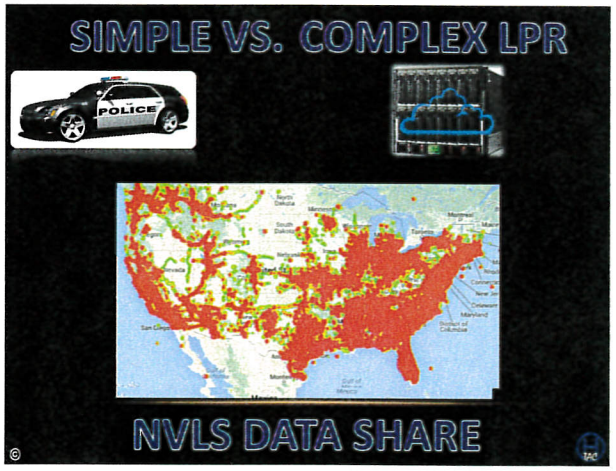
A traditional LPR system works by downloading a list of wanted license plates into a vehicle's computer. The LPR scans a plate that is on your hotlist, triggering an alert to be sounded in the car. Once the alert is triggered, the officer takes appropriate action.



A complex LPR system works in the same manner as a simple system, but it is also networked with other agency LPR cars. This allows officers in other geographical areas to notify and disseminate information on wanted or vehicles of interest in a seamless manner. This information can be downloaded to the agencies' vehicles near real time. There is a lower threshold for entering a plate into the LPR system compared to California DOJ or NCIC, which allows for more information to be shared by officers.



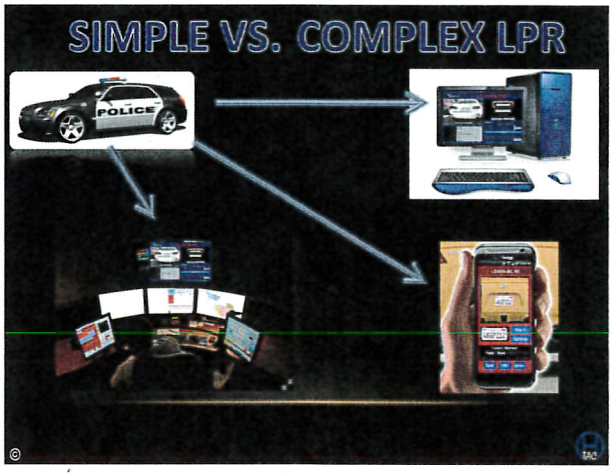
A complex system allows information to be shared, not only with your own agency, but with any agency that shares detections and hotlists. This process allows the user to be immediately notified when a vehicle of interest is scanned by a sharing outside agency. This process allows sharing agencies to multiply their LPR fleets. All sharing agencies' LPR fleets work together seamlessly, providing detection information, and generating hits exactly how their own LPR car would.



In addition to directly sharing with individual agencies, some choose to contribute to the National Vehicle Locator System (NVLS). This is a national LPR repository that can be accessed by agencies that may not directly share with others. As there are a large number of law enforcement agencies in the

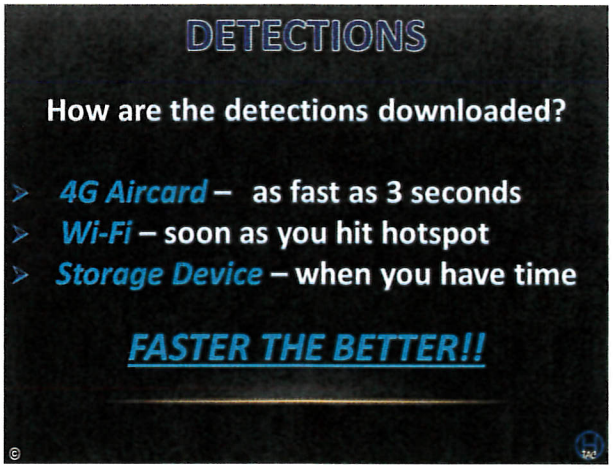
United States, it is almost impossible to share directly with each agency. NVLS allows agencies to contribute to NVLS, which may be utilized by other agencies.

Simple LPR systems generate an in-car hit when a hot plate is scanned. A complex LPR system allows for a hit to be sent instantaneously to desktop computers, mobile devices including cell phones, or deployed to communication centers. Complex LPR systems have provided new and novel ways in which LPR systems are deployed. No longer does the LPR user have to be driving the vehicle in order to get the active LPR hit. Vehicles can be outfitted with the LPR system allowing the operator to scan a maximum number of plates where all alerts are transmitted offsite.



As hot plates were entered into the system for a reason, the download time plays a key role in the effectiveness of the information. The most efficient way of downloading the information is through the use a 4G aircard outside of the department's network. This will minimize the download time since it will not have to pass through firewalls and the department's network, which is often slower.

It is important to be aware of the other download processes. Before acting on a hit, verify the detection information. Some systems save the detections to a storage device, which is then manually uploaded to a server at the end of the shift. This could lead to the data being several hours old by the time the alert is sent. Faulty equipment could cause alerts to not be sent out for weeks as the information will be stored locally on the computer until the download issue is resolved.



The next module will cover Legal Aspects.

Module II: Legal Aspects

Duration

1.5 Hours

Scope Statement

This module covers all legal aspects of LPR technology including best deployment practices, current case law, the importance of departmental operation/general orders, and how to handle requests for LPR records.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify best practices in deploying an LPR program.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe Legal Aspects of LPR
2. Explain case law as it pertains to LPR
3. Describe 28 CFR Part 23
4. Explain the current court standard in California on releasing information in line with the Public Records Act.

Lesson Topics

This module includes the following topics:

- Key points of concern from privacy advocacy groups
- The importance of establishing general/operational orders
- Best practices
- Case law
- Role of the LPR administrator

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Thumb drive handout

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

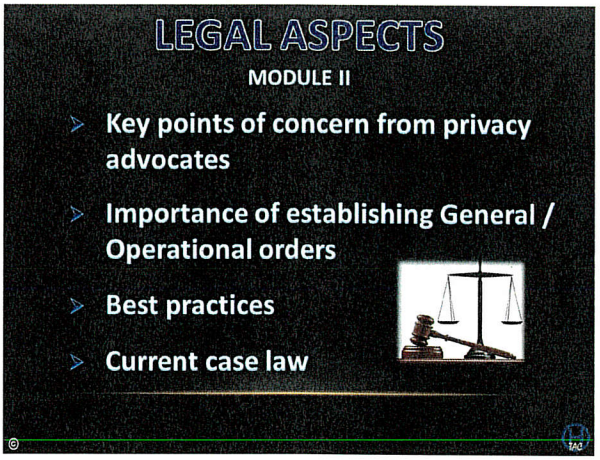
Assessment Strategy

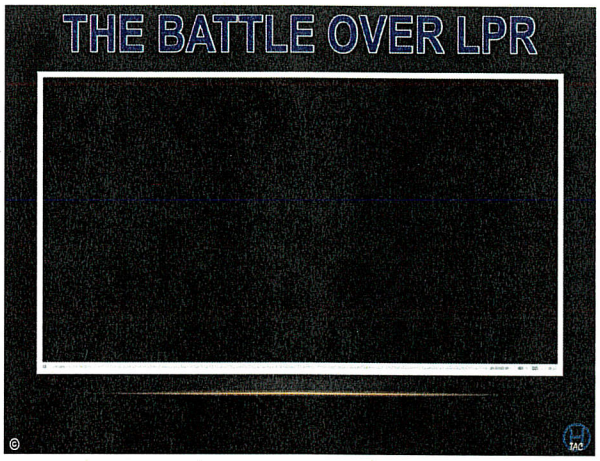
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Participant's Note:

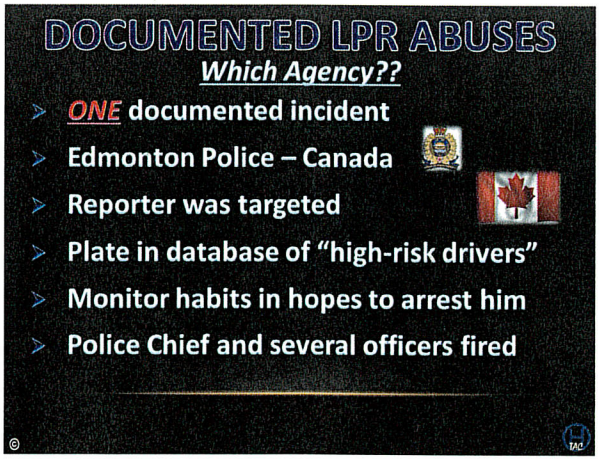
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

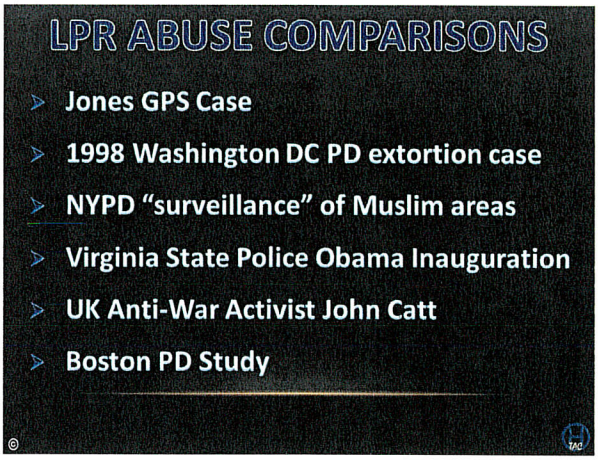
PARTICIPANT NOTES





While LPR technology has been deployed for years, there is not one documented case of abuse here in the United States. This example shows a specific case of abuse which could happen without LPR. As with all scenarios involving LPR, the system just made this process more efficient. The fact that there are zero documented LPR abuse cases here in the United States where 72% of agencies are using the LPR equipment demonstrates people are using the equipment appropriately.





These are simply scenarios used as comparisons on how LPR can be abused. The fact is there can be abuse in any aspect of law enforcement. These comparisons are noted by privacy advocacy groups and cited in news articles about the potential misuse of LPR systems.

The Jones GPS case will be covered in depth later, but this is the most common comparison to the potential abuse of LPR. In 1998 a Washington, D.C., officer made the decision to extort married men who frequented alternative lifestyle bars. The officer would write down license plate numbers of vehicles in the parking lot and, once he determined the registered owner was married, he would extort money from them, threatening to tell his wife. This case did not involve the use of LPR, but is still used as a comparison.

New York Police Department deployed LPR systems to scan the areas around mosques after September 11, 2001. This was not a secret program, but was widely criticized by individuals in the Muslim community. This program was recently deactivated and was never determined to be an abuse.

During President Obama's first inauguration the Secret Service requested the assistance of the Virginia State Police (VSP). They requested VSP deploy LPR equipment in the area of the inauguration for two reasons. This equipment would alert officers of vehicles associated with those who have threatened the President and the information could later be referenced if anything happened during the event. While this was requested by the Secret Service, many in the media say the VSP was conducting surveillance for political reasons.

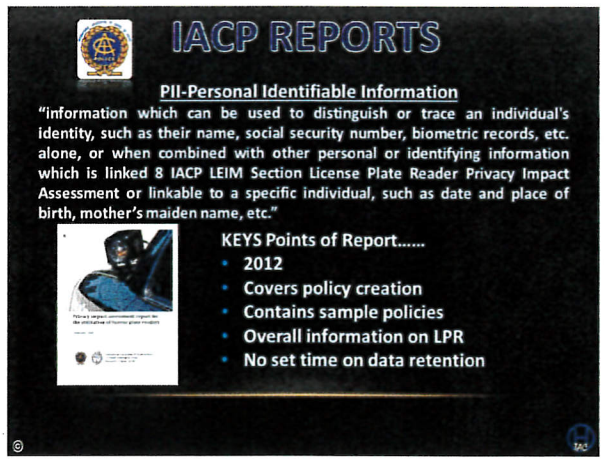
Another cited abuse comparison again occurs outside the United States. Authorities who were monitoring anti-war rallies mistakenly entered a reporter's vehicle as one associated with a group of protesters who were being investigated. When this mistake was pointed out, his license plate was immediately removed from the hot list.

A recent Boston PD (BPD) study has been compared by several people as proof that law enforcement is more interested in collecting data than receiving active field alerts. This study showed while BPD scanned a great number of vehicles, they failed to take action on a good percentage of alerts. A portion of this study showed numerous cars were scanned multiple times triggering an alert with no action. It is not uncommon for law enforcement officers to not take action on every violation of the law they witness. Apply this same standard to LPR hits and the BPD study has no new revelation.

One of the most noted studies involving LPR was produced by the Americans Civil Liberties Union (ACLU). This report concludes that LPR is a great resource for law enforcement, but they have issues with the amount of data gathered and the retention period for which it will be kept. There are several good recommendations in the report departments should address when writing LPR policies. It is obvious from reading this report the ACLU and law enforcement are not close to a compromise on what the appropriate retention period would be for LPR data.

Even though it is not mentioned in this report, the ACLU has stated they would like to see agencies have open public debates about LPR systems prior to the deployment of the program.

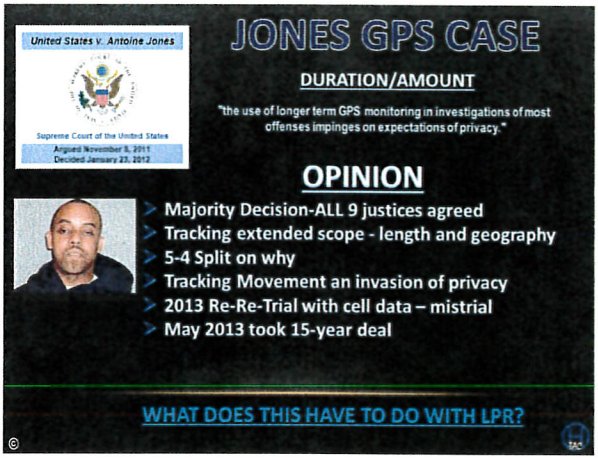
The International Association of Chiefs of Police (IACP) produced several reports over the years regarding LPR. The IACP Privacy Impact Assessment weighs the deployment of LPR systems with its effectiveness compared to its impact on the public's privacy. The report recommends agencies adapt written policies. The most important point this report makes is the fact that LPR data is not considered Personal Identifiable Information (PII). It further outlines LPR is a great resource with possible misuses.



The IACP LPR System Policy and Operation Guidance report covers policy creation. It contains

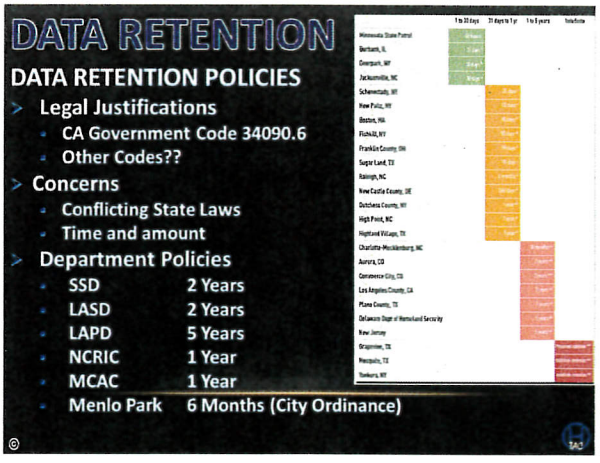
sample policies and overall LPR information. The report fails to outline or recommend a retention period.

This is the most referred-to case when media or privacy advocacy groups address LPR. While this case has nothing to do with LPR, the most important fact the groups are trying to convey is the great amount of legally obtained data could create a picture of the day-to-day life of a person. This is often referred to as the "mosaic effect." GPS data points concerning Jones' location over a 30-day period were detailed in over 40,000 pages. The fact that all nine justices ruled against the GPS deployment shows there was a misuse of the equipment. The reasoning why was not unanimous, with a 5-4 split.



The most favored portion of the split says the device was left on the vehicle too long. The justices state the officers had all the information they needed for the case long before the 30 days. This lengthy deployment went far beyond what was needed where 40,000 pages would tell intimate details of Jones' life.

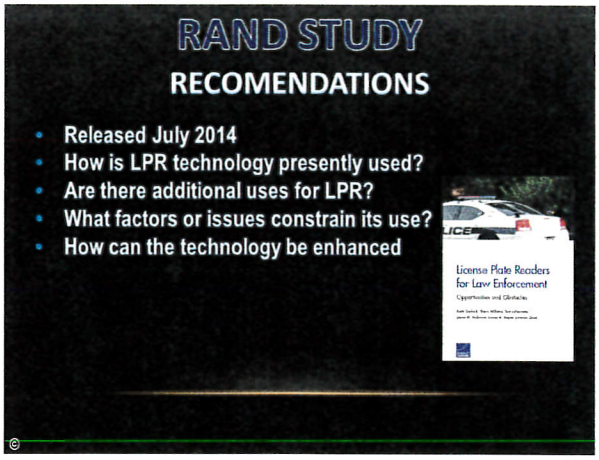
Data retention is one of the main issues privacy advocacy groups have with LPR. There is no retention standard established by the federal government or the State of California. States are gradually passing legislation with no uniformity. California's Government Code (GC) section is the legal authority which agencies are using to establish a retention period. GC 34090.6 states agencies shall store photographic images captured by law enforcement systems for a period of one year. While the agencies could destroy these items at the one-year mark, most store it longer. The reason for the extended period is that many lawsuits have an expiration period of one year from the event. If a lawsuit was filed towards the end of this one-year mark, it is possible the photographic images/video could be deleted prior to the case being discovered.



The graph shows the wide ranges of retention periods from different agencies all over the United

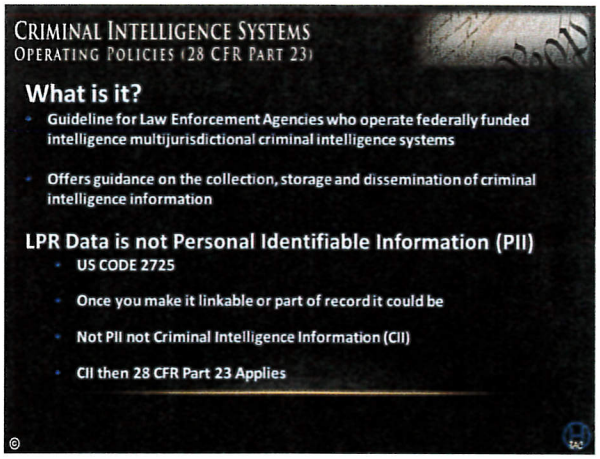
States.

The RAND study had very good suggestions for those agencies that are interested in creating an LPR program. All key points made in this report will help facilitate the deployment of an LPR program. Even though some agencies will not have the manpower to have a designated LPR coordinator, it is important to deploy the system in a manner paralleling the mission, vision, and values of that particular agency. One may choose to establish a short retention period and data access to reduce the possibilities of misuse if there is not a designated LPR coordinator. However, the study points outs the fact a policy with a longer retention period with the most allowable access the data is the most useful.

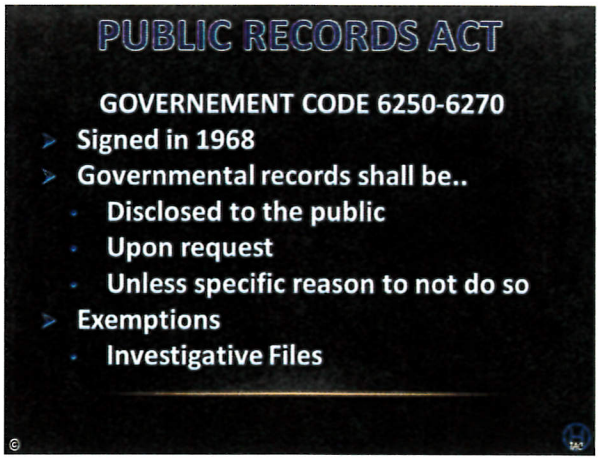


28 CFR Part 23 is for informational purposes only as LPR data has been determined to not be Personal Identifiable Information (PII). Since it is not PII, it does not have to be governed by 28 CFR Part 23. If the record integrates other information or if it is linkable, then the LPR record could become PII, and thus covered under 28 CFR Part 23.

28 CFR Part 23 are federal guidelines on storing or using information that is PII or Criminal Intelligence Information (CII).



The Public Records Act (PRA) is covered in California Government Code sections 6250-6270. These codes cover the disclosure of government records to create transparency. Specifically, these codes state that Investigative files are exempt from disclosure. Several California courts have recently ruled that LPR data are classified as investigative files and are exempt from release.



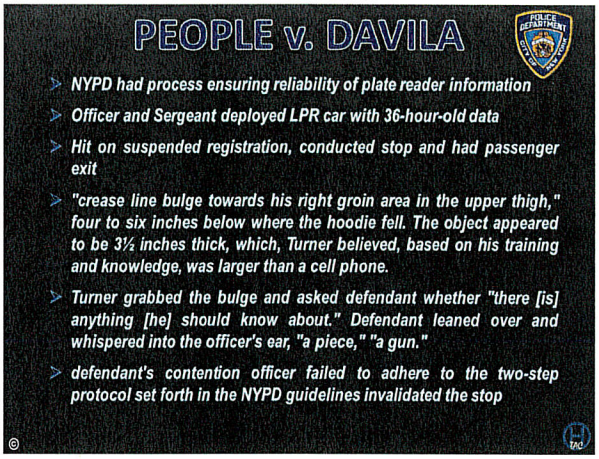
The ACLU and Electronic Frontier Foundation (EFF) sued both Los Angeles County Sheriff and Los Angeles Police Departments for not complying with a PRA request for LPR data. The courts concluded LPR data is investigative in nature, which would deem the information investigative files exempt from disclosure.

Both organizations have filed an appeal to this ruling and the case is pending.

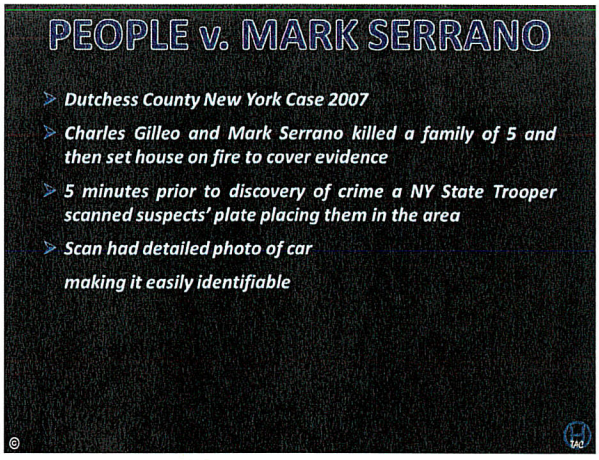
A reporter in the San Diego area sued San Diego law enforcement agencies to release LPR data. This case was decided shortly after the Los Angeles case. The judge's ruling was similar to the Los Angeles case, deeming the LPR data to be investigative files exempt from disclosure. No appeal has been filed in this case so far.

There are very limited court cases dealing directly with LPR. Most cases related to LPR deal with license plates viewed in public and technology enhancements of standard practices.

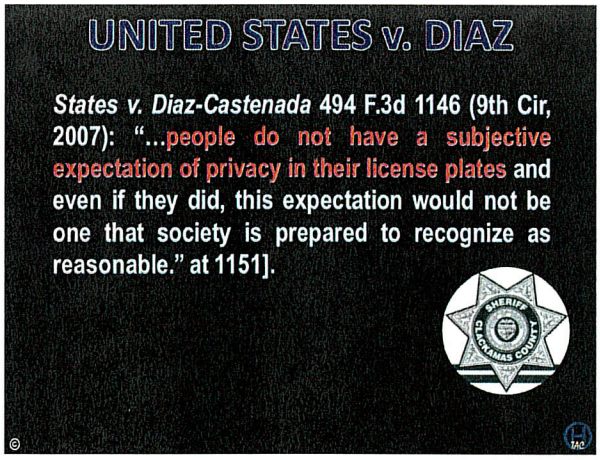
This case concerned a sergeant and officer who did not follow NYPD protocol by deploying an LPR car with 36-hour-old data. During the shift a person was arrested as the result of an LPR hit. Davila argued since the two did not follow department policy, the case should be thrown out. The court found while they did not follow department protocol on deploying the LPR equipment, the protocol is simply guidelines and the conviction was upheld.



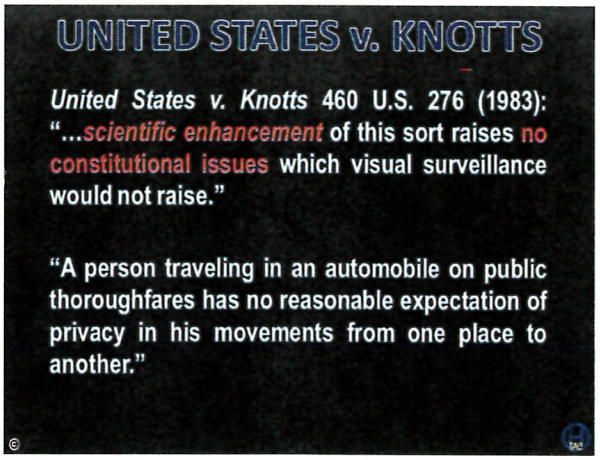
This is the first major case where an LPR detection was admitted as evidence in a murder case. The LPR photograph was found to contain specific identifiable characteristics of the suspect's vehicle in the area where the crime occurred.



This is another case not directly involving LPR, but involves the right to conduct random checks of license plates in public view. A records check of the defendant's plate showed the owner's license was suspended. The vehicle was stopped where the driver was arrested and the vehicle was in the process of being released to the passenger. A check of the passenger showed him to have an active ICE detainer and he was arrested. The defendant argued the check of the plate was unconstitutional.

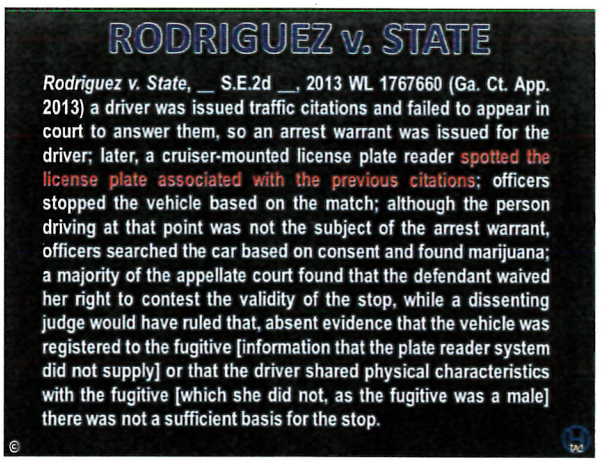


U.S. v. Knotts explains that a scientific enhancement of a standard practice raises no constitutional issues with the court. A radio beeper was placed in a chemical shipment where authorities believed the chemicals were being used to manufacture drugs. A physical surveillance team had lost the suspect several times during surveillances. The team placed a radio beeper in the chemicals to aid them in reacquiring the suspect if they lost sight of him. They followed him to a cabin with the help of the beeper where a drug lab was found..

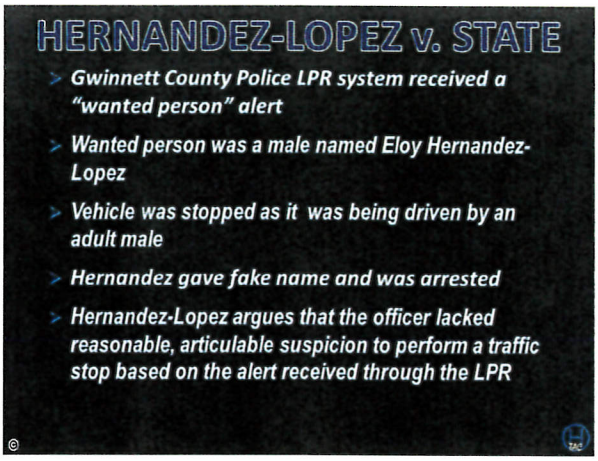


This a court case in the state of Georgia which serves more of an example than anything else. LPR is widely used in Georgia and there are numerous state cases directly relating to LPR. Officers receive an LPR alert on a warrant for a male where the vehicle is occupied by two females. The officer stops the car where the driver consents to a search. During the search, marijuana is found and the driver is arrested for possession of marijuana for sale.

The defense argued the officer illegally gained consent to search the vehicle. The court did not side with the defense based on the illegal search, but they did volunteer an opinion. The court stated if the defense had argued the stop itself was illegal since the occupants were both female and the LPR alert was for a male, the case would have been dismissed.

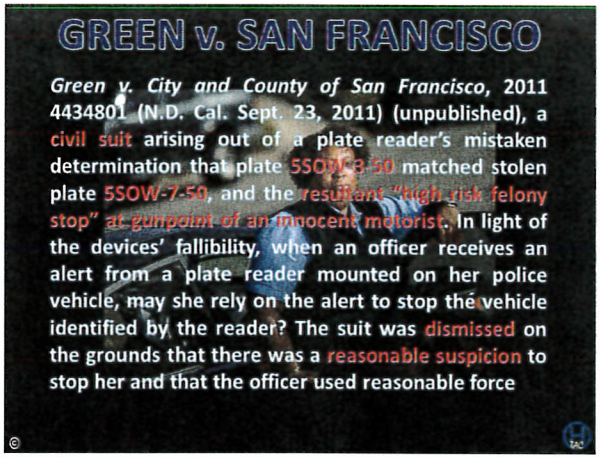


This case is similar to Rodriguez v. State and the defense attempted to use the illegal stop defense to have the case dismissed. Unfortunately in this case the alert was for a male who happened to be the driver of the truck.

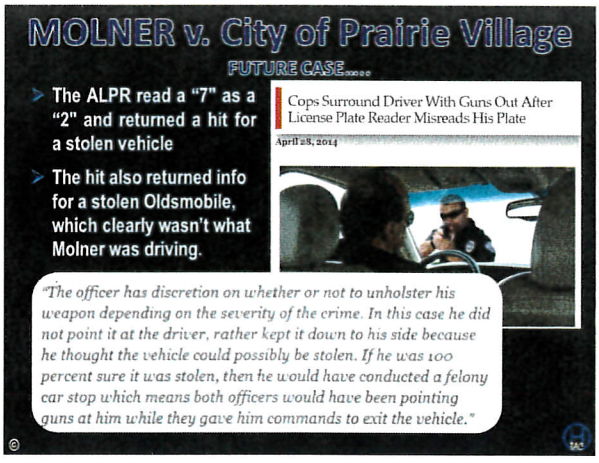


Green v. City and County of San Francisco shows the importance of establishing an active hit protocol for in field alerts. Two officers driving a person to jail had a misread on their LPR system, but voiced it over the radio. A sergeant in the area saw the described vehicle and followed it until appropriate units arrived. The alert was for a pickup truck, but the plate was on a Lexus. Green was stopped and ordered from the car at gunpoint. She was handcuffed and placed into the back of a police car that she barely fit into. It wasn't until after the stop that someone confirmed the plate.

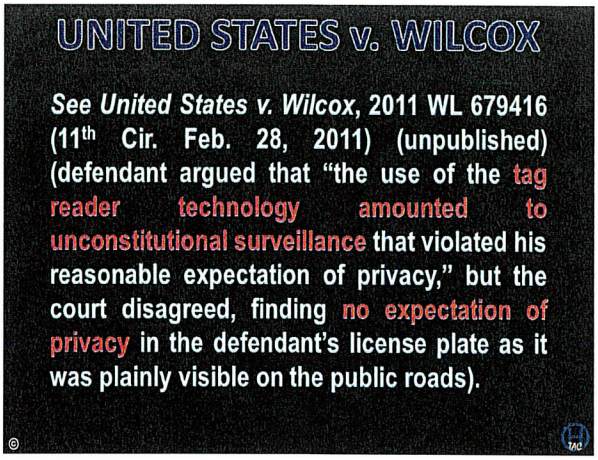
The original case was dismissed, but ultimately a civil case was allowed to go forward based on numerous issues found with this stop.



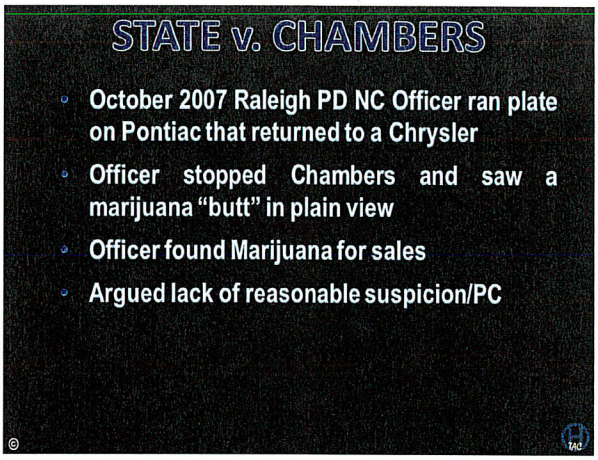
This article highlights the necessity of establishing an active hit protocol and making officers follow it. This story covers a misread where the alert was for a completely different vehicle. The officer still conducted a vehicle stop on the car with his gun out of the holster. The driver, who happened to be an attorney, was traumatized by the event. Bottom line is do not force a vehicle stop unless the information is confirmed.



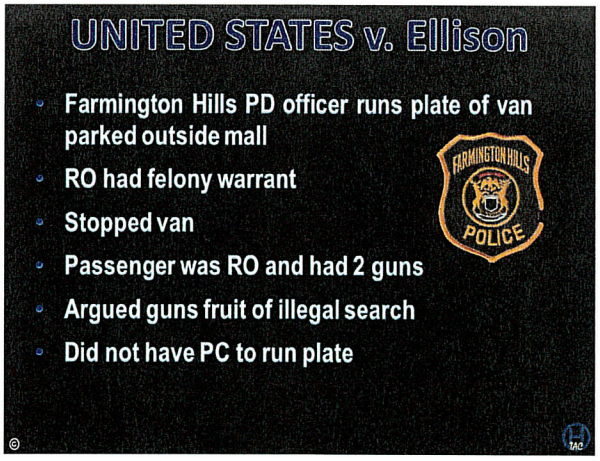
U.S. v. Wilcox is an LPR case where the system alerted officers to a vehicle with expired registration. During the traffic stop a gun was found to be in the possession of a felon. Wilcox argued unconstitutional surveillance violating his reasonable expectation of privacy. The case affirmed that you have no right to privacy while in a public.



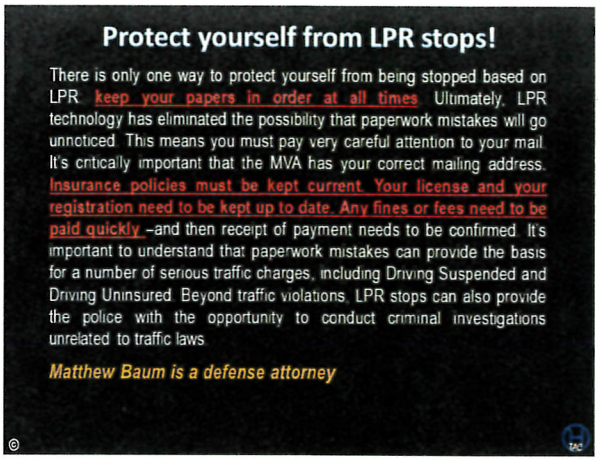
Another non LPR case showing you have no right to privacy while in public.



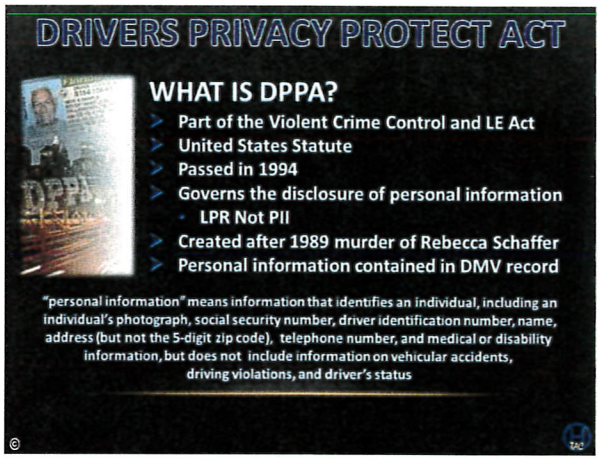
This is not an LPR case, but it demonstrates manually how an LPR system works in regards to generating an alert. The officer in this case conducted a records check on a license plate which showed the registered owner had a felony warrant. The van was stopped and the passenger who was the registered owner was arrested. This is the exact process an LPR system follows, except in reverse order. The records check is completed prior to locating the vehicle and the alert record is generated and saved in the system. Once the plate is scanned, the alert is triggered and the officer is notified.



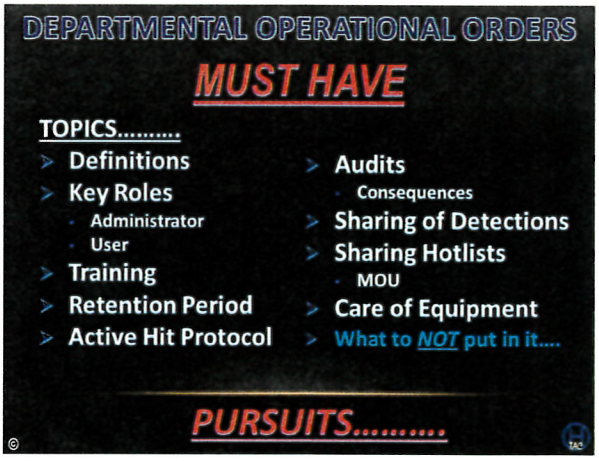
While this slide has no instructional value, it demonstrates that even defense attorneys know the level or proficiency of LPR systems. All suggestions in this slide really have nothing to do with LPR; the slide simply points out the fact that if you do not stay in line with the law and an LPR car scans your, plate you may go to jail.



The federal Drivers Privacy Protection Act (DPPA) is the federal law governing the potential abuse of LPR systems. While LPR data is not PII, the personal information can easily be located by conducting a records check on the license plate. The DPPA states anyone who accesses it without the need to know can be prosecuted under federal law. This act was enacted in 1994 after a suspect located his victim by accessing DMV data.

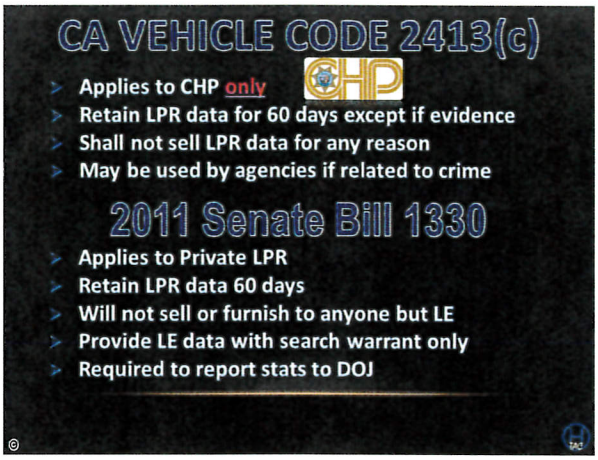


Written departmental general/operational orders are a must for agencies that deploy LPR equipment. Topics covered in this slide are suggestions of what to minimally include in the orders. Agencies should not rush to have orders written completely prior to the deployment of the equipment as the orders will evolve to each department's mission. An evaluation deployment period should be used to identify other topics that need to be covered in the orders which will be unique to the individual department.

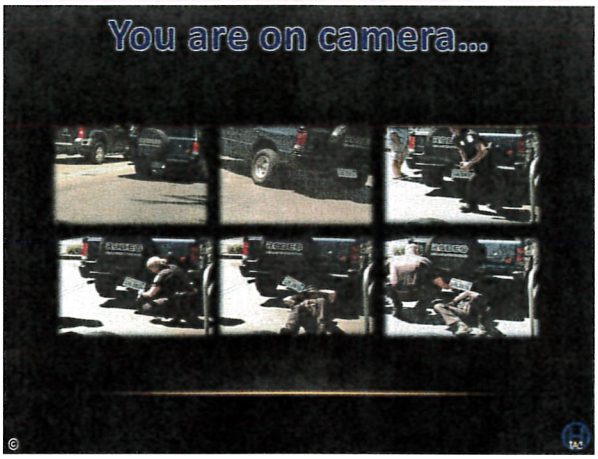


Vehicle Code section 2413 (c) is the only law that covers LPR systems in the state of California. This section only applies to the California Highway Patrol (CHP), placing a retention period of 60 days on LPR detections. The CHP may not share detections with other agencies unless the requested information is related to an investigation.

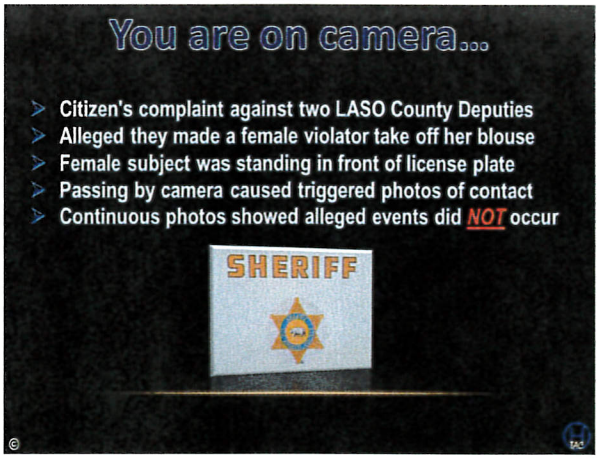
Multiple Senate Bills (SB) have been brought forward to place the same restrictions this Vehicle Code places on all agencies. These SBs attempt to place the same restrictions on law enforcement LPR systems as well as on privately collected LPR data.



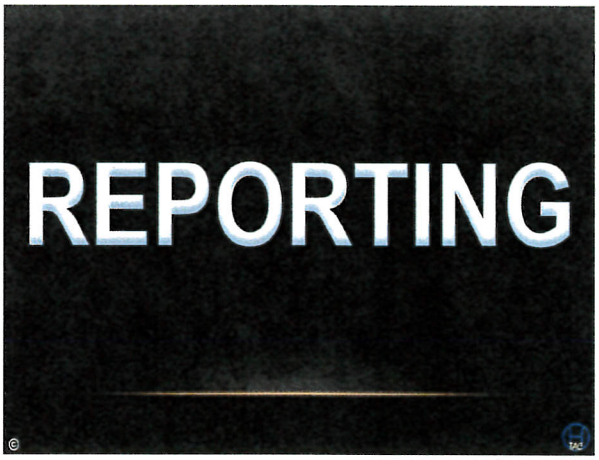
These examples show how still LPR photographs captured by the cameras can tell a story. Officers need to be aware that when in the vicinity of an LPR car they are more than likely being photographed. Officers are traditionally aware of forward-facing in-car cameras systems. LPR cameras angled away from the car, coupled with the officers' belief the cameras only take photos of license plates, can give officers a false sense they are not being photographed.



Two Los Angeles Sheriff's Department (LASD) deputies were exonerated for any wrongdoing after reviewing LPR still photos. A female motorists who was stopped claimed the two deputies made her take her blouse off during the traffic stop. While the officers spoke with her outside of her vehicle the view of the plate was interrupted, triggering numerous detections of the plate. These photos showed no nefarious actions occurred during the stop.



Reporting the use of LPR rests with each agency that utilizes the technology. While we never try to hide anything from the court, law enforcement is allowed to keep processes out of a report if reporting them will teach offenders how to defeat future investigations. If the use of the LPR equipment can be left out of the report, that is what is recommended, but always inform the prosecuting attorney of this.



Module III: Hotlist Deployment

Duration

1.5 Hours

Scope Statement

This module covers LPR hotlists and how they are created, deployed, and shared with other agencies through written MOUs with an emphasis on active hit protocol.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify the diverse deployments of LPR hotlists.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe what a LPR hotlist is
2. Describe proper Active Hit Protocol
3. Describe TSC handling codes and which ones give detention authority

Lesson Topics

This module includes the following topics:

- What a hotlist is
- Who can receive LPR hits how are they sent
- Active Hit Protocol
- Sharing hotlists
- Available hotlists
- Hotlist sources
- Terrorist Screen Center Alerts

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer for PowerPoint presentation
Projector
Projection Screen

Thumb drive handout
Terrorist Screening Center (TSC) Handling Codes Reference Card handout

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

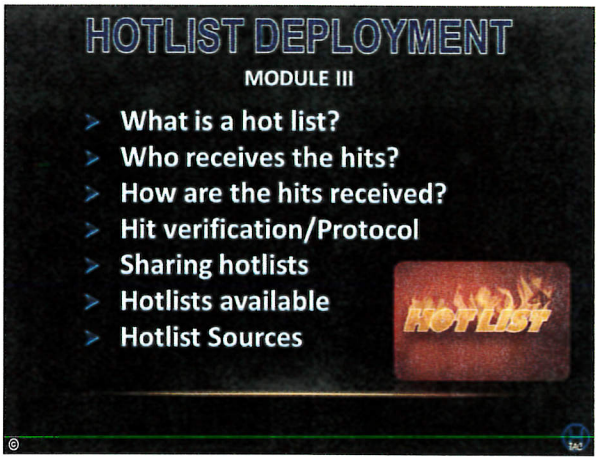
Assessment Strategy

Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

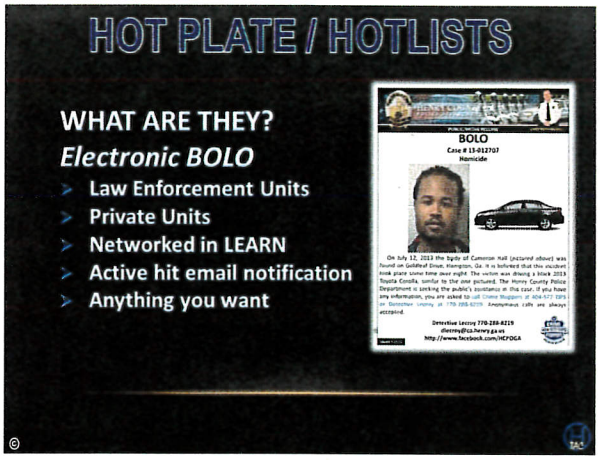
Participant's Note:

Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

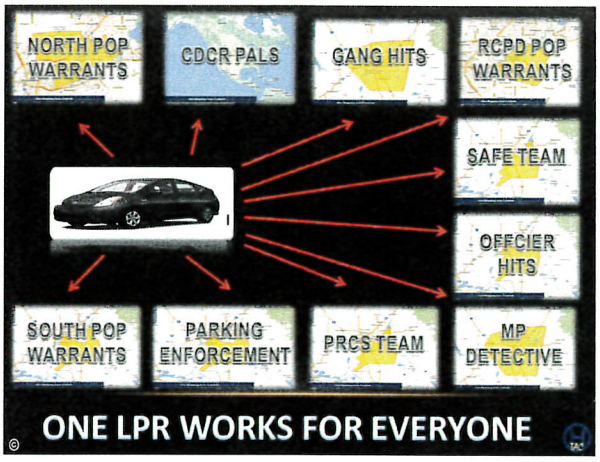
PARTICIPANT NOTES



Hot plates or hotlists are simply electronic BOLOs. They can be used in conjunction with law enforcement LPR units or private LPR data. These hot plates/lists can be of a multitude of topics. The hits can be for informational purposes as not all hot-plated vehicles must have a want on them.

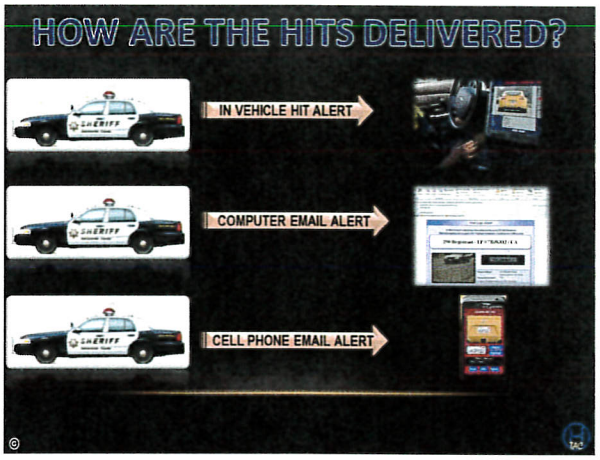


Networked LPR systems can work for a diverse group of officers, units, or agencies. Not all hotlists are sent to the vehicle, so as the LPR units detect plates, hits are sent to those who have entered the information into the database. This allows different officers, units, and agencies to receive hits from the LPR units while the operator of the LPR unit can receive a manageable amount of in-vehicle alerts.

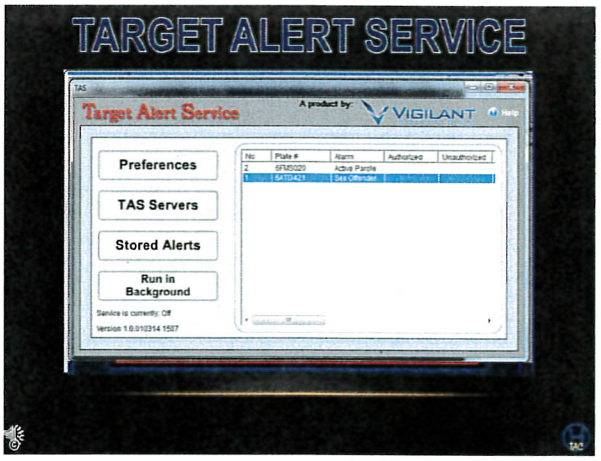


LPR hits are generated from multiple sources. Hits may be produced by agency equipment, equipment deployed by agencies that directly share LPR data, and agencies that contribute to the National Vehicle Locator System (NVLS). This allows agencies to multiply the amount of systems working for them in the same or adjacent jurisdictions.

Delivery of the hits come in several different forms. From the traditional in-vehicle alert to the alerts being sent to any email address or even on a mobile device, LPR is becoming a diverse tool.



The Target Alert Service (TAS) operates similarly to the vehicle LPR system. This is a software program downloaded to an individual computer. This program allows a desktop computer to receive active field alerts near to real time. This model allows hits from private LPR vehicles or alerts from fixed assets or units with no enforcement authority to be acted on. TAS would allow an agency to technically have an LPR program with no physical equipment by utilizing shared LPR data or data generated from private LPR cars.



Active hit protocol is the most important topic covering the deployment of LPR systems in the field. This protocol needs to be followed closely, minus exigent circumstances. The most civil liability rests with active hits in the field and the officer's ability to quickly vet the information prior to taking appropriate action. Vehicle stops conducted pursuant to LPR hits where the officer failed to vet the information and identify a misread are highly scrutinized by the media. It is important to realize it is better to pass on a vehicle stop if the supporting information is not there to confirm the alert. LPR is far too great of a resource to push the limits on these vehicle stops.

The officer heard in the radio transmission paints a clear picture for responding officers. He identifies he received an LPR hit off of the department's generated warrant list and the passenger meets the description of the person in the hit. While the dead air time has been removed, all radio transmissions are clear and concise.

[redacted]

[redacted]

[redacted]

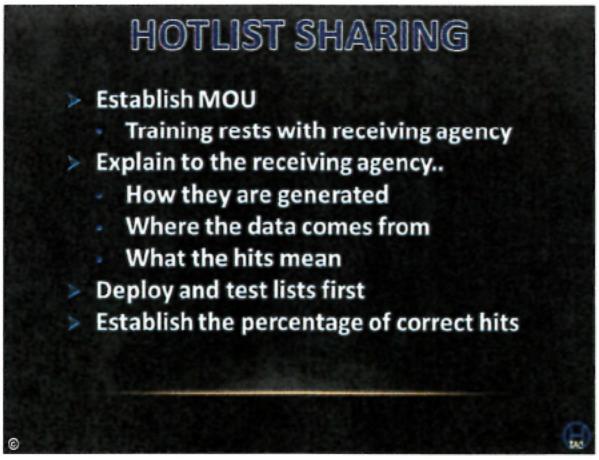
[redacted]

[redacted]

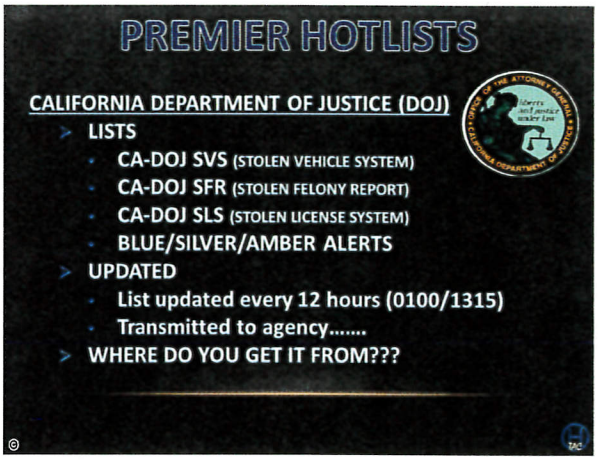
[redacted]

Hotlist sharing between departments that have overlapping or adjacent jurisdictions is a force multiplier. Memorandums of Understanding (MOU) need to be established between departments prior to sharing. Training officers on the hotlist rests with the receiving agency. The agencies need to be able to articulate how the alerts are generated, where the data comes from, and what the hit means.

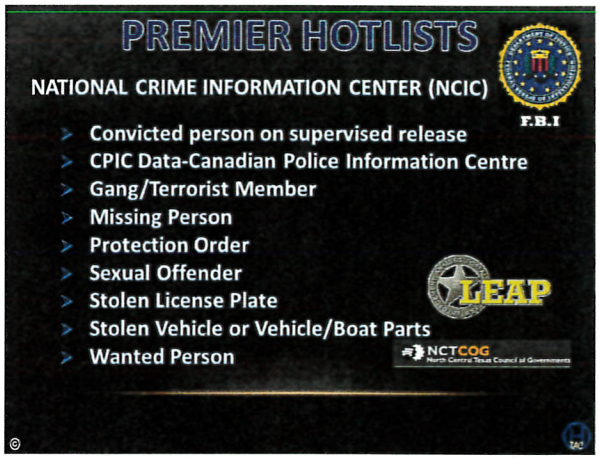
The sharing agency should test the hotlist in the field prior to sharing the list. During the testing phase, the agency should establish the percentage of correct hits associated to the hotlist.



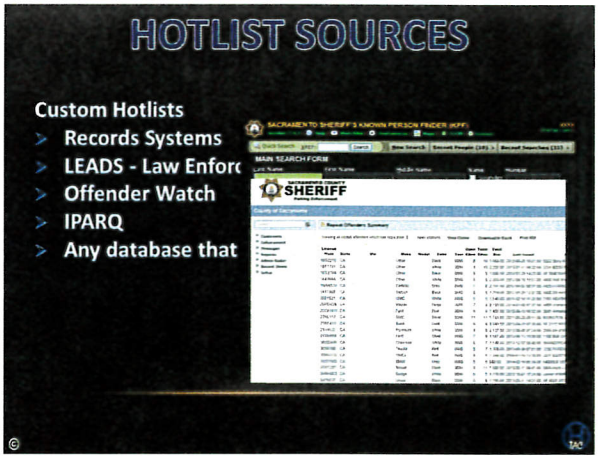
There are several premier hotlists available to agencies. These lists are generated at the state and federal level. At the state level, the California Department of Justice (CA DOJ) provides a hotlist which has three subsections: Stolen Vehicles, Stolen License Plates, and Felony Vehicles. These lists are updated every 12 hours and are uploaded directly to the LPR systems. If the agency is not set up to receive these lists automatically, they can also be download manually from the California Law Enforcement Web (CLEW).



At the national level, the National Crime Information Center (NCIC) produces hotlists with multiple subsections. These subsections are updated by separate data streams which may overlap state hotlists. For example, in California, the Stolen Vehicle and Stolen License Plate lists overlap with the same hits. The NCIC list has more information in it as it shows which agency entered the hit and the description of the vehicle.

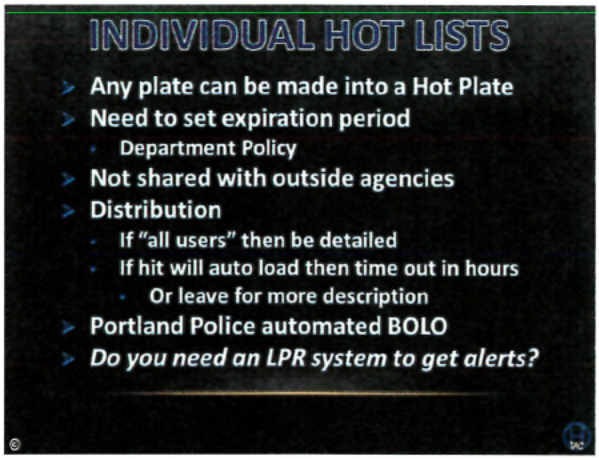


Any database containing a license plate can be converted into a hotlist. Departments use information from records management systems, parking enforcement systems, computer-aided dispatch systems, and any other resources available.



LPR hotlists can be generated for specific missions. While every officer does not need to see every alert, it is important to create a diverse pool of these alerts which can be directed to specific units. As an enhancement, the addition of booking photos for subjects listed in alerts would be a great resource to identify the subject by the officer receiving the hit.

Individual hotlists can be created for any purpose. The threshold for entering a vehicle into CA DOJ or NCIC is much higher than that to enter it into an LPR system. These individual hot plates can be entered as an information trigger with no want whatsoever. This would be similar to asking a patrol officer to notify a detective if they saw a vehicle of interest during their shift. The LPR system would automatically send the alert to the requesting officer, thus providing information which may be useful.



The next module will address LPR databases.

Module IV: LPR Databases and User Instruction

Duration

1 Hour

Scope Statement

This module displays the different LPR databases that are available with a brief explanation of how to navigate them, highlighting private LPR information and how it is incorporated into certain databases.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify available LPR databases and how to use them.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe how private LPR data is generated
2. List the pros and cons between private and law enforcement LPR data
3. Demonstrate a basic knowledge of using NCRIC LPRWeb, EPIC DICE and Vigilant Solutions LEARN databases

Lesson Topics

This module includes the following topics:

- Private LPR data
- LEARN database
- LPR scenarios of prior use
- Data available by geographical location
- Private LPR data versus law enforcement LPR data
- NCRIC LPRWeb database
- EPIC DICE database

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer

Projector
Projection Screen

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

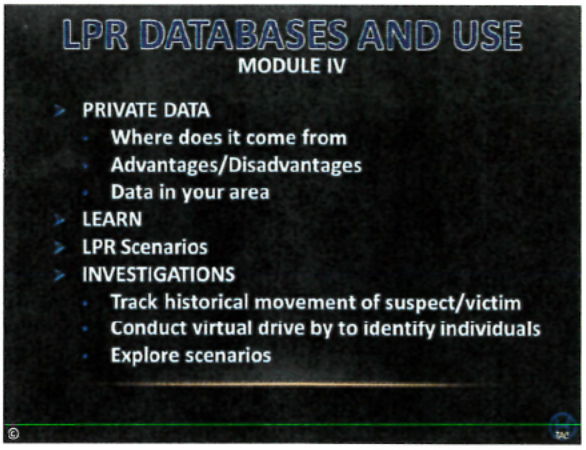
Assessment Strategy

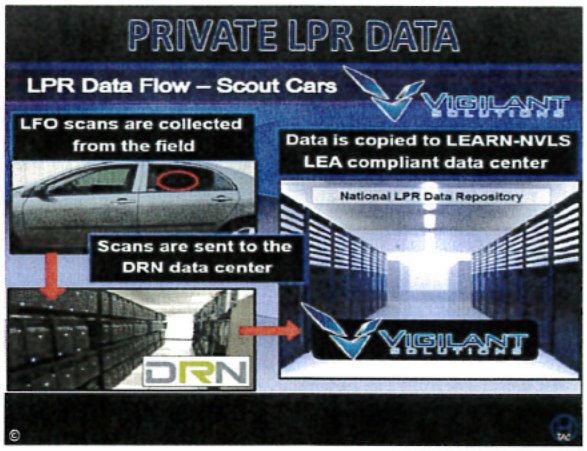
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Participant's Note:

Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

PARTICIPANT NOTES



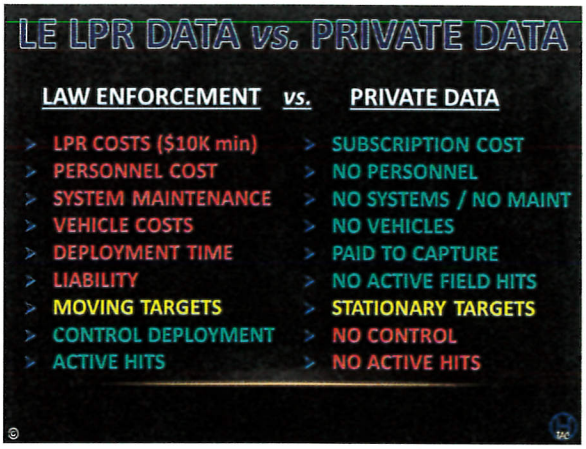


Private LPR data is a huge resource that usually comes with a stigma. It is important to know the process in which law enforcement receives the information from these private LPR cars and what exactly the private LPR operators have access to. Most private LPR cars are owned by repossession companies or bank asset-tracking companies. These companies buy or lease the LPR systems which come with zero querying abilities. The LPR systems are uploaded with the national vehicle repossession list which is generally about 250K vehicles. The LPR operators traditionally drive during night time hours scanning areas which they think may produce an alert of a vehicle they can repossess. Once the operator receives an alert, they contact the company to confirm the information. That company then has two hours to take possession of the vehicle.

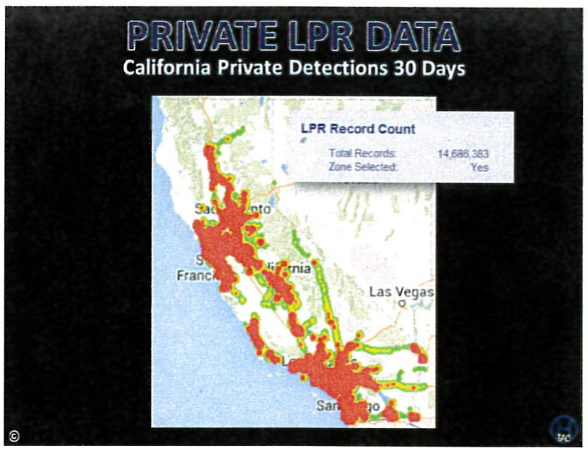
As the LPR scans plates, every plate is copied to the law enforcement server. [redacted] Once the private detections are copied on the law enforcement server they are immediately cross-referenced with plates on hotlists. If there is a match on the detection an alert is sent to the appropriate person on email, Mobile Hit Hunter (MHH) or TAS. These detections are owned by the company which makes them available for research since they do not have an expiration time.

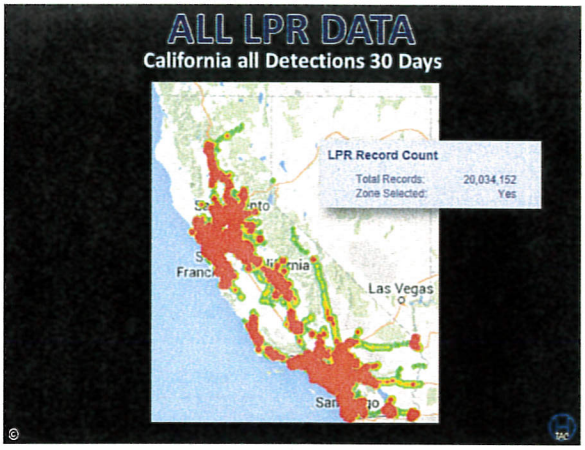
In the Sacramento area every agency shares detections and hotlists. Mobile law enforcement systems scan approximately 725 plates a month. Private LPR vehicles in the same geographical area scanned close to 1.25 million in the same month. The benefit of the private scans is they are typically looking for parked or stationary vehicles where the law enforcement vehicles scan predominantly moving cars.

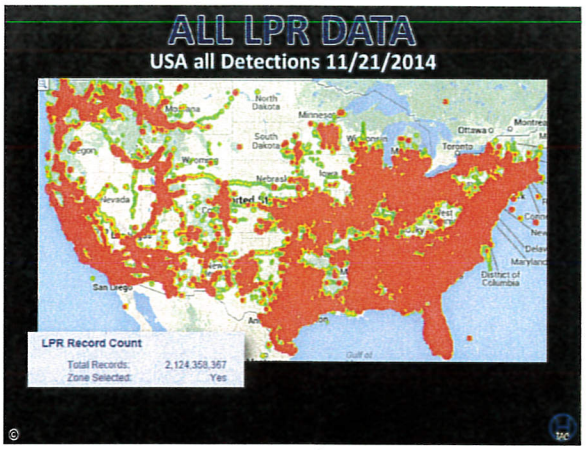
There are pros and cons between each deployment of private and law enforcement LPR data and systems. The perfect LPR deployment model incorporates private data with data generated by agency LPR equipment. While private data is more cost effective and has low risk of liability, the fruits of active field hits make the agency equipment just as valuable.

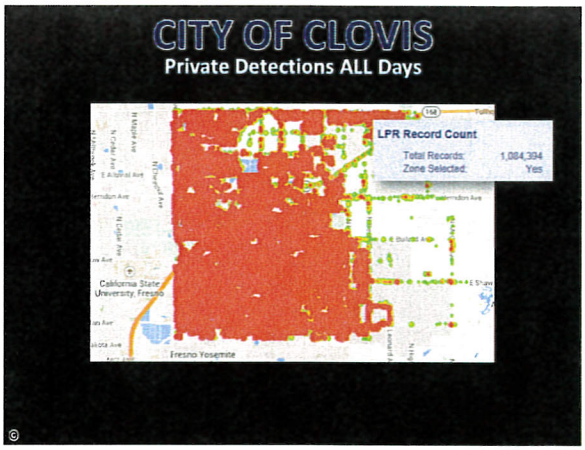


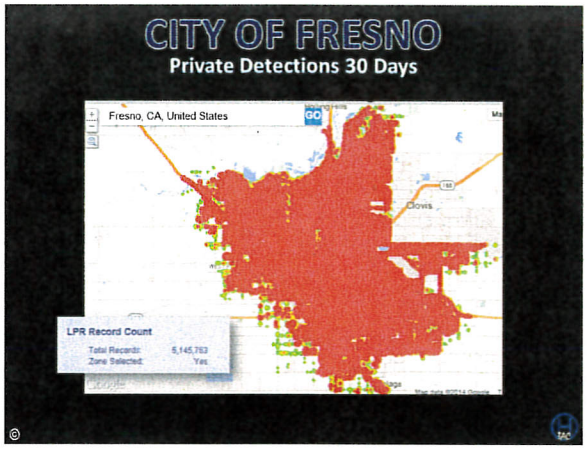
Private LPR data that is available in certain geographical areas is detailed here. An average law enforcement LPR car scans 10K plates a month. That does not mean agencies cannot establish a method to scan more, but that is the average. Applying the average scans of law enforcement vehicles to the amount of monthly scans on these slides and dividing the total by 10 will equal the number of cars needed to gain this amount of data. A two-camera LPR system costs about $13K. Using this theory an agency can determine if it is cost effective to purchase private LPR data.

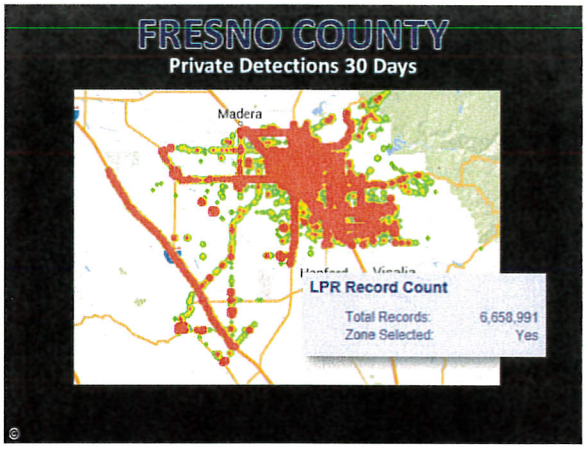


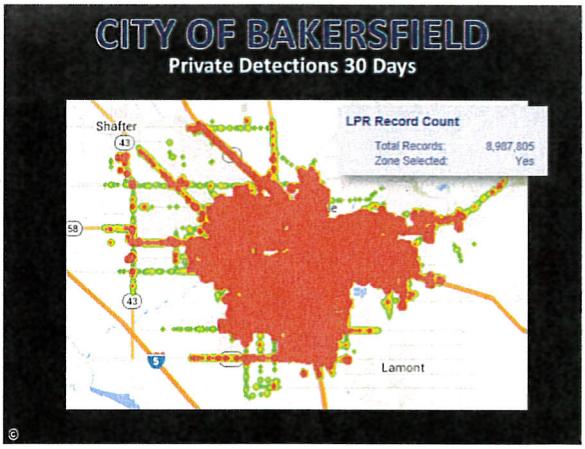

ALL LPR DATA
California all Detections 30 Days
LPR Record Count
Total Records: 20,034,152
Zone Selected: Yes
Las Vegas

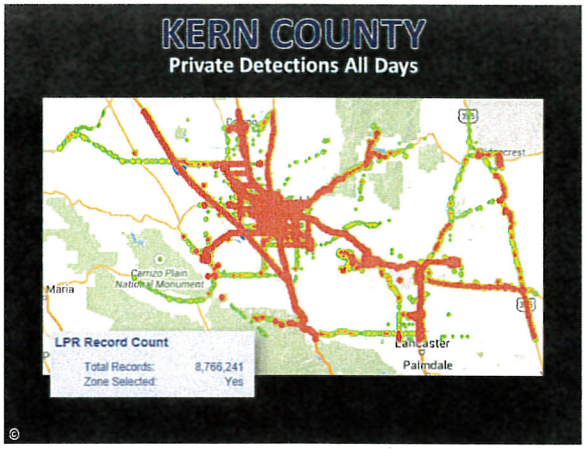

ALL LPR DATA
USA all Detections 11/21/2014
LPR Record Count
Total Records: 2,124,358,367
Zone Selected: Yes

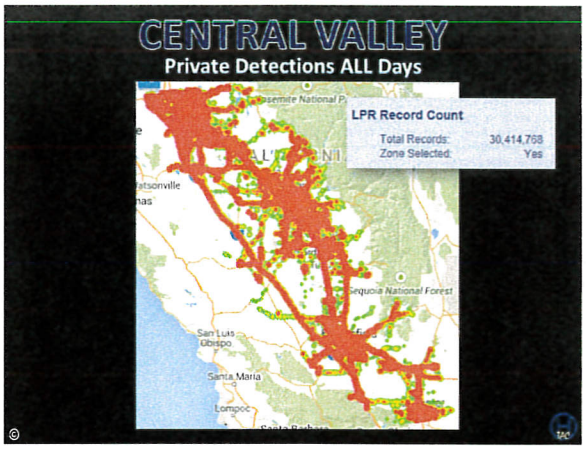

CITY OF CLOVIS
Private Detections ALL Days
LPR Record Count
Total Records: 1,084,394
Zone Selected: Yes


CITY OF FRESNO
Private Detections 30 Days
Fresno, CA, United States
GO
Clovis
LPR Record Count
Total Records: 6,145,783
Zone Selected: Yes

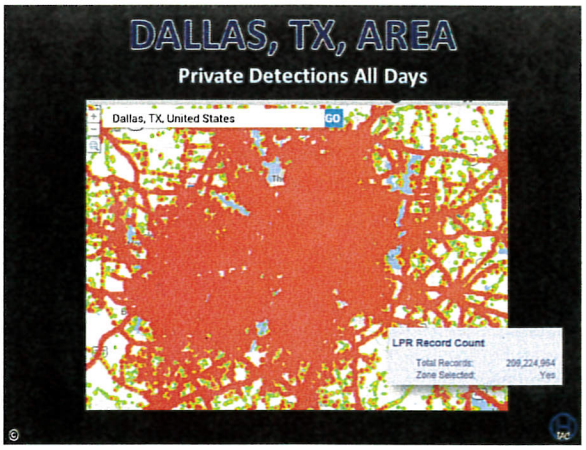

FRESNO COUNTY
Private Detections 30 Days
Madera
LPR Record Count
Total Records: 6,658,991
Zone Selected: Yes


CITY OF BAKERSFIELD
Private Detections 30 Days
Shafter
43
58
5
Lamont
LPR Record Count
Total Records: 8,987,805
Zone Selected: Yes

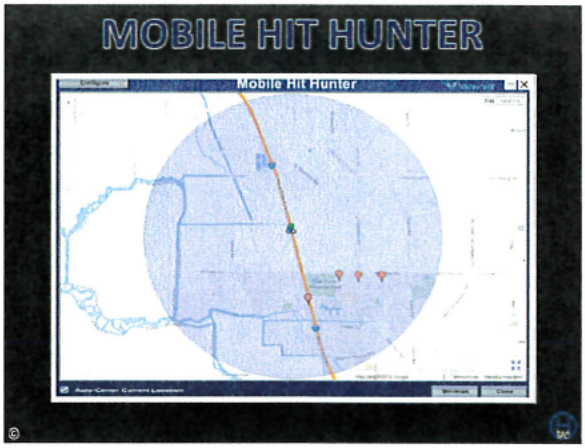




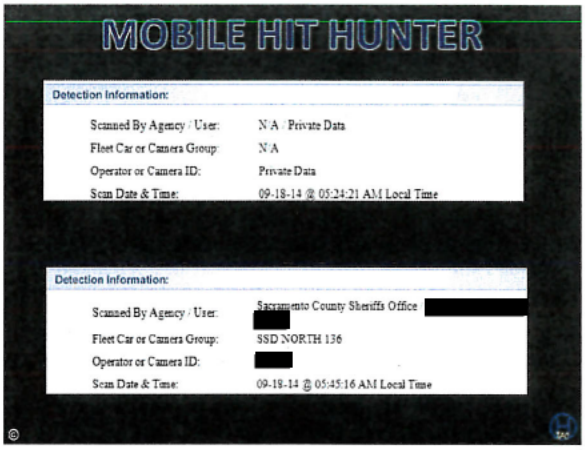
The final slide in this series shows the Dallas, Texas, area. This area was the birthplace of private LPR. In a month the Dallas area has close to 9.4 million private scans available to law enforcement. This would be equal to 940 law enforcement LPR cars scanning for the month. The cost for 940 LPR units would be about $12 million. The private data subscription cost for this data is $120K a year.



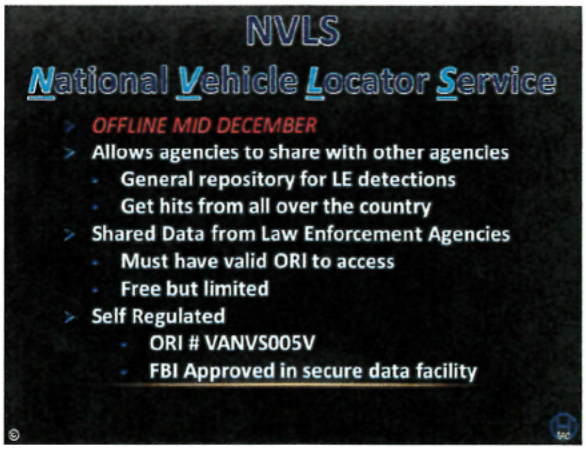
Mobile Hit Hunter (MHH) is a program which incorporates private data on a scope that moves with the officer. This scope will show any hit generated from your hotlists that was scanned by a private vehicle. The scope has a set perimeter around the moving LPR unit alerting the LPR operator when a new hit from a private car is detected within the area. This program allows the law enforcement unit to have the private cars work for them, thus being a force multiplier in the field.



As a real-time scenario, [redacted] was notified via MHH that a private LPR car had scanned a stolen vehicle at 0524hrs. [redacted] responded to the location of the alert where he located the reported stolen approximately 21 minutes later.



Most investigators are familiar with NVLS. This began as a free service which allowed access to the entire NVLS database. As officers' use of the system increased, unlimited querying was reduced to a set number of attempts and successful queries for a given period of time. This free service was offered in 2009 and after six years of great success was taken offline in December of 2014. NVLS data is now incorporated in the Vigilant Solutions Law Enforcement Archival Reporting Network (LEARN) cloud-based LPR solution database.

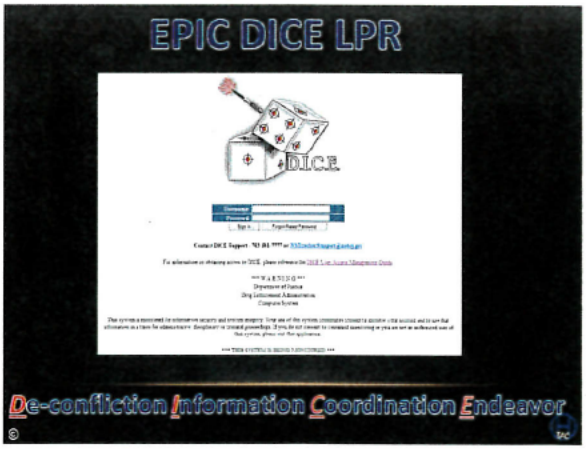


Since not all agencies deploy LPR systems by the same vendor, [redacted] created a central repository for this data. Currently 40 agencies contribute their LPR data to this server. The information is stored for a period of one year and the system has a simple query and alert function. It is important to note the data contained in the system may not be real time.

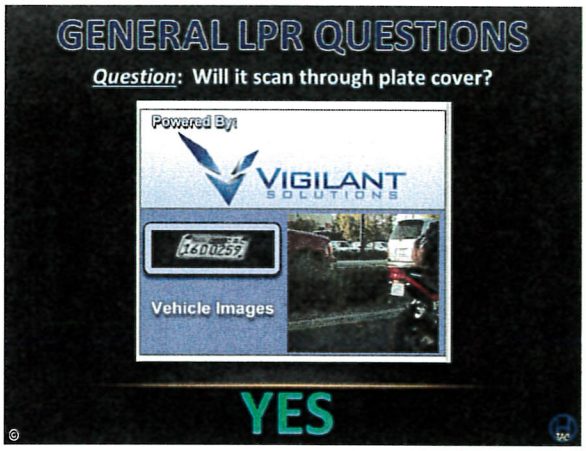
[redacted]

[redacted]

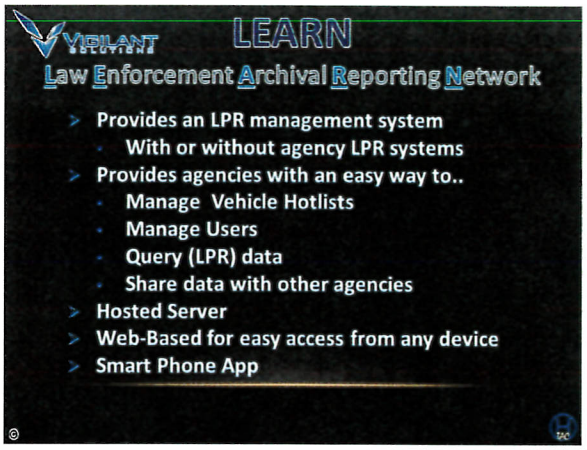
The [redacted] has created an LPR notification process. This process, known as the De-confliction Information Coordination Endeavor (DICE), allows a user to set up notifications if a plate is scanned by one of the LPR systems on their network. Plates can be queried one at a time with a DICE employee.



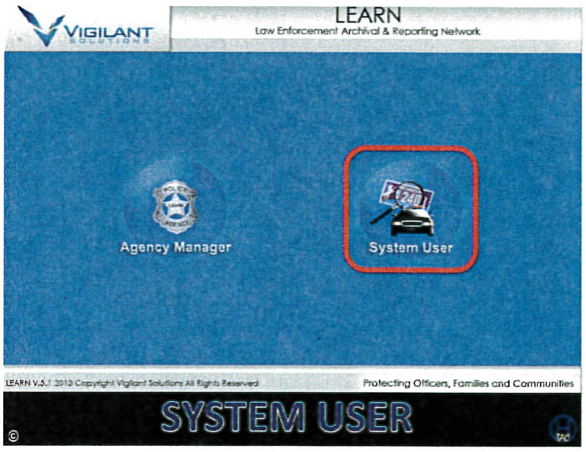
This slide reflects (and answers) general questions a typical class will ask.



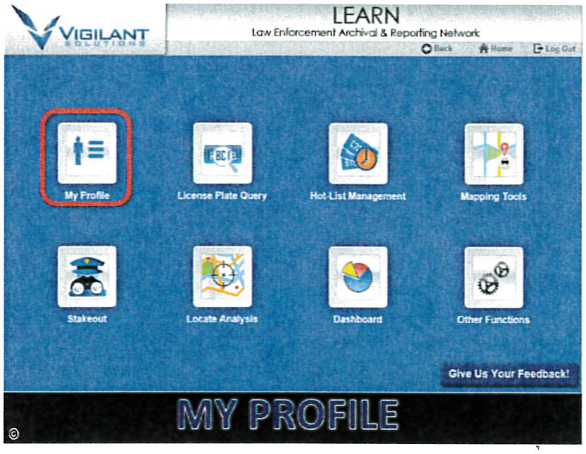
LEARN is the database which students will gain access to and learn how to use. LEARN is the central database for agency LPR data, private LPR data, and LPR data contributed by NVLS sharing agencies. This database contains analytical search engines which have been used to establish suspect/victim travel patterns and identify vehicles used in crimes.



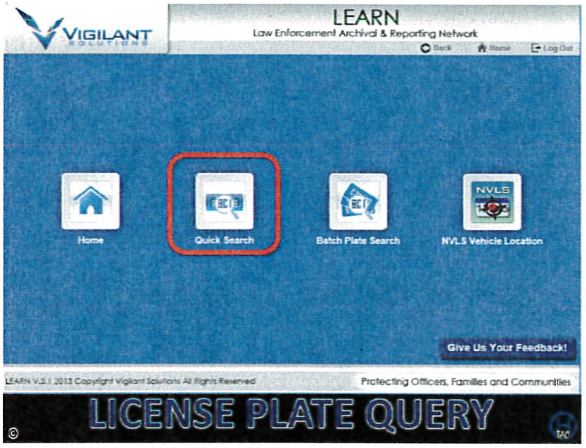
Once on the home screen, all users will click the system user icon to enter LEARN.



It is imperative the user account information is correct. We suggest that every LPR operator places their cell phone number next to their name prior to deploying the LPR car. This will allow employees with other agencies to contact them directly if they scan a plate of interest. This will eliminate the officer having to contact the department through a non-emergency line and then wait for a return call. The officer will have a direct means of communication with the LPR operator seamlessly providing information which may be time sensitive.

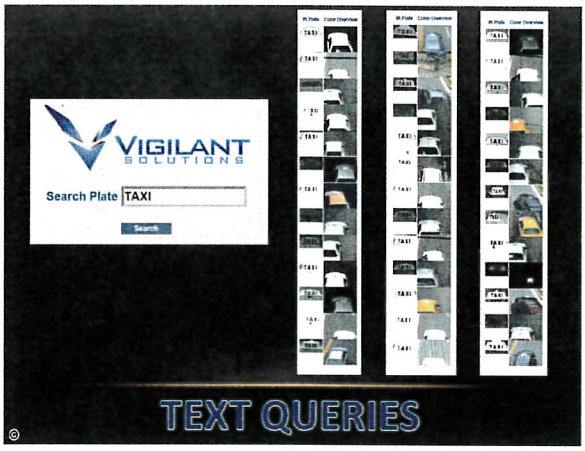


The most common function utilized in the LAERN database is the query function. This is a very diverse tool which will help identify a vehicle by numerous different methods. From geographical location to a partial plate search (known as a wild card search), officers successfully identify vehicles used in crimes with the minimal amount of information in this area.



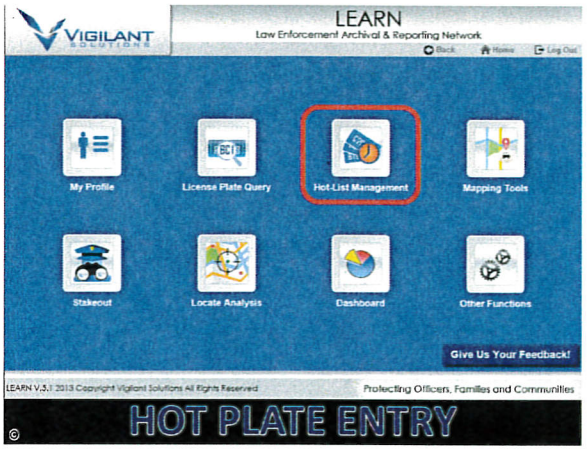
Knowing how the cameras work will benefit the user. In this scenario it is demonstrated how the maximum amount of scans of one vehicle can be located using different search techniques.

As earlier stated in the class, the LPR simply translates what it sees into alpha numeric characters and creates a report. Here you can see how the camera scanned visible text which was not a license plate. This could easily lead to identifying a vehicle of interest where the plate itself was not scanned.

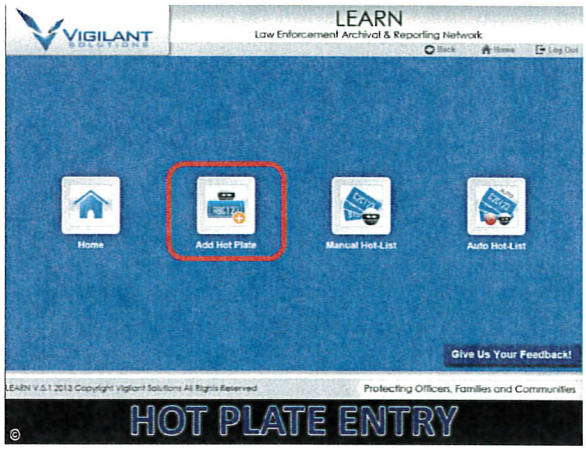


A batch search allows the user to search locations of multiple license plates (up to 100) at once. These plates need to be on an Excel spreadsheet where it is saved as a comma separated value (.csv) file. Browse, upload the file, and then search. The result will be detections of every vehicle on that list on one search result. The user may map all detections at once, which will show places in common with all the vehicles.

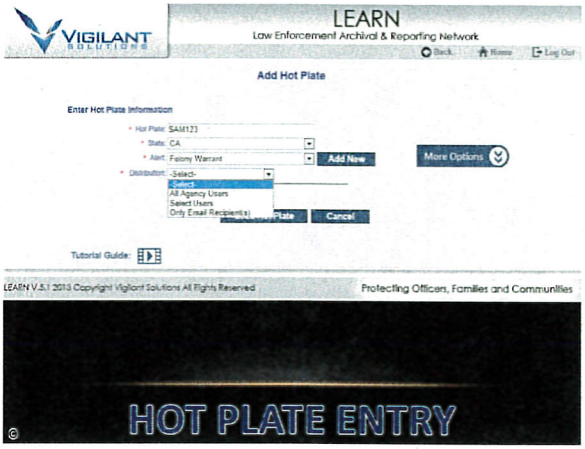
The hotlist management function is the second most commonly used function. This section will allow a user to upload a single hot plate or hotlist. This area will function solely on a single hot plate entry as entering a manual hotlist or automatic hotlist is covered in the advanced class.

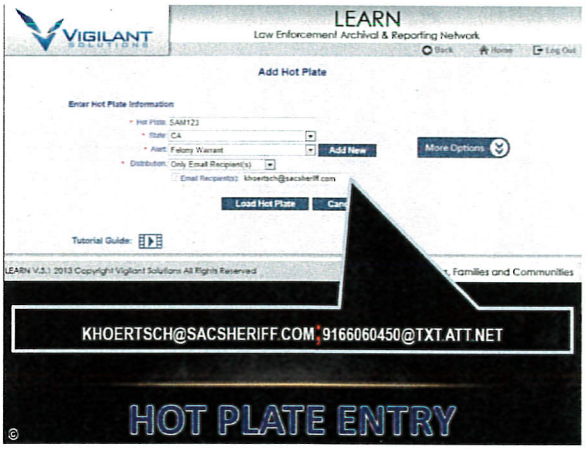


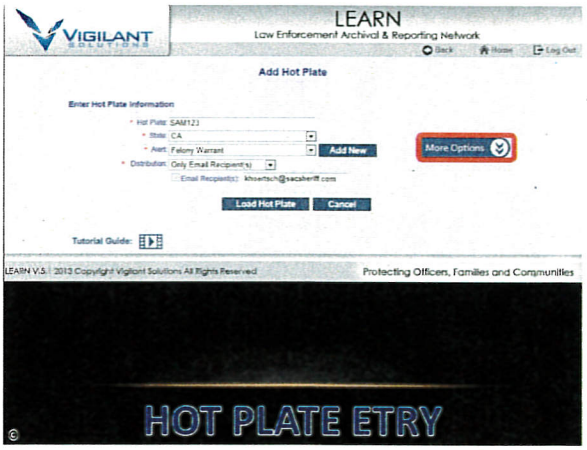
This slide demonstrates how to navigate and use the LEARN program's function of entering a hot plate into the system.

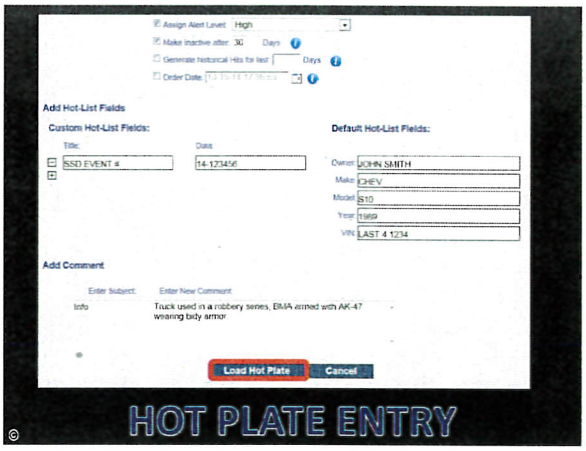


The following eight slides demonstrate how to navigate and use the LEARN program's function of entering a hot plate into the system.

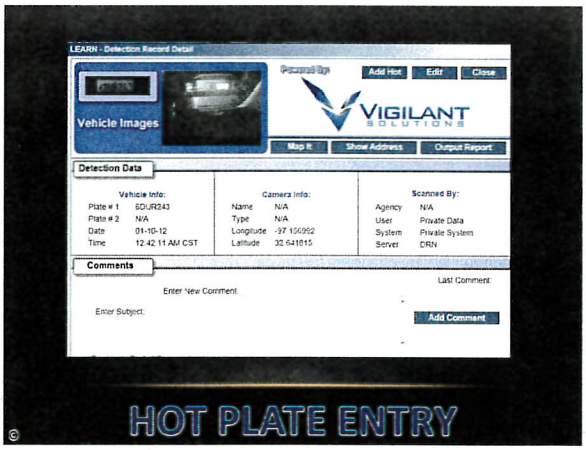

VIGILANT SOLUTIONS
LEARN
Law Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Cancel
Tutorial Guide:
LEARN V.5.1 2013 Copyright Vigilant Solutions All Rights Reserved
Protecting Officers, Families and Communities
HOT PLATE ENTRY


VIGILANT SOLUTIONS
LEARN
Law Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Load Hot Plate
Tutorial Guide:
KHOERTSCH@SACSHERIFF.COM, 9166060450@TXT.ATT.NET
HOT PLATE ENTRY

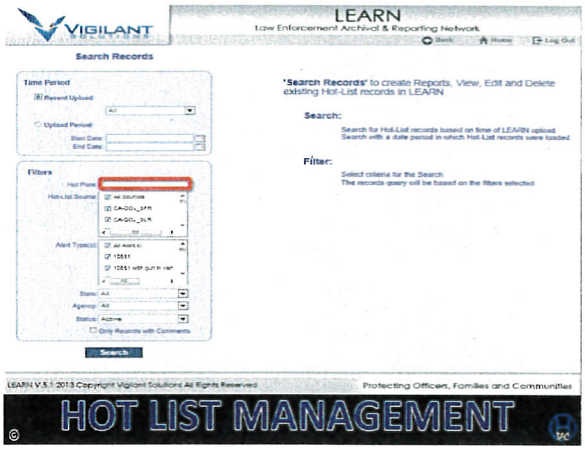

VIGILANT SOLUTIONS
LEARN
Law Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Load Hot Plate
Cancel
Tutorial Guide:
LEARN V.5.1 2013 Copyright Vigilant Solutions All Rights Reserved
Protecting Officers, Families and Communities
HOT PLATE ETRY



In addition to adding a plate as a hot plate through the hotlist management, the plate may be entered a different way. Once the target vehicle is identified utilizing the query function, it can be easily entered here. Simply view a record and then click the add button. This will then take the plate and begin the hot plate entry process.



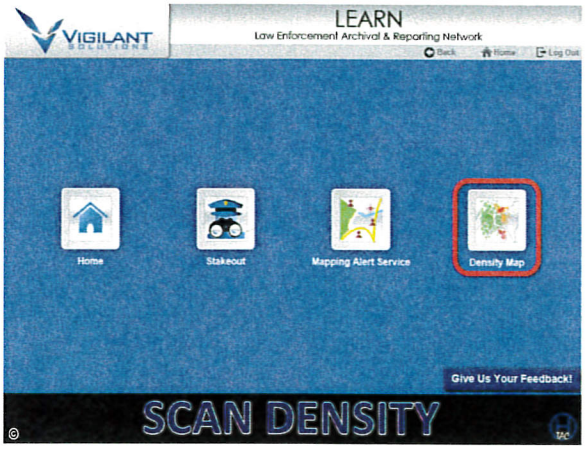
This slide demonstrates how to navigate and use the LEARN program's function of checking the system to see if a plate is currently on a hotlist.



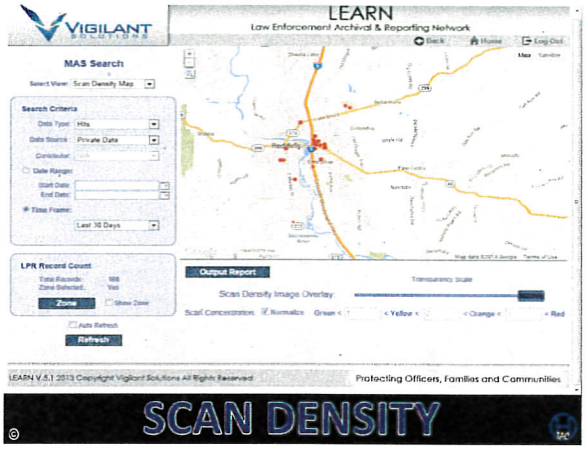
This slide is the base slide for the mapping tools functions.

The Mapping Alert Service will place icons on the displayed map area for specific user-defined parameters. Although this is not a commonly used function in LEARN, it is a good visualization of where certain hits are concentrated on the map.

The scan density map allows the user to quickly see the amount of detections and hits in a geographical area. The user may define a specific time period and even geo zone an area for more specific data.



This slide shows an example of utilizing the Scan Density Map.

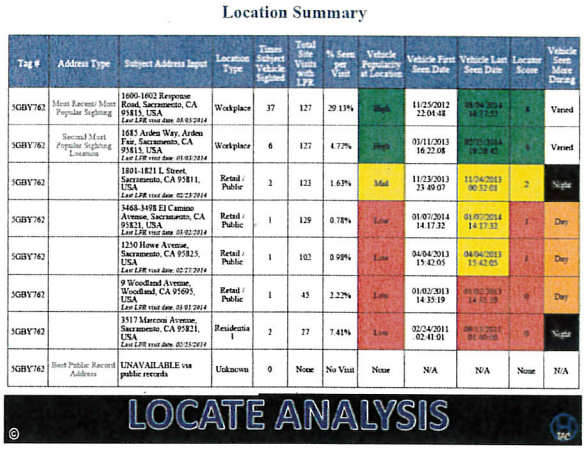


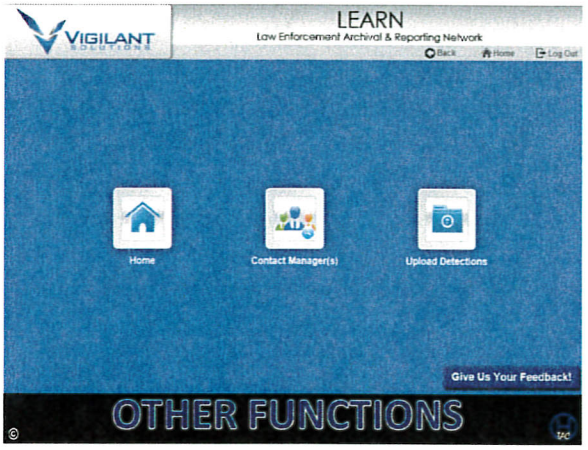
Stakeout is one of two analytical resources commonly used in LEARN. Stakeout will allow the user to conduct a virtual drive-by of a specific location. This will allow the user to identify vehicles where the license plate is unknown. The query will return with every single pass an LPR-equipped vehicle made within the predefined search area. This function also allows a daytime thumbnail to be placed in a night time scan to be used a reference for those detections where the user would normally not be able to determine the description of the vehicle.

Since this function has all scans in a certain area, the photos captured could be next to real time providing situational awareness for an officer conducting an investigation in a specific area.

Locate Analysis is a complex analytical search function which is very easy to use. Simply enter the license plate number and search. Locate Analysis will conduct all research on the plate and locations that have been scanned. This function calculates the number of times an LPR car has been by the location detailing its geospatial information as well. This allows the user to also manually enter addresses so it can incorporate into the report information specific to that location, even though the target vehicle may not have been scanned there.

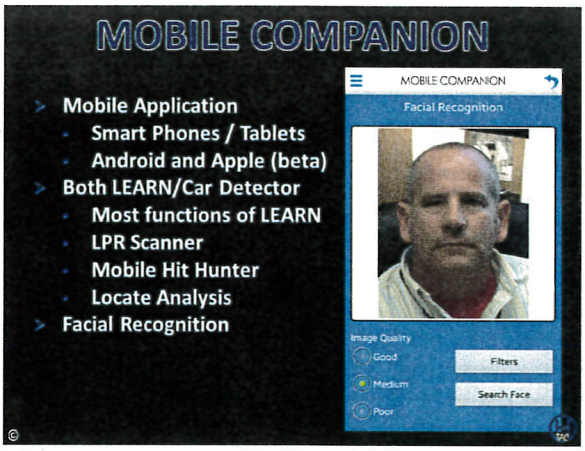
This section will show system administrator information.





Mobile Companion was created to combine the most utilized functions of LEARN and CarDetector into one mobile application. This application has almost every function of LEARN with the availability to use the mobile device as an LPR scanner. All detections from the mobile device are uploaded to the LEARN server making them part of the LPR database. This application is a great resource for officers assigned to foot patrol, bike patrol, mounted patrol, or investigations where LPR data could take the place of transcribing the information.

In addition to the LPR functions this application also has Face Search. Face Search is a mobile facial recognition program that can be used on the mobile device.



Module V: Investigative Uses of LPR

Duration

1 Hour

Scope Statement

This module will cover the diverse uses of LPR data, highlighting cases in which it has been successfully used in the past.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify investigations where LPR could play a key role.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe the versatility of LPR during investigations
2. List ways LPR could be incorporated into investigations

Lesson Topics

This module includes the following topics:

- Historical uses as it relates to both suspect and victims
- Crime series
- BOLO's
- Confirm or disprove statements
- Suspect identification
- Vehicle identification
- Geographical evidence

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

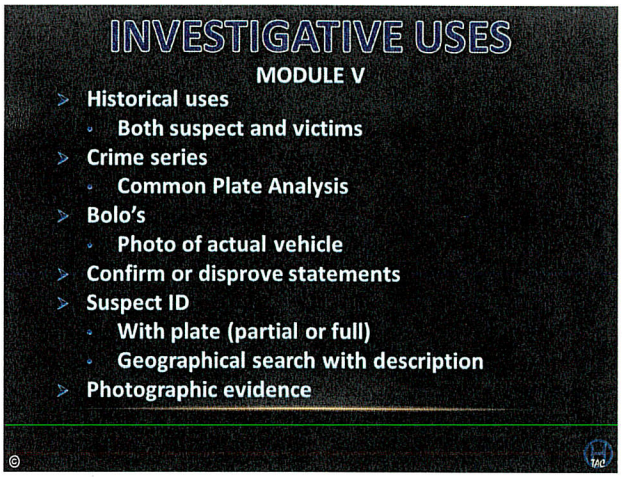
Assessment Strategy

Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

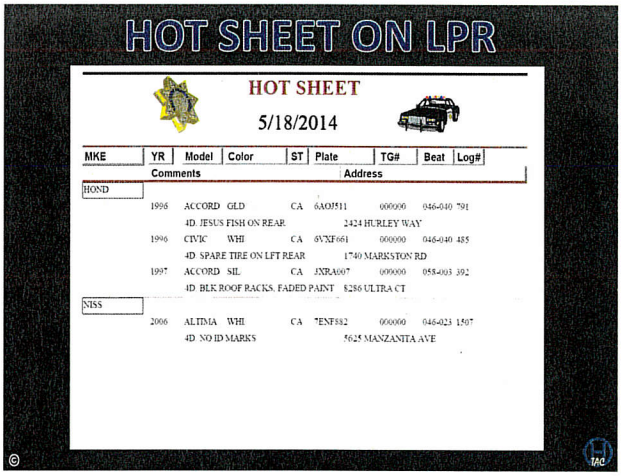
Participant's Note:

Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

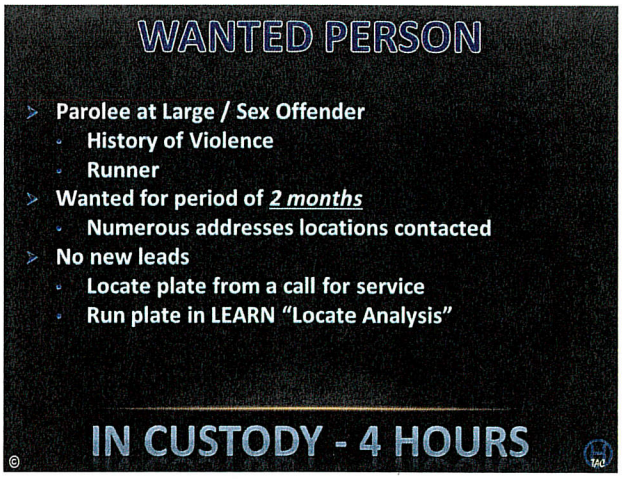
PARTICIPANT NOTES



Most agencies either create a stolen vehicle hotlist or receive one daily from the agency that is responsible for auto theft investigations. These hotlists usually are in the form of a Word document with the vehicle description. LPR would allow the hotlists to contain a photo of the actual stolen vehicle from a historical scan. For example, on this hot sheet the Honda is described as a sedan when a historical photo shows that it is actually a station wagon.

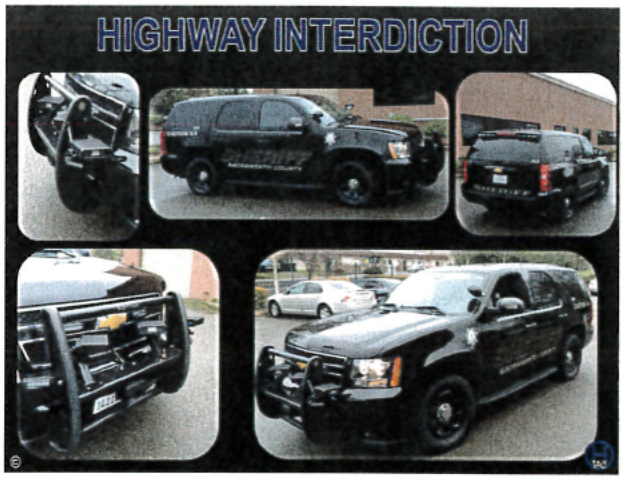


This example highlights how an investigation, which had been ongoing for several months, to the whereabouts of a violent parolee at large was concluded within four hours with the use of LPR. The suspect's location was discovered from a historical scan of a vehicle he had been known to drive. This address was not known to the investigating officers prior to the LPR query.

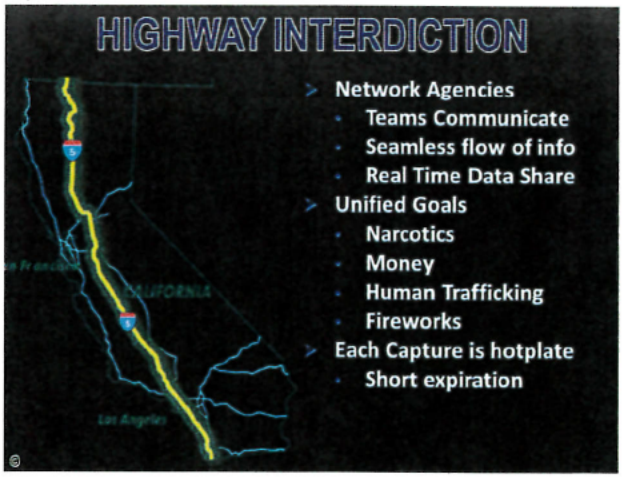


Although LPR is primarily used to receive active field alerts and in criminal investigations, it has other important uses. In this example a sex offender's vehicle is scanned behind a business during a time that would be considered after hours. A check of the offender shows he listed a culinary school as a place of business. The location on the map shows this is where his car is being scanned. If there was any additional information needed, the person receiving the alert could simply call the patrol officer at the number listed on the hit.

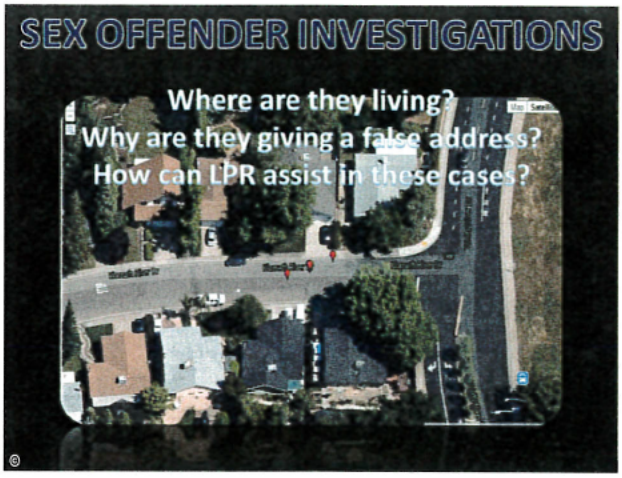
Drug smuggling is a crime that crosses many jurisdictional boundaries. Knowing this fact, agencies that have major interstates or freeways have established highway interdiction teams. These vehicles are usually equipped with power tools, radios programmed to communicate with multiple agencies throughout the state, a narcotics K9, and LPR equipment.



The LPR equipment is an active resource used to scan passing vehicles looking for cars that may have been entered as hot plates. If the systems were able to be networked with other jurisdictions, this would be a huge resource. This would allow the interdiction units to be alerted to vehicles traveling on known narcotics couriers' routes. This information would be beneficial to those who investigate narcotics and other criminal activity who utilize highways.



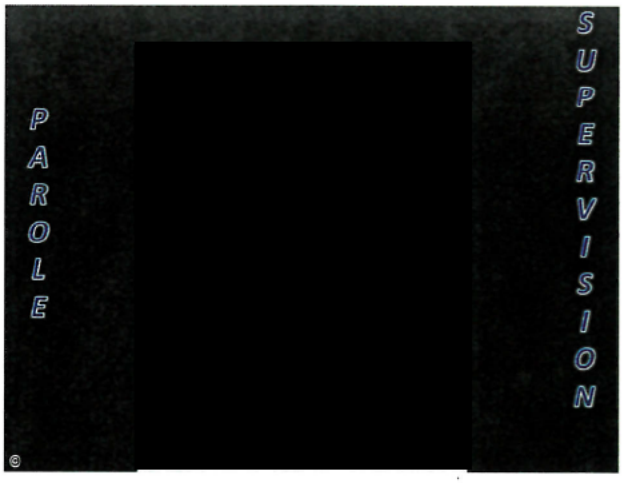
LPR used in sex offender investigations is a great and efficient resource. While sex offenders on parole in California are fitted with GPS ankle monitors, the agent has to manually query each device. Once a sex offender hotlist is created, a person who investigates sex offenders can receive alerts on the offender's location. These alerts will trigger an investigation on the offender's true location which can also be used as evidence in court if a case is generated.



In the course of one afternoon numerous vehicles were burglarized. During one of the burglaries the suspect was confronted by a vehicle owner. The suspect brandished a firearm and fled the scene after the owner was able to get the suspect's license plate. This plate was entered into the LPR systems, where moments later a Sheriff's Parking Enforcement LPR system captured the plate, triggering an alert.

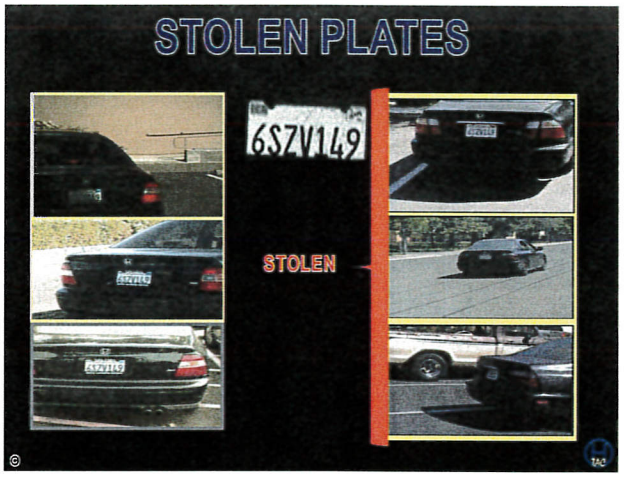
The audio in this slide is played at real time demonstrating the efficiency of LPR equipment.

This slide contains another prime example of using LPR to keep track of offenders. This is an alert from an Active Parolee hotlist. The alert was vetted to the parolee listed in the alert. It was determined he was in violation of his parole by traveling outside his limitation of 50 miles. While this was not a violation where he was arrested, this serves as an example of using LPR to be notified of persons of interest's locations.

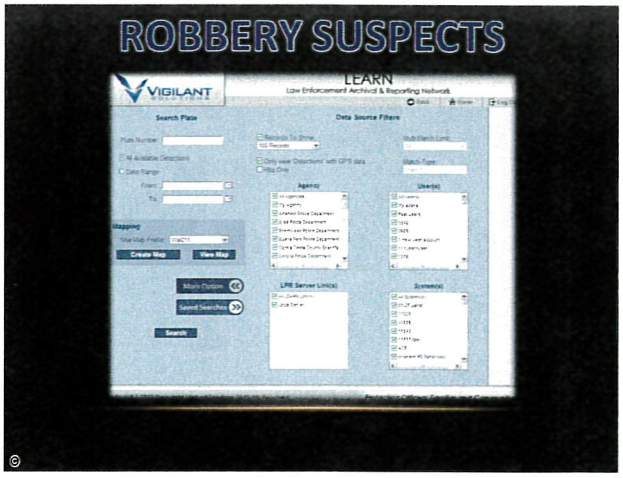


These slides represent a night's worth of detections of sex offenders' vehicles captured out front of their registered addresses. This process allows detectives to focus on those alerts where the offenders' vehicles are continually being scanned at locations away from their address of record. These automatic LPR compliance checks allow officers to use their time more efficiently by identifying those who are not in compliance with the law.

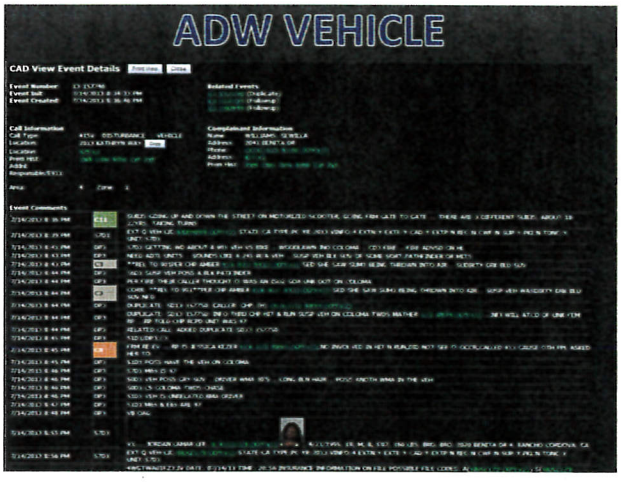
Traditionally, stolen license plate alerts are not acted upon. The reason for this is the stolen license plate database is very inaccurate. By running these stolen plate alerts through historical LPR records the information can be used productively, identifying vehicles the plate does not belong with. In this example a stolen vehicle was identified by a person in the communications center. Once the vehicle was identified, an alert was entered into the system. An LPR system located the car, where it was confirmed to be stolen and it was recovered for the owner.



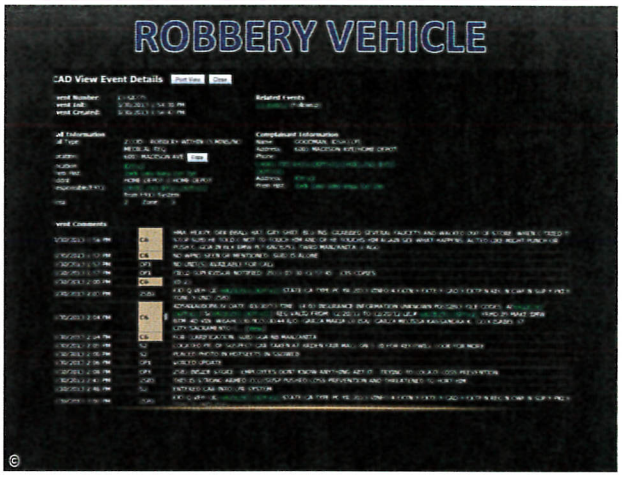
Based on witness descriptions of robbery suspects, coupled with the location of the crime, the suspect vehicle was identified utilizing LPR data. While both suspects were inside of the victim's store, a parking enforcement unit equipped with LPR was scanning the parking lot looking for violations. The suspect car was one of the vehicles that was scanned during this time. Witnesses described the suspect vehicle as an early 2000 green Ford Mustang parked near the garden section of the store. A geographical search of the lot during that time frame produced the vehicle parked in the location described by witnesses. Both suspects were positively identified after researching the vehicle.



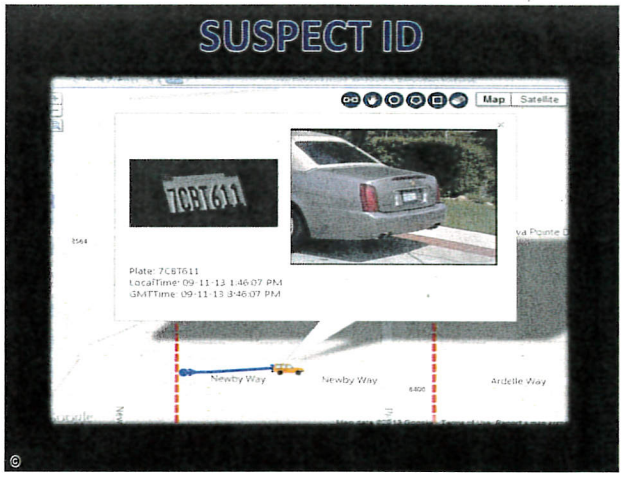
Utilizing historical records the officer driving an LPR car was able to check historical records when he was waived down by citizens regarding a man who was just intentionally run over. The citizens stated the suspect car had just fled in the same direction the officer came from. A check of his scans showed the suspect vehicle. After contacting the registered owner, the true driver was identified and ultimately arrested off another LPR hit at a local mall.



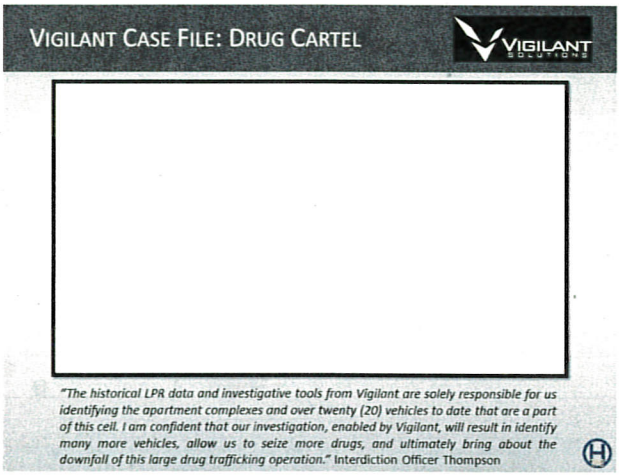
After loss-prevention officers stopped a person suspected of shoplifting, the person pulled a handgun. The male suspect fled the scene in a vehicle officers were able to get the license plate of. The plate was entered into the LPR system where an officer received an alert several weeks later. The male occupant fled on foot and was ultimately taken into custody. The photo taken of the plate had a clear photo of the suspect that was captured as a collateral photo.



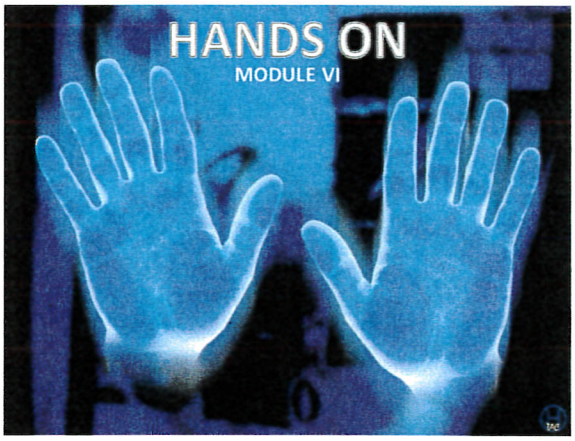
By using the Stakeout function, both occupants of a vehicle who fled on foot were identified as two suspects involved in a shooting several weeks prior. Without this information provided to the officers on scene, they would have been searching for misdemeanants instead of two possibly armed suspects wanted in a previous shooting.



This slide contains a 1:30 minute video on a success story where LPR was used to uncover a large drug cartel.



The next module will involve hands-on demonstration of the diverse uses of the LEARN database.



Module VI: Hands-On Scenarios

Duration

2 Hours

Scope Statement

This module is the hands-on portion of the class demonstrating the diverse uses of the LEARN database while working through real-world scenarios that have previously been solved utilizing LPR technology.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be confident in the basic functions of the LEARN database.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe LEARN use
2. Successfully navigate investigative scenarios utilizing the LEARN database
3. Enter a hot plate into the LEARN system

Lesson Topics

This module includes the following topics:

- Hands-on use of the LEARN database
- Clean up user profile
- Required audit
- Run plates related to investigations
- Utilize Stakeout
- Utilize Locate Analysis

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Computer with LEARN Program (1 computer per student is preferred; however, students can share computers if necessary)

Handout: Cell Phone SMS/TXT reference sheet

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

Participants will work on their own or in a group setting, depending upon the setup of the training room. A series of scenarios based on either real scenarios or hypothetical situations will mimic daily queries of the LPR database. Participants will utilize various functions of the LEARN system within each scenario to allow the participants to become familiar with the diverse functions of the LPR database.

Assessment Strategy

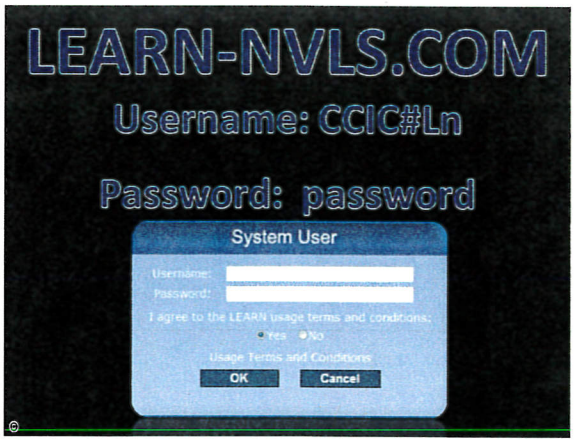
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Participant's Note:

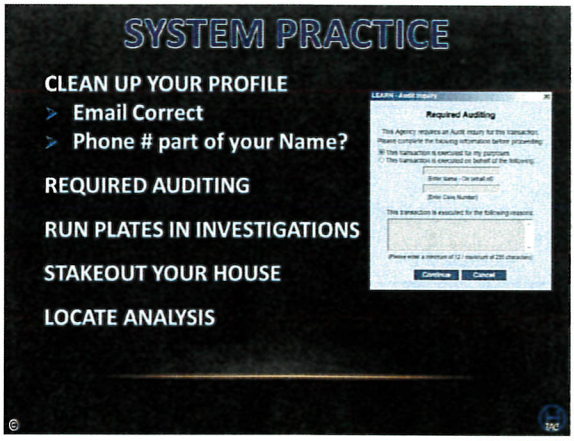
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

PARTICIPANT NOTES

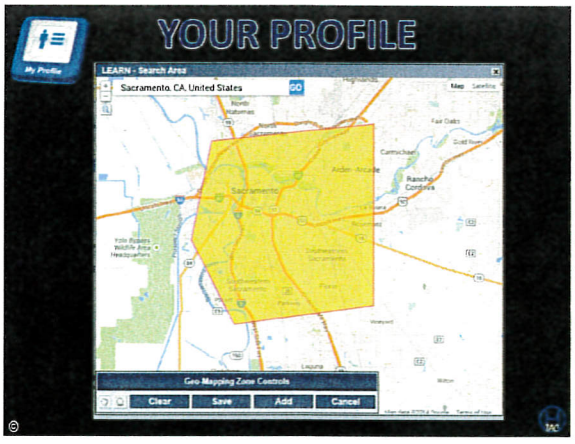
The URL address for the LEARN database is www.learn-nvls.com. Once the home screen appears, each student will log into the systems utilizing the logon credentials provided by the instructor.

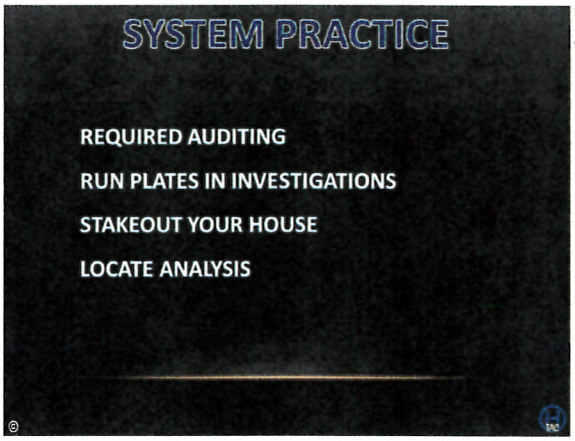


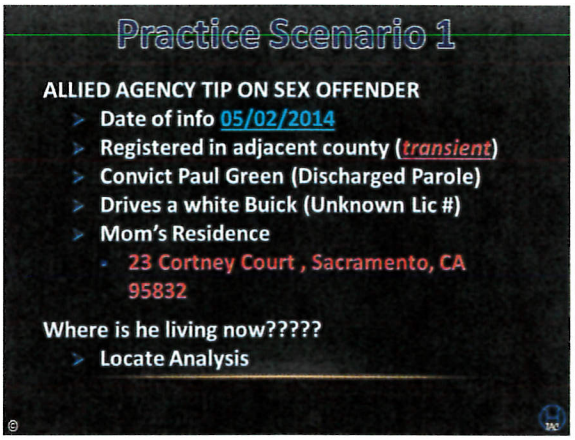
Prior to working through the scenarios, each student needs to confirm their information is correct. They will be given a chance to test drive the system by conducting Stakeout on a known address, run plates identified as being involved in crimes, and produce a Locate Analysis report. There is a standard transaction audit that will appear for every action on the LEARN system.



In the user account there are several important topics that need to be addressed. As this is a nationwide database, it is important to geo zone the area in which the alerts are generated. If there is no geo zone setup, the user will receive a large amount of email alerts from all over the nation. This geo zone needs to be established prior to checking the email service button.

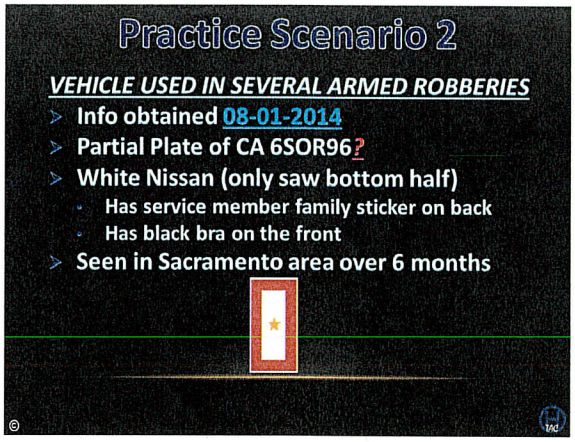




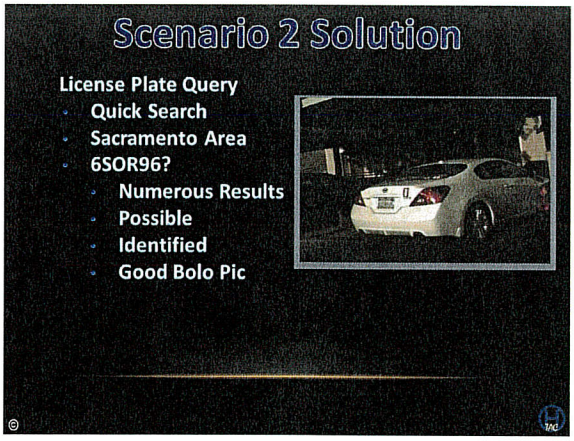


The hands-on Scenario 1 is a real case that was investigated in 2014. A Placer County detective notified the Sacramento SAFE team of the possibility of sex offender Paul Green residing in their county illegally. This would be a felony violation since Green was registering as a transient sex offender in Placer County. The only information given to the Sacramento SAFE team was his name, his mother's name, and a vehicle described as a white Buick sedan in which he drove to his last registration event. With the limited information, detectives were able to locate Green's mother's residence, which was used as the anchor point for a Stakeout search. The Stakeout search produced a white Buick sedan a records check showed had a release of liability to Paul Green. A Locate Analysis report showed Green had moved from his mother's house to a new, unregistered

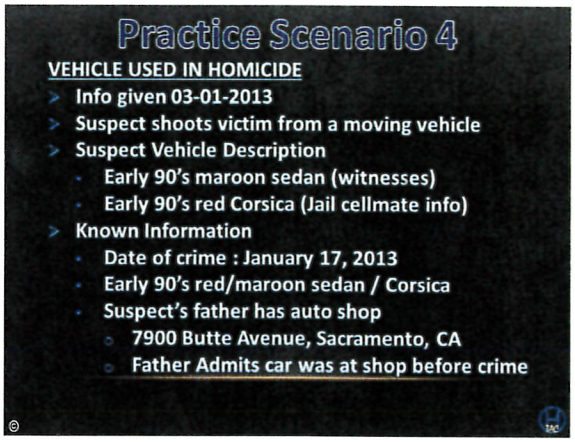
location and was possibly attending a local junior college which he also had not registered with. A search warrant was served at his residence where he was arrested.



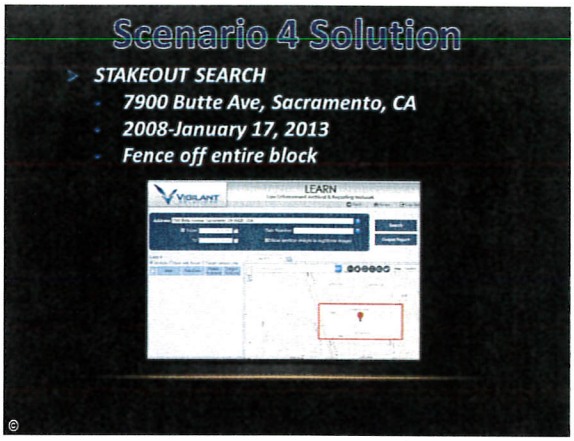
Scenario 2 is a hypothetical scenario created to be used as an example of how to use a wildcard search.



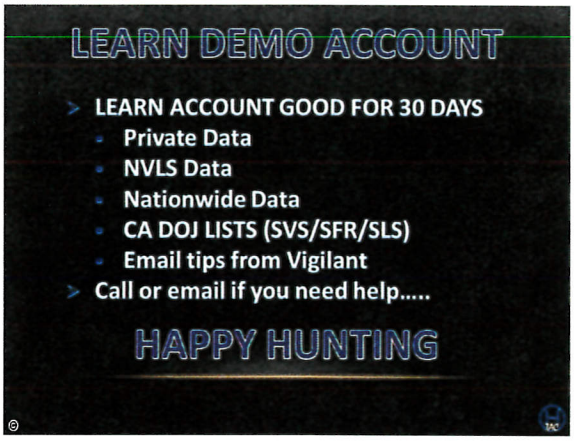
This is the process to quickly enter a plate into the system as a hotplate.



This is a real scenario that was used by district attorney investigators during a homicide investigation. Occupants of two cars exchanged words one evening. This resulted with one occupant shooting the victim in the other car. Since it occurred at night, there was a rough description of the suspect's vehicle described as a maroon sedan. Information led investigators to the suspect's identity, but they did not have enough information to charge him with murder. One key point of evidence was the description of the maroon sedan. Utilizing the Stakeout function investigators were able to locate a collateral photo of the suspect vehicle parked in front of his father's auto shop. This photo was entered into evidence in the case. The car was never located as the suspect used a saws-all and cut it into small pieces where it was melted down.



This is a hypothetical scenario created to highlight the great resource of searching for text in the license plate search area.



APPENDIX A

Reference List

- Algorithm for License Plate Recognition. VISL, Technion. 2002.
- ACLU raises privacy concerns about police technology tracking drivers - CNN.com. *CNN*. 18 July 2013.
- Automated License Plate Recognition Systems: Policy and Operational Guidance for Law Enforcement. *U.S. Department of Justice, National Institute of Justice*. 2012.
- International Association of Chiefs of Police LPR Privacy Impact Assessment (2009)
- International Association of Chiefs of Police LPR System Policy and Operational Guidance (2012)
- RAND License Plate Readers for Law Enforcement Study (2014)
- American Civil Liberties Union "You Are Being Tracked" (2013)
- United States v. Antoine Jones, 132 S. Ct. 945 (2012)
- California Government Code 34090.6
- Criminal Intelligence Systems Operating Policies (28 CFR Part 23)
- United States Code 2725
- California Government Code Sections 6250-6270
- People v. Davila, 27 Misc. 3rd 921, 901 N.Y.S 2d 787(2010)
- People v. Mark Serrano
- United States v. Diaz-Castenada, 494, F.3d 1146, 1152 (9th Cir. 2007)
- United States v. Knotts, 460 U.S. 276 (1983)
- Rodriguez v. State, S.E.2d, 2013 WL 1767660 (Ga. Ct. App. 2013)
- Hernandez-Lopez v. State, 319 Ga. App. 254 (Ga. Ct. App. 2013)
- Green v. San Francisco, 2011 4434801 (N.D. Cal. Sept . 23, 2011) (Unpublished)
- United States v. Wilcox, 2011 WL 679416 (11th Cir. Feb. 28, 2011)
- State v. Chambers, 2010 WL 1287068 (N.C Ct. App. April 6, 2010) (Unpublished)
- United States v. Ellison,
- Federal Drivers Privacy Protection Act (1994)
- Vigilant Solutions User Manual
- California Vehicle Code Section 2413 (c)
- Northern California Region Information Center LPRWeb user manual
- El Paso Information Center DICE manual
- Guide to Critical Infrastructure and 1146

LICENSE PLATE READER (LPR)

Instructor Guide

March 2015

PRA - LPR0075

Module I: Introduction to LPR

Duration

1 Hour

Scope Statement

This module reviews the history of License Plate Reader (LPR) technology, common terminology, LPR system components, traditional LPR system deployment and the difference between simple and complex systems.

Terminal Learning Objectives (TLO)

Upon successful completion of this module, students will be able to explain the history of LPR systems, the method of operation, and common deployment models listing the advantages and disadvantages of each.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Define common LPR terms
2. Explain the basic mode of operation of an LPR system.
3. Describe the difference between a simple and complex LPR system.

Lesson Topics

This block includes the following topics:

- Course Overview
- Housekeeping
- Introductions
- History of LPR
- How LPR works
- LPR components
- Terminology

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer

Projector
Projection Screen
Handouts:

- USB thumb drive containing more than 130 student resources (information contained on enclosed DVD)
- Terrorist Screening Center (TSC) Information Card

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

Assessment Strategy

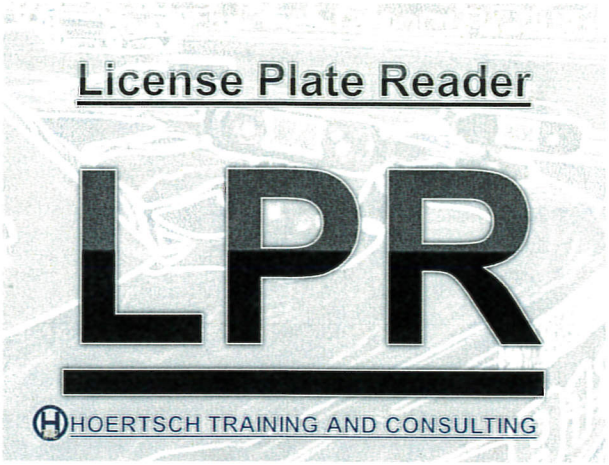
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Instructor's Note:

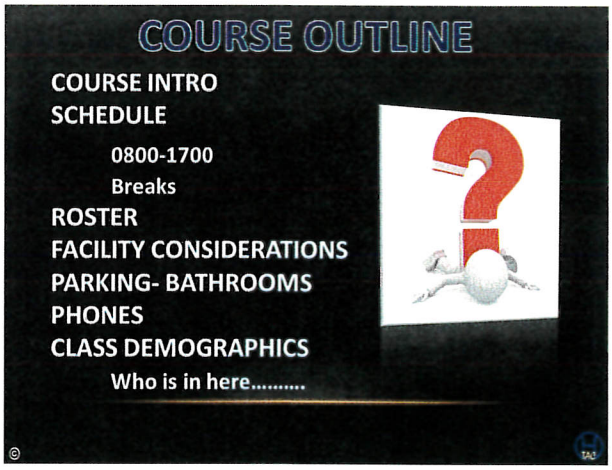
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

INSTRUCTOR NOTES

Show slide as participants are settling in.



Discuss briefly what will be covered during the course. Make sure that the exits are clearly located and that bathrooms have been pointed out. Let people know that if they need to exit during the session for personal or work business, they are free to do so. Have each student introduce themselves with name, agency, and assignment. This will allow the instructor to adapt the instruction to highlight areas of interest to those in different assignments.



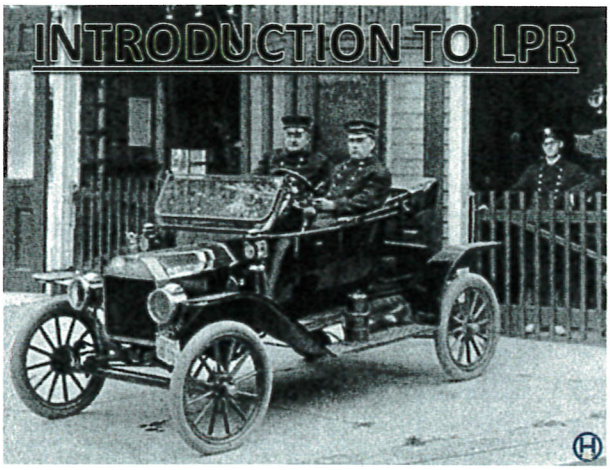
Inform the class every piece of information they need concerning the class is on the USB thumb drive that they were given.

Course hours are 8:00 a.m. to 5:00 p.m. and include a 1-hour lunch.

There will be 10-minute breaks every hour and thirty minutes. This could vary by time spent on each module.

Class and instructor introductions should take about 20 minutes for a class size of 40.

Confirm that every attendee received a USB drive and a Terrorist Screening Center (TSC) information card.



LPR is not a new or novel idea; it simply enhances typical law enforcement duties through the use of technology. To illustrate this concept you can look at the simple process of conducting a records check of a license plate. Using the tradition methods an officer can run a few hundred plates during the course of a shift to see if they are wanted or have alerts associated with them. With LPR it is possible to run a far greater number of plates in a shift. As an example of an LPR's efficiency, an LPR car scanned an entire parking lot of 8,000 plates in an hour.

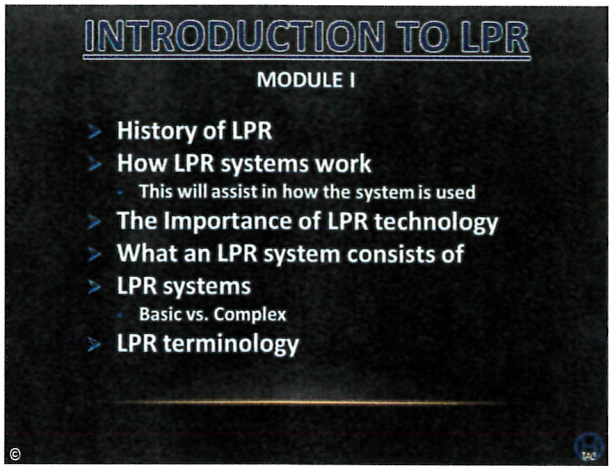
During patrol briefings vehicles-of-interest license plates are told to officers who write them down in the hopes they may locate them during their shifts. If located, these officers either take enforcement action or notify the person who issued the Be On the Look Out (BOLO). The LPR system makes this process seamless by allowing the person to enter the plate in the system, which automatically notifies them when the LPR system scans the plate.

Give examples of what normal daily duties are and how LPR is utilized to make those processes more efficient. Examples that relate to the job classification of the attendees will facilitate a quicker learning curve.

Examples of daily duties LPR enhances, not replaces, include:

- Conduct checks of license plates
- Attempt to locate wanted vehicles
- Broadcast BOLOs (Be On Look Out)

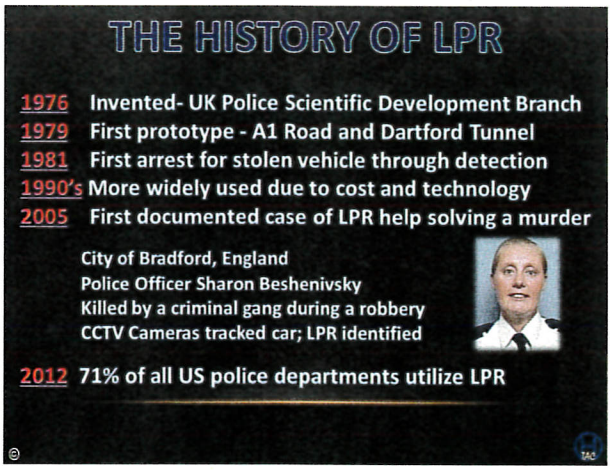
Summarize what will be covered in the first module (see slide for details).



LPR technology is widely used in Europe and is a part of their security infrastructure. LPR technology has rapidly developed since the 1990s. With equipment costs decreasing to a more affordable level, a 2012 survey showed 72% of departments were utilizing LPR equipment. Since this survey is a few years old, the percentage of agencies has most likely risen. As an example, every agency (except for one) in the Sacramento area utilize LPR (85%).

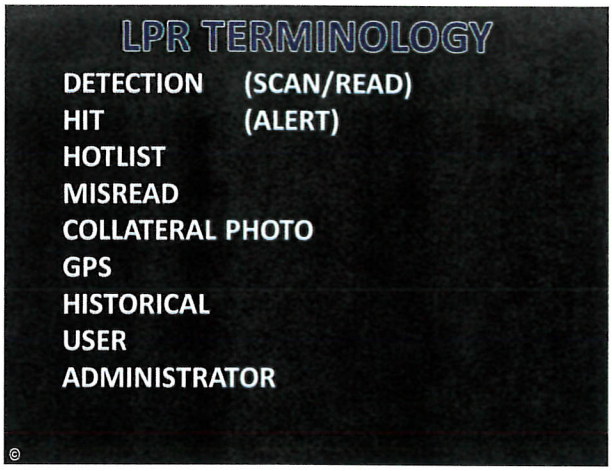
Follow the slide and summarize each bullet point. It is important to point out the first homicide solved utilizing LPR was that of a law enforcement officer.

Since the last survey of police departments utilizing LPR was in 2012, point out the fact that this number is probably lower than reality. Using Sacramento County as an example, point out that all agencies in the county (with the exception of one) have LPR.

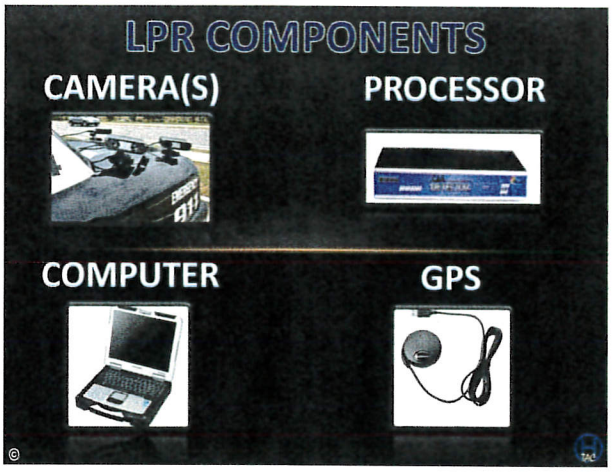


- DETECTION - Also referred to as a SCAN or READ, is simply the result of one of the LPR cameras recognizing alphanumeric characters where it was translated (all or in portion)
- HIT - Also referred to as an ALERT, is a detection of a license plate where that particular plate has been entered into the system to trigger a notification
- HOTLIST - A list which contains numerous HITS
- MISREAD- A detection where the text is not translated accurately due to numerous factors (out-of-state plate, imperfection in the plate, similar character, etc.)
- COLLATERAL PHOTO - Surrounding photo captured during the detection of a license plate or text
- GPS - Global Positioning System
- HISTORICAL - Any detection which did not trigger an active alert
- USER - A person who is operating a vehicle equipped with an LPR system or who is using the LPR database
- ADMINISTRATOR - A person or group who administers a particular agency's LPR program

Express the importance to vet hits as misreads create the highest liability in utilizing LPR technology. Tell students the only liability cases directly pertaining to LPR thus far are a result of the officer not vetting "misreads."

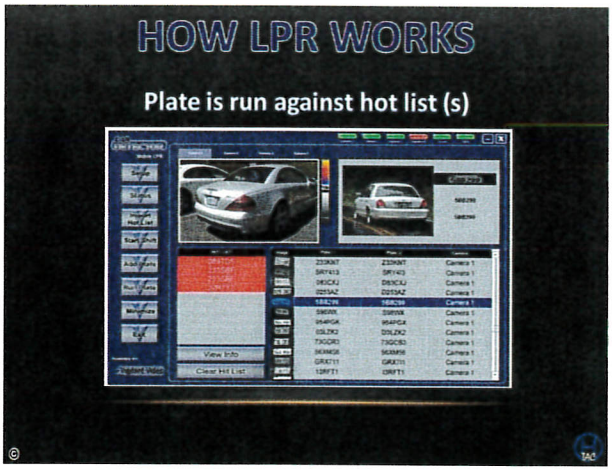


The LPR system consists of a computer (which most law enforcement vehicles are equipped with), one to four camera pods, a processor, and a GPS. With new LPR technology the processor can be contained in the camera, eliminating the need for a separate processor. The newer systems are powered over the Ethernet, minimizing the need for additional equipment.



Detail the components of an LPR system. When describing the camera POD, explain the functions of the Infrared (IR) camera and the Color camera. In addition, describe how the IR emitters operate by flashing light where the IR camera looks for the dead space that is ultimately translated into the alpha numeric characters. Convey the importance of updating GPS drivers and deploying the latest, most accurate GPS devices available.

LPR cameras are traditionally affixed to the top of law enforcement vehicles and constantly capture video. When a license plate or text passes in front of the camera pod, a still photograph is taken of the characters. Each LPR camera pod contains two cameras and infrared emitters. Only one camera (Infrared) recognizes characters by identifying the dead area caused by when the infrared emitters flash a light to create a reflection off of the plate. Once the characters are detected, the color/black-and-white camera takes a photograph to be used as a reference of what vehicle the plate was on. Once the two photos are captured, the location is set by the GPS device. All of this information is put together to include the identifying information of the agency, user, and system to be stored for a set period of time.



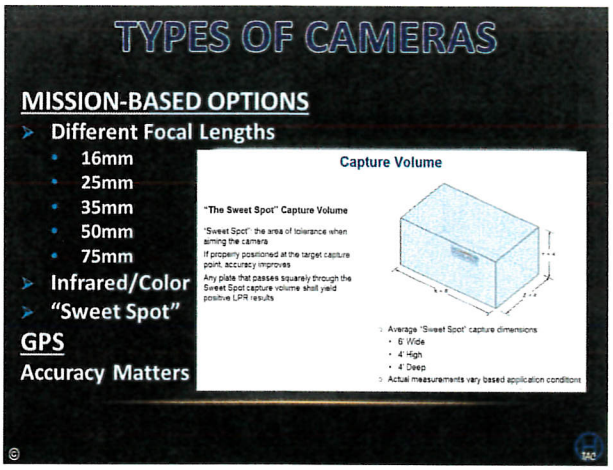
The LPR system will capture all kinds of alpha numeric characters as that is its sole purpose.

Follow the slide while explaining how LPR technology works.

While this is one vendor's in-car LPR system, it serves as an example of how the unit works in the field. In addition to the traditional LPR system, this one incorporates private data, which will be covered later in the class.

Play the video as a demonstration of how an actual LPR systems works from the operator's view. While this is one vendor's system, the others are similar and would operate along the same line.

It is very important to deploy the correct camera based on your mission needs. If a camera is deployed and not set up for your mission, you will not be successful in scanning plates. The focal point increases with the millimeter of the lens. In addition to the correct deployment of cameras, it is important to use the most current GPS hardware and software. The most accurate GPS hardware currently can have a 30-foot deviation. This could be the difference between neighborhoods when attempting to locate a vehicle which was scanned.



Once the proper cameras are deployed, they must be aimed to maximize the scan rate. It is suggested that departments creating an LPR program construct an LPR aiming pad. This will ensure that every camera is aimed on its appropriate field of view.

Explain each camera is used in different deployment models. This will maximize the use and effectiveness of the LPR systems. During the GPS portion of the slide, it is important to explain the GPS devices could have a 30-foot deviation for accuracy.

The slide will explain the deployment model of each size of camera. Emphasize the importance of aiming the cameras to scan plates in the "sweet spot" as this plays an important role on how effective the cameras scan the pates.

The traditional LPR deployment is where the camera pods are mounted on top of the police patrol car or parking enforcement car. These three slides demonstrate how agencies are utilizing [redacted] vehicles with [redacted] LPR camera installations. This allows the units to be used by [redacted] units operating in plain view, undetected.

This slide contains examples of LPR systems with covert mobile cameras.

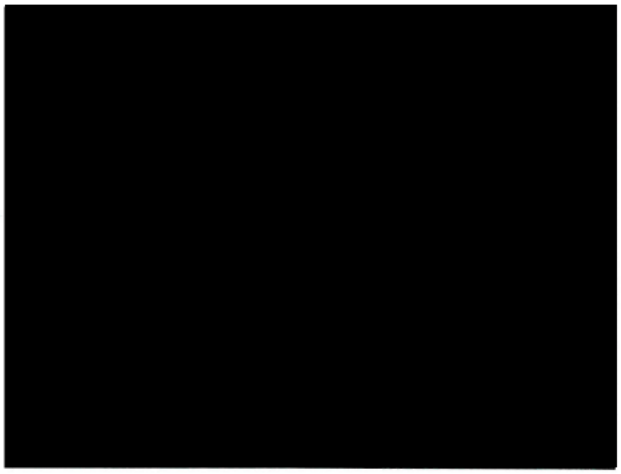
This slide contains examples of LPR systems with covert mobile cameras.

This slide contains examples of LPR systems with covert mobile cameras.

LPR systems can be deployed as a fixed asset. Law enforcement agencies are deploying LPR as a fixed asset in lieu of mobile for numerous reasons. Once the systems are deployed, there are almost zero man hours involved in their maintenance. The fixed units are traditionally deployed in highly travel intersections capturing a great amount of data with little to no impact on the citizen's reasonable expectation of privacy.

This slide contains examples of LPR systems with covert fixed cameras.

This slide contains examples of LPR systems with fixed cameras.



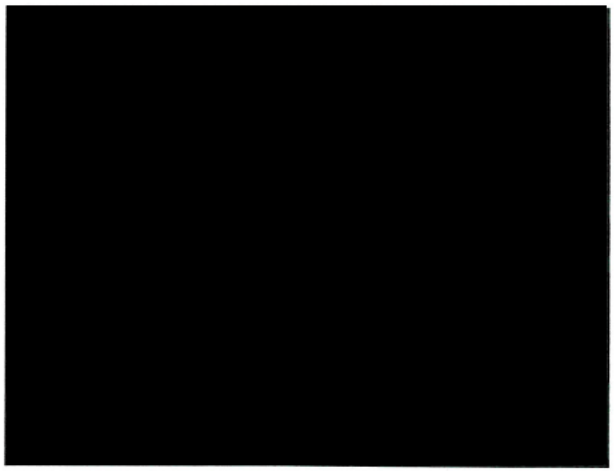
This fixed asset covers only one lane of traffic in a highly traveled intersection in the city of Sacramento. During the first month, this one camera system captured over 120,000 license plates yielding approximately 300 hits. As a reference, the Sacramento County Sheriff's Department scans between 270K to 350K plates a month with its 17 mobile LPR cars that are equipped with 2 to 4 cameras each.

This slide contains a video of news coverage of the Sacramento Police Department's first fixed LPR deployment. It is important to point out the change in attitude of the people being interviewed in the footage once they are told of the system's success.

This slide demonstrates the effectiveness of the fixed systems by the numbers with minimal man hours involved after installation. It is important to point out this is one lane of traffic at a highly traveled intersection.

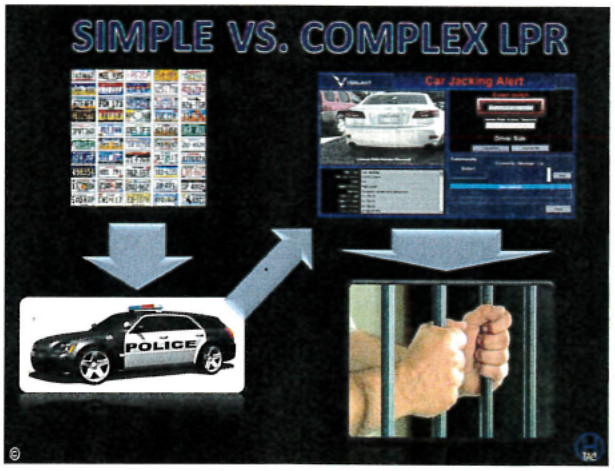
Each one of these slides is an example of the LPR system simply translating alpha numeric characters into text. These examples will help you conduct research utilizing the LPR databases. Limiting yourself to the exact plate you are attempting to locate will end up reducing the search results.

Explain how this slide serves as an example of LPR simply translating what it captures on the camera into alpha-numeric characters run against hotlists.

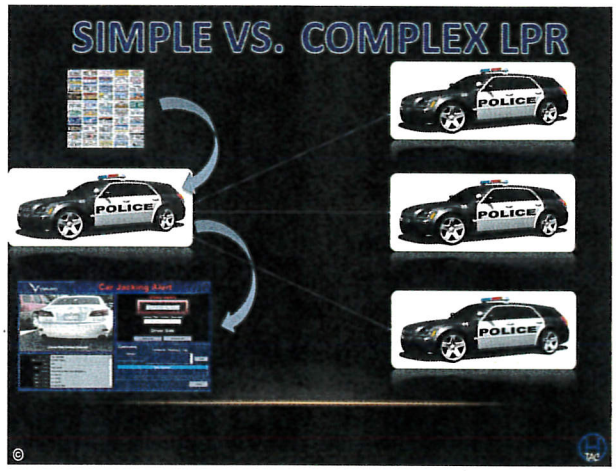


A traditional LPR system works by downloading a list of wanted license plates into a vehicle's computer. The LPR scans a plate that is on your hotlist, triggering an alert to be sounded in the car. Once the alert is triggered, the officer takes appropriate action.

Explain the traditional simple LPR system. A list of hotplates is loaded into the computer of the law enforcement vehicle, a plate that is on that list is scanned, and an alert is triggered notifying the operator of the vehicle. The officer then arrests the person driving the hot-listed vehicle if the situation dictates.



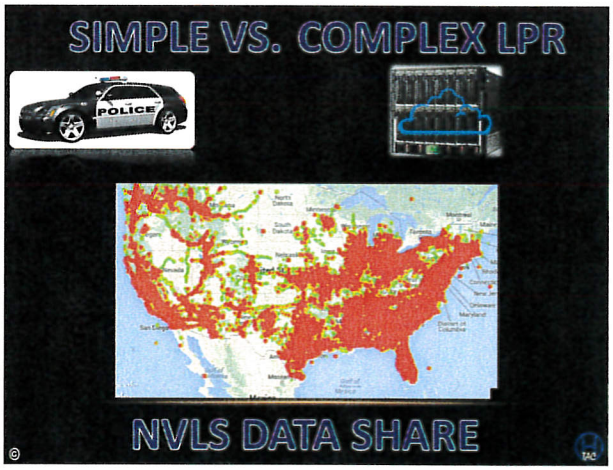
A complex LPR system works in the same manner as a simple system, but it is also networked with other agency LPR cars. This allows officers in other geographical areas to notify and disseminate information on wanted or vehicles of interest in a seamless manner. This information can be downloaded to the agencies' vehicles near real time. There is a lower threshold for entering a plate into the LPR system compared to California DOJ or NCIC, which allows for more information to be shared by officers.



Explain how a complex LPR system does exactly what a simple system can do, except it is also networked with other LPR units.

Explain how the information can be disseminated to other law enforcement LPR units in a matter of seconds.

A complex system allows information to be shared, not only with your own agency, but with any agency that shares detections and hotlists. This process allows the user to be immediately notified when a vehicle of interest is scanned by a sharing outside agency. This process allows sharing agencies to multiply their LPR fleets. All sharing agencies' LPR fleets work together seamlessly, providing detection information, and generating hits exactly how their own LPR car would.

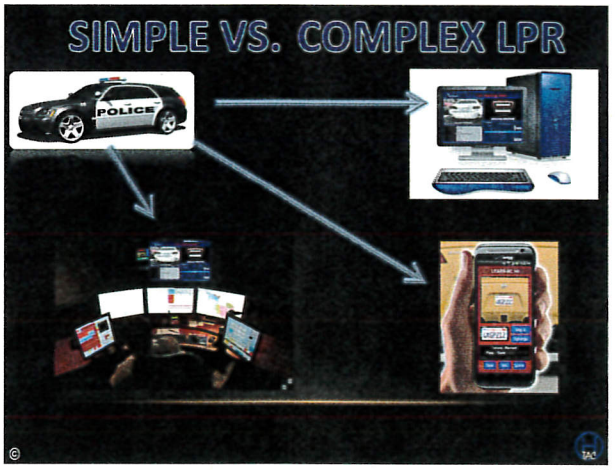


In addition to directly sharing with individual agencies, some choose to contribute to the National Vehicle Locator System (NVLS). This is a national LPR repository that can be accessed by agencies that may not directly share with others. As there are a large number of law enforcement agencies in the United States, it is almost impossible to share directly with each agency. NVLS allows agencies to contribute to NVLS, which may be utilized by other agencies.

Explain how the cloud-based storage solution allows information to be shared by law enforcement

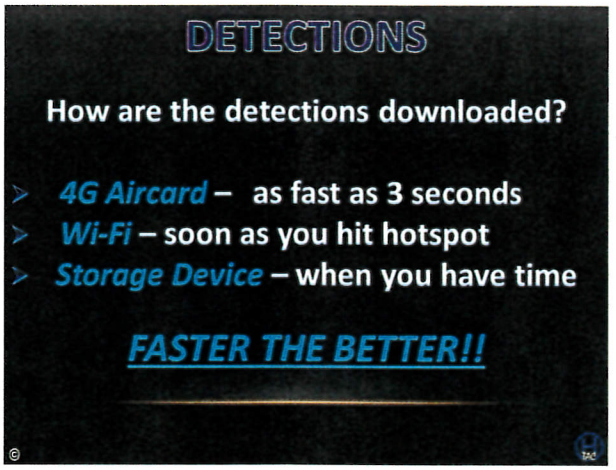
agencies seamlessly in near real time. In addition to the direct sharing of information, the National Vehicle Locater System (NVLS) database allows information to be utilized by any law enforcement agencies with an ORI/LEA number.

Simple LPR systems generate an in-car hit when a hot plate is scanned. A complex LPR system allows for a hit to be sent instantaneously to desktop computers, mobile devices including cell phones, or deployed to communication centers. Complex LPR systems have provided new and novel ways in which LPR systems are deployed. No longer does the LPR user have to be driving the vehicle in order to get the active LPR hit. Vehicles can be outfitted with the LPR system allowing the operator to scan a maximum number of plates where all alerts are transmitted offsite.



Explain how a complex LPR system provides different means of receiving LPR hits. The hits generated by the LPR vehicles can be sent to a desktop computer, cell phone, or even a communication center that is equipped to receive such information.

As hot plates were entered into the system for a reason, the download time plays a key role in the effectiveness of the information. The most efficient way of downloading the information is through the use a 4G aircard outside of the department's network. This will minimize the download time since it will not have to pass through firewalls and the department's network, which is often slower.



It is important to be aware of the other download processes. Before acting on a hit, verify the detection information. Some systems save the detections to a storage device, which is then manually uploaded to a server at the end of the shift. This could lead to the data being several hours old by the time the alert is sent. Faulty equipment could cause alerts to not be sent out for weeks as the information will be stored locally on the computer until the download issue is resolved.

Explain the different download types from fastest to slowest. Make sure the students realize that, due to equipment malfunction, downloads could be delayed for days, making it very important to look at the hit alert carefully.

The next module will cover Legal Aspects.

This slide serves as the conclusion to Module 1 and students can take a 10 minute break. Leave this slide up during the break

Module II: Legal Aspects

Duration

1.5 Hours

Scope Statement

This module covers all legal aspects of LPR technology including best deployment practices, current case law, the importance of departmental operation/general orders, and how to handle requests for LPR records.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify best practices in deploying an LPR program.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe Legal Aspects of LPR
2. Explain case law as it pertains to LPR
3. Describe 28 CFR Part 23
4. Explain the current court standard in California on releasing information in line with the Public Records Act.

Lesson Topics

This module includes the following topics:

- Key points of concern from privacy advocacy groups
- The importance of establishing general/operational orders
- Best practices
- Case law
- Role of the LPR administrator

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Thumb drive handout

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

Assessment Strategy

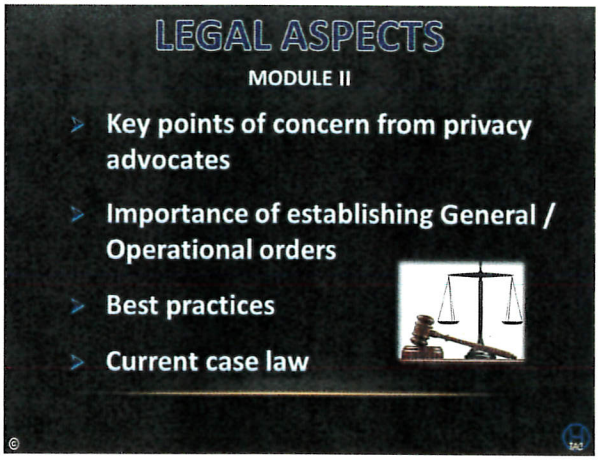
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Instructor's Note:

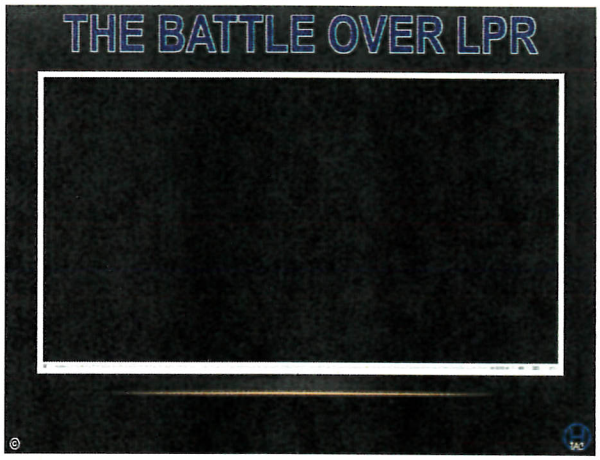
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

INSTRUCTOR NOTES

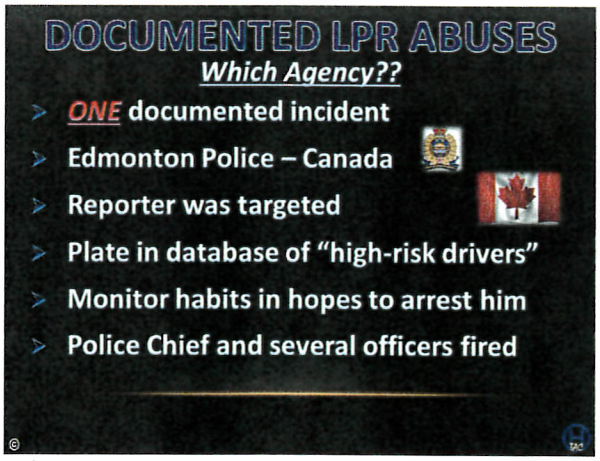
Briefly describe what will be covered in Module II (see slide for details).



Play video that covers both points of view on the LPR controversy. While law enforcement views LPR has a huge resource, privacy advocacy groups fear it can be abused with little to no oversight.

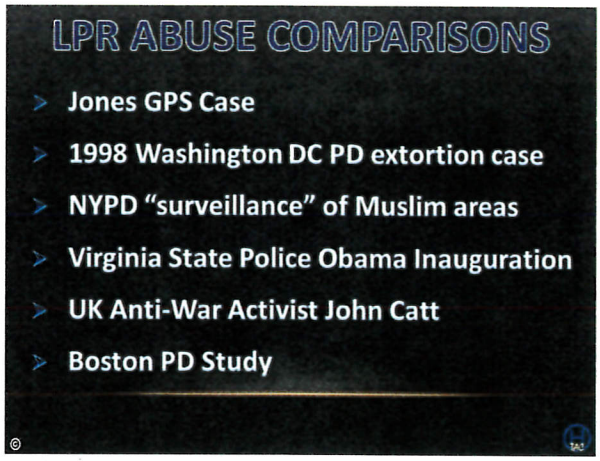


While LPR technology has been deployed for years, there is not one documented case of abuse here in the United States. This example shows a specific case of abuse which could happen without LPR. As with all scenarios involving LPR, the system just made this process more efficient. The fact that there are zero documented LPR abuse cases here in the United States where 72% of agencies are using the LPR equipment demonstrates people are using the equipment appropriately.



Ask the class the questions at the top of the slides and let the students attempt to answer. The point of this slide is to show that while 72% of agencies deploy LPR systems, there have been no

documented abuses to date in the United States. It shows that agencies that deploy LPR systems are trying to do the right thing.



These are simply scenarios used as comparisons on how LPR can be abused. The fact is there can be abuse in any aspect of law enforcement. These comparisons are noted by privacy advocacy groups and cited in news articles about the potential misuse of LPR systems.

The Jones GPS case will be covered in depth later, but this is the most common comparison to the potential abuse of LPR. In 1998 a Washington, D.C., officer made the decision to extort married men who frequented alternative lifestyle bars. The officer would write down license plate numbers of vehicles in the parking lot and, once he determined the registered owner was married, he would extort money from them, threatening to tell his wife. This case did not involve the use of LPR, but is still used as a comparison.

New York Police Department deployed LPR systems to scan the areas around mosques after September 11, 2001. This was not a secret program, but was widely criticized by individuals in the Muslim community. This program was recently deactivated and was never determined to be an abuse.

During President Obama's first inauguration the Secret Service requested the assistance of the Virginia State Police (VSP). They requested VSP deploy LPR equipment in the area of the inauguration for two reasons. This equipment would alert officers of vehicles associated with those who have threatened the President and the information could later be referenced if anything happened during the event. While this was requested by the Secret Service, many in the media say the VSP was conducting surveillance for political reasons.

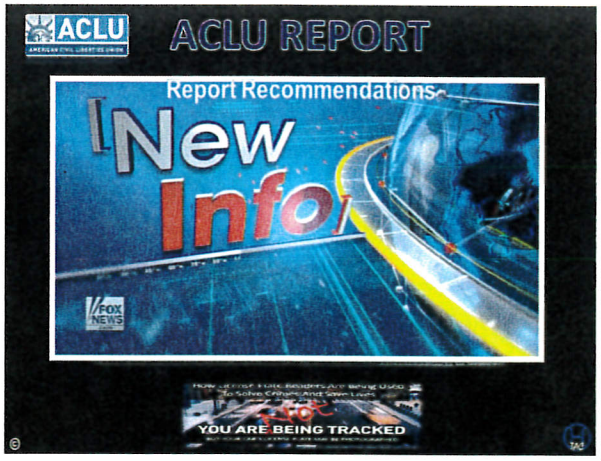
Another cited abuse comparison again occurs outside the United States. Authorities who were monitoring anti-war rallies mistakenly entered a reporter's vehicle as one associated with a group of

protesters who were being investigated. When this mistake was pointed out, his license plate was immediately removed from the hot list.

A recent Boston PD (BPD) study has been compared by several people as proof that law enforcement is more interested in collecting data than receiving active field alerts. This study showed while BPD scanned a great number of vehicles, they failed to take action on a good percentage of alerts. A portion of this study showed numerous cars were scanned multiple times triggering an alert with no action. It is not uncommon for law enforcement officers to not take action on every violation of the law they witness. Apply this same standard to LPR hits and the BPD study has no new revelation.

To highlight their concerns, these abuse comparisons have been cited in publications written by or covered by privacy advocate groups. Tell the class the "Jones GPS case" will be covered in great detail in an upcoming slide. It is important to point out the fact none of these were actual abuses. In all instances, the LPR systems were either not used at all, were requested to be there by the same groups listed as the victims, or there simply was an error in the deployment of the system with no malice whatsoever.

One of the most noted studies involving LPR was produced by the Americans Civil Liberties Union (ACLU). This report concludes that LPR is a great resource for law enforcement, but they have issues with the amount of data gathered and the retention period for which it will be kept. There are several good recommendations in the report departments should address when writing LPR policies. It is obvious from reading this report the ACLU and law enforcement are not close to a compromise on what the appropriate retention period would be for LPR data.



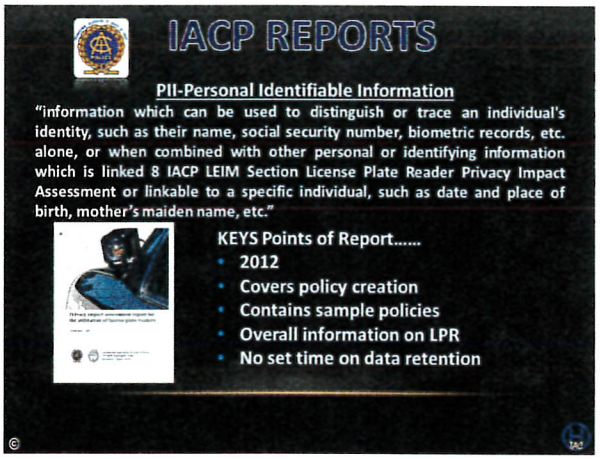
Even though it is not mentioned in this report, the ACLU has stated they would like to see agencies have open public debates about LPR systems prior

to the deployment of the program.

Summarize the ACLU report to the class from the information listed on the slide. It is important to show both the valid points the ACLU makes in addition to where the report is flawed. It is a good recommendation for any department wishing to deploy LPR to read this report in depth and cover key points of concern the ACLU has documented in this report.

A copy of the study is on the USB drive.

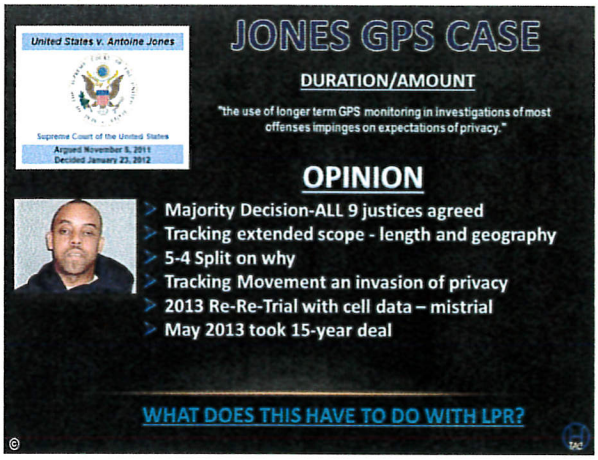
The International Association of Chiefs of Police (IACP) produced several reports over the years regarding LPR. The IACP Privacy Impact Assessment weighs the deployment of LPR systems with its effectiveness compared to its impact on the public's privacy. The report recommends agencies adapt written policies. The most important point this report makes is the fact that LPR data is not considered Personal Identifiable Information (PII). It further outlines LPR is a great resource with possible misuses.



The IACP LPR System Policy and Operation Guidance report covers policy creation. It contains sample policies and overall LPR information. The report fails to outline or recommend a retention period.

A copy of the study is on the USB drive.

This is the most referred-to case when media or privacy advocacy groups address LPR. While this case has nothing to do with LPR, the most important fact the groups are trying to convey is the great amount of legally obtained data could create a picture of the day-to-day life of a person. This is often referred to as the "mosaic effect." GPS data points concerning Jones' location over a 30-day period were detailed in over 40,000 pages. The fact that all nine justices ruled against the GPS deployment shows there was a misuse of the equipment. The reasoning why was not unanimous, with a 5-4 split.

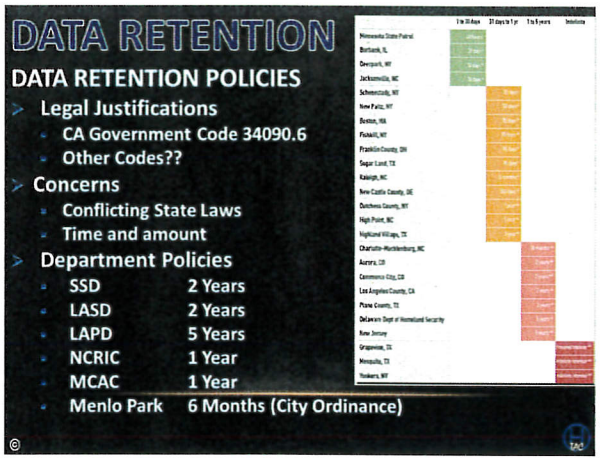


The most favored portion of the split says the device was left on the vehicle too long. The justices state the officers had all the information they needed for the case long before the 30 days. This lengthy deployment went far beyond what was needed where 40,000 pages would tell intimate details of Jones' life.

This single case needs to be explained in detail due to the amount of relevance placed on it regarding LPR. It is important to point out this is the most common comparison to LPR systems even though it has nothing to do with the actual system. While it is not mentioned in the actual case, the similarity is often referred to as the mosaic theory. This is where a large amount of legally obtained information paints a picture of the individual's life patterns. This could show similarities between GPS data and LPR scans if too much information is stored.

Ask the class the question at the end of the slide, "What does this have to do with LPR?" The answer is everything or nothing, depending on whom you are speaking with.

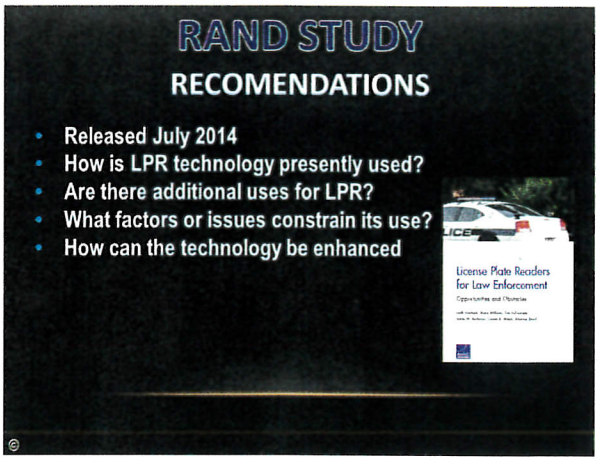
Data retention is one of the main issues privacy advocacy groups have with LPR. There is no retention standard established by the federal government or the State of California. States are gradually passing legislation with no uniformity. California's Government Code (GC) section is the legal authority which agencies are using to establish a retention period. GC 34090.6 states agencies shall store photographic images captured by law enforcement systems for a period of one year. While the agencies could destroy these items at the one-year mark, most store it longer. The reason for the extended period is that many lawsuits have an expiration period of one year from the event. If a lawsuit was filed towards the end of this one-year mark, it is possible the photographic images/video could be deleted prior to the case being discovered.



The graph shows the wide ranges of retention periods from different agencies all over the United States.

Explain the fact there is no federal standard for LPR data retention. The slide shows the different retention periods for different states. Discuss the fact that California is unique in the fact that it has a Government Code section covering the retention period of photographic evidence, which includes law enforcement in-car camera systems. While this code requires evidence be retained for one year, many agencies retain it longer.

The RAND study had very good suggestions for those agencies that are interested in creating an LPR program. All key points made in this report will help facilitate the deployment of an LPR program. Even though some agencies will not have the manpower to have a designated LPR coordinator, it is important to deploy the system in a manner paralleling the mission, vision, and values of that particular agency. One may choose to establish a short retention period and data access to reduce the possibilities of misuse if there is not a designated LPR coordinator. However, the study points outs the fact a policy with a longer retention period with the

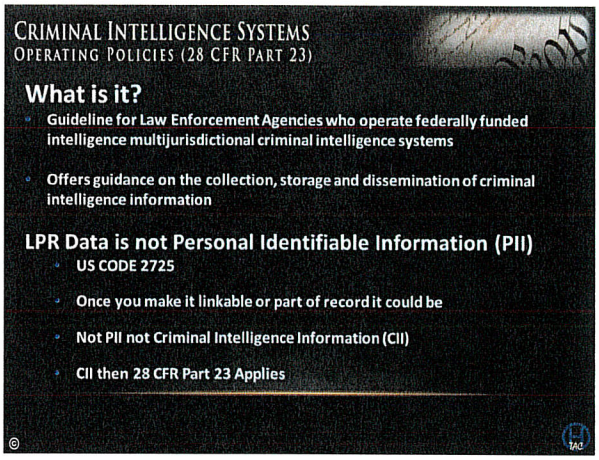


most allowable access the data is the most useful.

Explain the RAND study in detail to the class from the slide. The study has very good recommendations for those agencies that have or are going to establish an LPR program. Explain the increase in liability with the longer data retention limit with more users.

A copy of the study is on the USB drive.

28 CFR Part 23 is for informational purposes only as LPR data has been determined to not be Personal Identifiable Information (PII). Since it is not PII, it does not have to be governed by 28 CFR Part 23. If the record integrates other information or if it is linkable, then the LPR record could become PII, and thus covered under 28 CFR Part 23.



28 CFR Part 23 are federal guidelines on storing or using information that is PII or Criminal Intelligence Information (CII).

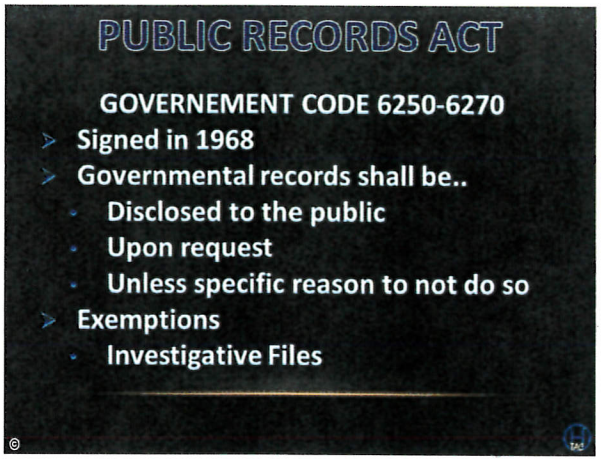
Explain LPR is not Personal Identifiable Information (PII) for a reason. Once the information rises to the level of PII or Criminal Intelligence Information (CII), the information will then fall under 28 CFR Part 23. The students need to know that if the non PII LPR data is easily linkable to information that is considered PII, then it may become PII based on the link.

A copy of 29 CFR Part 23 as well as a quick reference is on the USB drive.

The Public Records Act (PRA) is covered in California Government Code sections 6250-6270. These codes cover the disclosure of government records to create transparency. Specifically, these codes state that Investigative files are exempt from disclosure. Several California courts have recently ruled that LPR data are classified as investigative files and are exempt from release.

Explain the Public Records Act (PRA) form the slide. The most important detail of this slide in regards to LPR is the exemption of investigative files.

A copy of the PRA in on the USB drive.



The ACLU and Electronic Frontier Foundation (EFF) sued both Los Angeles County Sheriff and Los Angeles Police Departments for not complying with a PRA request for LPR data. The courts concluded LPR data is investigative in nature, which would deem the information investigative files exempt from disclosure.

Both organizations have filed an appeal to this ruling and the case is pending.

Summarize the lawsuit that was brought against Los Angeles Police and Sheriff by the American Civil Liberty Union (ACLU) and the Electronic Frontier Foundation (EFF). The judged sided with both departments finding LPR data was considered "investigative files;" therefore, it was not subject to release under the PRA.

A reporter in the San Diego area sued San Diego law enforcement agencies to release LPR data. This case was decided shortly after the Los Angeles case. The judge's ruling was similar to the Los Angeles case, deeming the LPR data to be investigative files exempt from disclosure. No appeal has been filed in this case so far.

This slide shows a secondary example of the denial to a PRA based on LPR being considered investigative files by a California court.

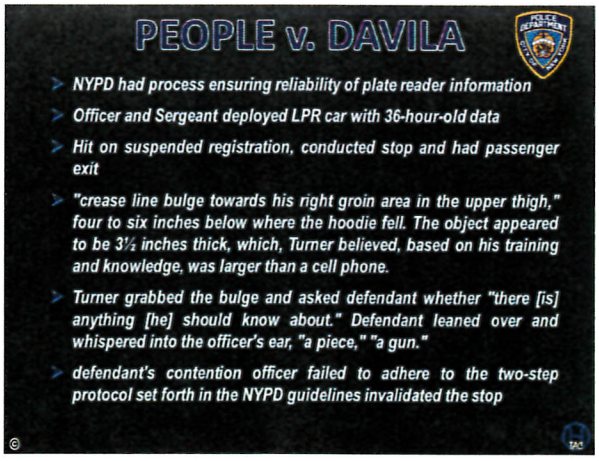
There are very limited court cases dealing directly with LPR. Most cases related to LPR deal with license plates viewed in public and technology enhancements of standard practices.

Use this slide as a possible point for a quick class break. Once the class returns, explain to them there is no case law that specifically pertains to the deployment or use of LPR systems or data through the Supreme Court of the United States (SCOTUS). Explain LPR case law stems from cases concerning license plates in public view and the use of technology.

This case concerned a sergeant and officer who did not follow NYPD protocol by deploying an LPR car with 36-hour-old data. During the shift a person was arrested as the result of an LPR hit. Davila argued since the two did not follow department policy, the case should be thrown out. The court found while they did not follow department protocol on deploying the LPR equipment, the protocol is simply guidelines and the conviction was upheld.

Explain the court case concerns department policy/procedure in regards to LPR. While the operators did not follow department procedure by the letter of the policy, the courts found these policies were only recommendations.

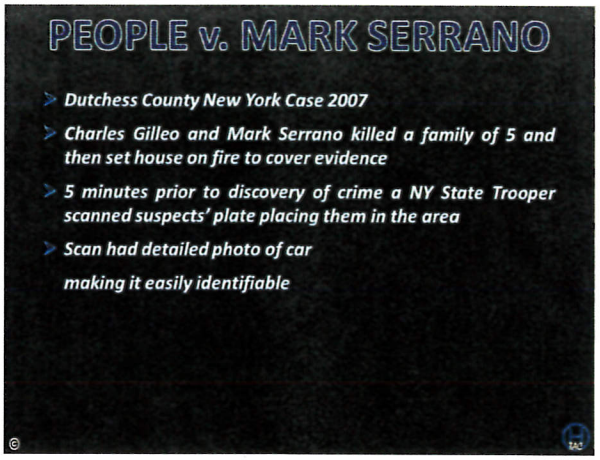
This case is on the USB Drive.



This is the first major case where an LPR detection was admitted as evidence in a murder case. The LPR photograph was found to contain specific identifiable characteristics of the suspect's vehicle in the area where the crime occurred.

Explain this case has importance due to the fact it was the first case where LPR data was introduced as evidence in court.

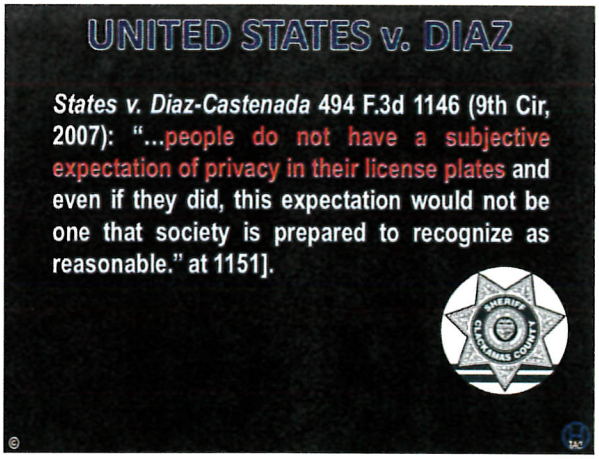
This case is on the USB Drive.



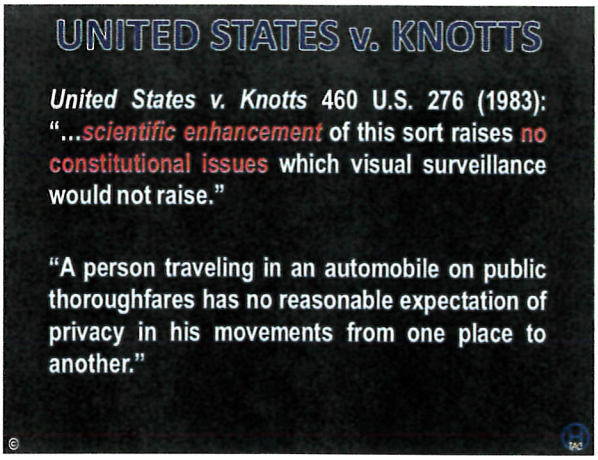
This is another case not directly involving LPR, but involves the right to conduct random checks of license plates in public view. A records check of the defendant's plate showed the owner's license was suspended. The vehicle was stopped where the driver was arrested and the vehicle was in the process of being released to the passenger. A check of the passenger showed him to have an active ICE detainer and he was arrested. The defendant argued the check of the plate was unconstitutional.

Explain while this case is not an LPR case, it does cover license plates in public view and reaffirms there is no expectation of privacy while in public view.

This case is on the USB Drive.



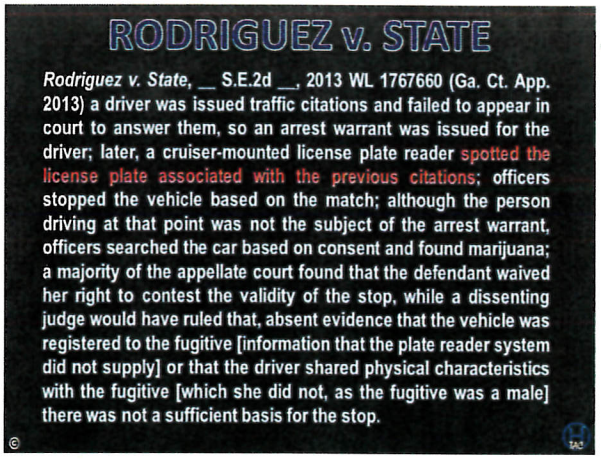
U.S. v. Knotts explains that a scientific enhancement of a standard practice raises no constitutional issues with the court. A radio beeper was placed in a chemical shipment where authorities believed the chemicals were being used to manufacture drugs. A physical surveillance team had lost the suspect several times during surveillances. The team placed a radio beeper in the chemicals to aid them in reacquiring the suspect if they lost sight of him. They followed him to a cabin with the help of the beeper where a drug lab was found.



Tell the class that while this is not an LPR case it reaffirms that a scientific enhancement of a known process raises no constitutional issues.

This case is on the USB Drive.

This a court case in the state of Georgia which serves more of an example than anything else. LPR is widely used in Georgia and there are numerous state cases directly relating to LPR. Officers receive an LPR alert on a warrant for a male where the vehicle is occupied by two females. The officer stops the car where the driver consents to a search. During the search, marijuana is found and the driver is arrested for possession of marijuana for sale.



The defense argued the officer illegally gained consent to search the vehicle. The court did not side with the defense based on the illegal search, but they did volunteer an opinion. The court stated if the defense had argued the stop itself was illegal since the occupants were both female and the LPR alert was for a male, the case would have been dismissed.

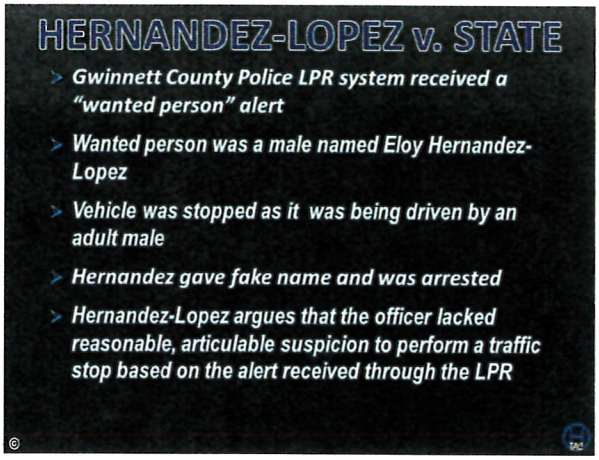
While this is a State of Georgia case, it is important to show the importance of using LPR in a fair manner. Explain to the class that even though the defendant lost this case, the presiding judges volunteered their opinion on the vehicle stop. If the defense would have argued the correct point, the case would have been decided in the plaintiff's favor.

This case is on the USB Drive

This case is similar to Rodriguez v. State and the defense attempted to use the illegal stop defense to have the case dismissed. Unfortunately in this case the alert was for a male who happened to be the driver of the truck.

Explain this is another court case from the same agency in the previous case. Tell the class how the attorney argued the point the judges had an issue with in the previous case. While the plaintiff lost in this case as well, it is important to show how quickly the defense used the judges' opinions on the previous case.

This case is on the USB Drive.

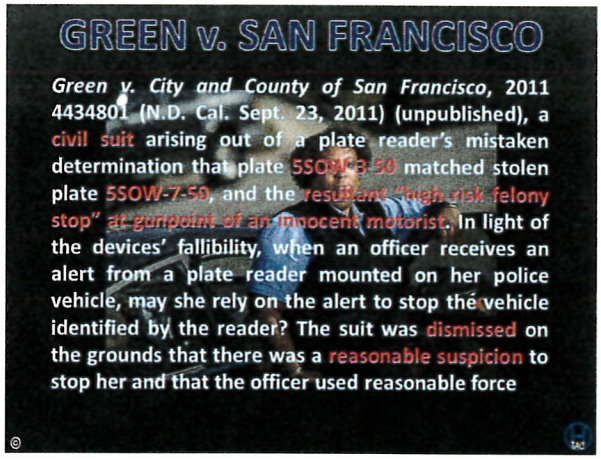


Green v. City and County of San Francisco shows the importance of establishing an active hit protocol for in field alerts. Two officers driving a person to jail had a misread on their LPR system, but voiced it over the radio. A sergeant in the area saw the described vehicle and followed it until appropriate units arrived. The alert was for a pickup truck, but the plate was on a Lexus. Green was stopped and ordered from the car at gunpoint. She was handcuffed and placed into the back of a police car that she barely fit into. It wasn't until after the stop that someone confirmed the plate.

The original case was dismissed, but ultimately a civil case was allowed to go forward based on numerous issues found with this stop.

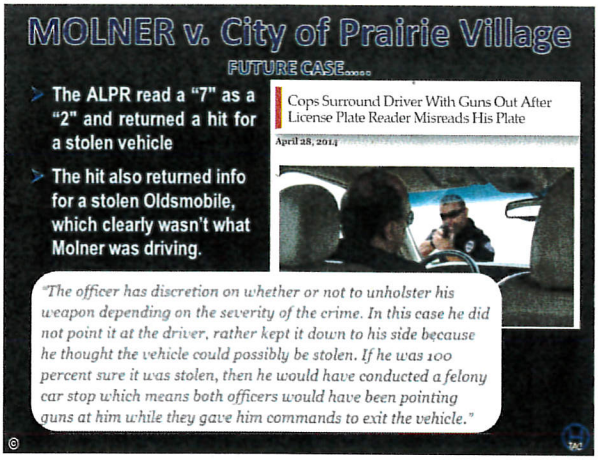
Explain in detail the problems with this stop. Not only was it a misread, it was second-hand information from a patrol car driving to jail with a person in custody. Explain while this case was originally decided in the police department's favor, an appeal overturned that and cleared the way for a civil lawsuit.

This case is on the USB Drive.



This article highlights the necessity of establishing an active hit protocol and making officers follow it. This story covers a misread where the alert was for a completely different vehicle. The officer still conducted a vehicle stop on the car with his gun out of the holster. The driver, who happened to be an attorney, was traumatized by the event. Bottom line is do not force a vehicle stop unless the information is confirmed.

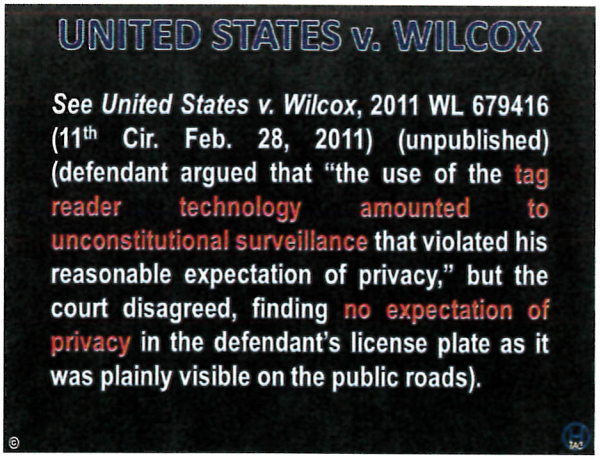
Explain this article in detail to the class. This serves as an example of what not to do when deploying LPR. Make sure the students recognize that just because the LPR system alerts on a vehicle, the operator should not feel obligated in taking action from a hit.



U.S. v. Wilcox is an LPR case where the system alerted officers to a vehicle with expired registration. During the traffic stop a gun was found to be in the possession of a felon. Wilcox argued unconstitutional surveillance violating his reasonable expectation of privacy. The case affirmed that you have no right to privacy while in a public.

Explain this is another case demonstrating no expectation of privacy while in a public place. Further explain the defendant used "unconstitutional surveillance" as an explanation of his rights being violated; the court disagreed.

This case is on the USB Drive.



Another non LPR case showing you have no right to privacy while in public.

Explain this is another case highlighting there is no expectation of privacy while a license plate is in in public view.

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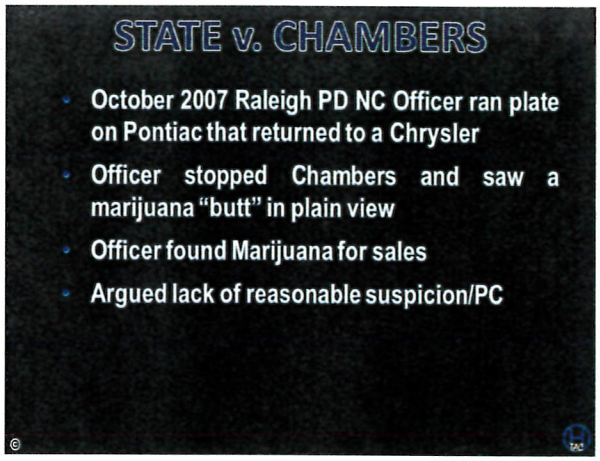
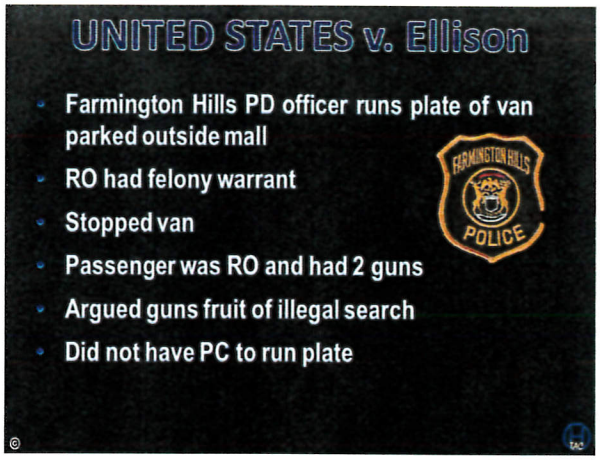


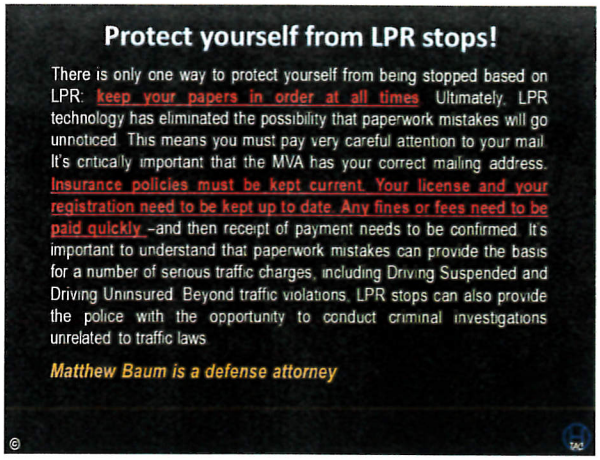
This is not an LPR case, but it demonstrates manually how an LPR system works in regards to generating an alert. The officer in this case conducted a records check on a license plate which showed the registered owner had a felony warrant. The van was stopped and the passenger who was the registered owner was arrested. This is the exact process an LPR system follows, except in reverse order. The records check is completed prior to locating the vehicle and the alert record is generated and saved in the system. Once the plate is scanned, the alert is triggered and the officer is notified.

It is important to explain that while this is not an LPR case, what the officer did in this case is very similar to what LPR does. The LPR is simply a technology enhancement of this same process.

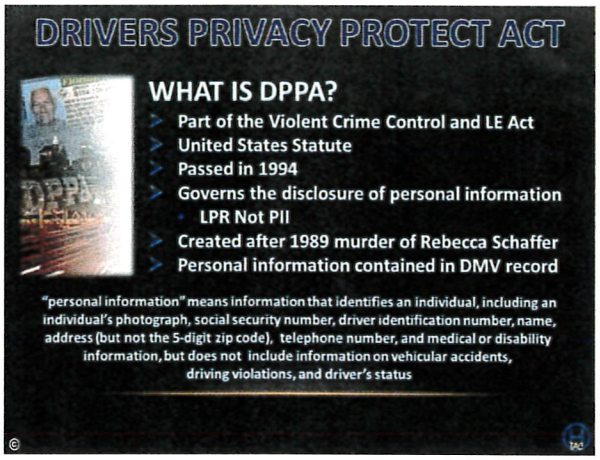


While this slide has no instructional value, it demonstrates that even defense attorneys know the level or proficiency of LPR systems. All suggestions in this slide really have nothing to do with LPR; the slide simply points out the fact that if you do not stay in line with the law and an LPR car scans your, plate you may go to jail.

This slide is intended to be humorous. Read to the class the text highlighted in red. The slide basically tells you that you should keep you papers in order and obey the law.



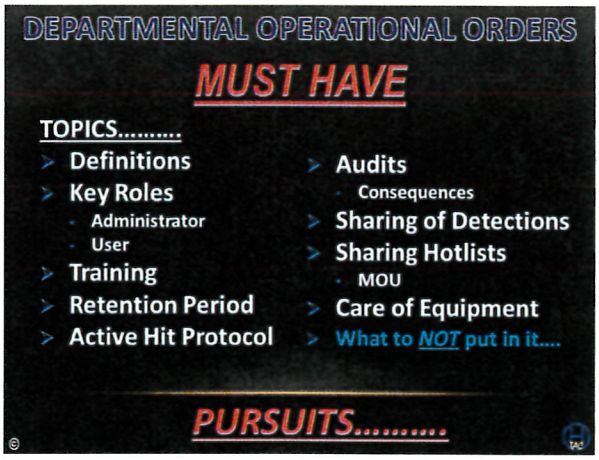
The federal Drivers Privacy Protection Act (DPPA) is the federal law governing the potential abuse of LPR systems. While LPR data is not PII, the personal information can easily be located by conducting a records check on the license plate. The DPPA states anyone who accesses it without the need to know can be prosecuted under federal law. This act was enacted in 1994 after a suspect located his victim by accessing DMV data.



Explain to the class this is what LPR proponents use as the legal ramification for misusing LPR. Many explain that while LPR data is not PII, once you conduct a records check of the license plate outside the scope of your duties, the person would be in violation of this federal statute.

This is on the USB Drive.

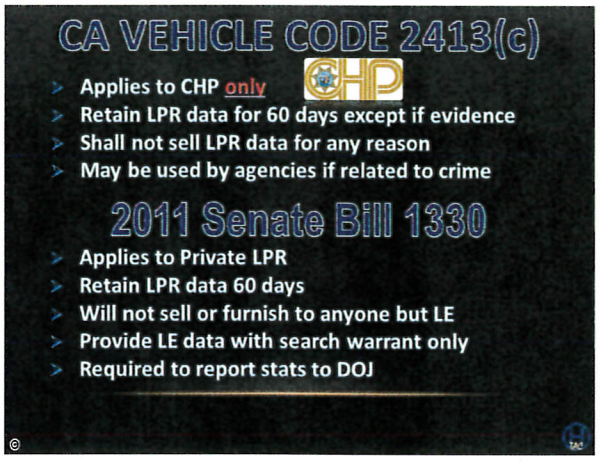
Written departmental general/operational orders are a must for agencies that deploy LPR equipment. Topics covered in this slide are suggestions of what to minimally include in the orders. Agencies should not rush to have orders written completely prior to the deployment of the equipment as the orders will evolve to each department's mission. An evaluation deployment period should be used to identify other topics that need to be covered in the orders which will be unique to the individual department.



Explain to the class that while it is imperative their agencies have written operations/general orders, it is just as important to write them on a system and process they are familiar with. Some agencies rush to write these orders before they become familiar with the systems and ultimately have to change them. Have a discussion about agency LPR cars being involved in vehicle pursuits.

Numerous operations/general orders from other agencies are on the USB drive.

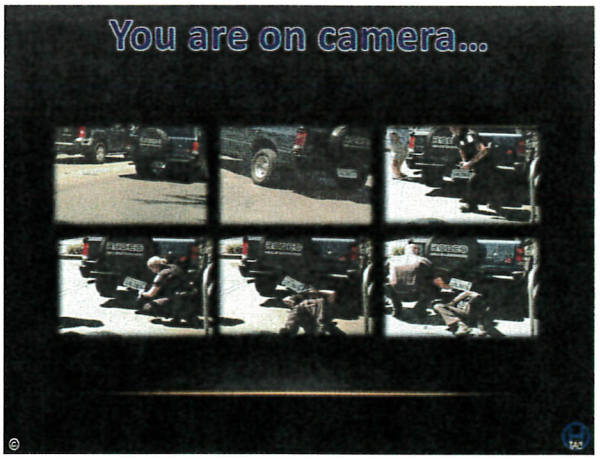
Vehicle Code section 2413 (c) is the only law that covers LPR systems in the state of California. This section only applies to the California Highway Patrol (CHP), placing a retention period of 60 days on LPR detections. The CHP may not share detections with other agencies unless the requested information is related to an investigation.



Multiple Senate Bills (SB) have been brought forward to place the same restrictions this Vehicle Code places on all agencies. These SBs attempt to place the same restrictions on law enforcement LPR systems as well as on privately collected LPR data.

Reinforce this code section applies only to the California Highway Patrol (CHP), even though year after year bills are brought up to regulate all LPR in CA. It is important that CHP not be penalized by agencies in regards to sharing as they must be in compliance with this law.

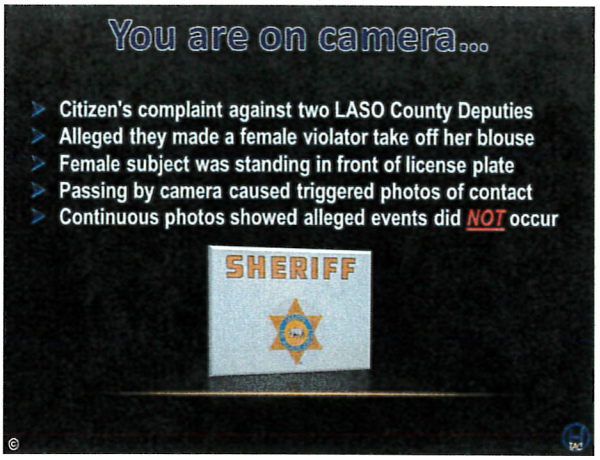
These examples show how still LPR photographs captured by the cameras can tell a story. Officers need to be aware that when in the vicinity of an LPR car they are more than likely being photographed. Officers are traditionally aware of forward-facing in-car cameras systems. LPR cameras angled away from the car, coupled with the officers' belief the cameras only take photos of license plates, can give officers a false sense they are not being photographed.



Explain to the students this slide serves as a reminder that if they are around an LPR system, they are more than likely being photographed. This is very important since these cameras are usually angled to the side of the car, where most law enforcement officers are accustomed to the In-Car Camera (ICC) being pointed to the front of the car.

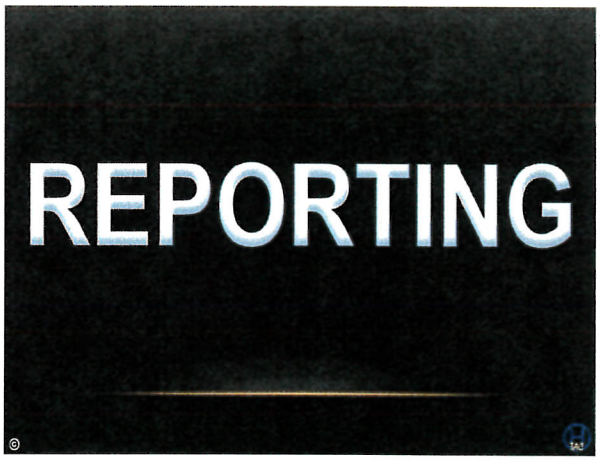
Two Los Angeles Sheriff's Department (LASD) deputies were exonerated for any wrongdoing after reviewing LPR still photos. A female motorists who was stopped claimed the two deputies made her take her blouse off during the traffic stop. While the officers spoke with her outside of her vehicle the view of the plate was interrupted, triggering numerous detections of the plate. These photos showed no nefarious actions occurred during the stop.

Explain from the slide how LPR cleared officers of all wrong-doing based on LPR still photos taken at the scene of a vehicle stop.



Reporting the use of LPR rests with each agency that utilizes the technology. While we never try to hide anything from the court, law enforcement is allowed to keep processes out of a report if reporting them will teach offenders how to defeat future investigations. If the use of the LPR equipment can be left out of the report, that is what is recommended, but always inform the prosecuting attorney of this.

Explain to the students the level of reporting of the use of LPR in their reports should be decided by their local district attorney. While it is important to document events in detail, there are certain evidentiary protections set in place in the Penal Code to protect tools used by law enforcement.



Module III: Hotlist Deployment

Duration

1.5 Hours

Scope Statement

This module covers LPR hotlists and how they are created, deployed, and shared with other agencies through written MOUs with an emphasis on active hit protocol.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify the diverse deployments of LPR hotlists.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe what a LPR hotlist is
2. Describe proper Active Hit Protocol
3. Describe TSC handling codes and which ones give detention authority

Lesson Topics

This module includes the following topics:

- What a hotlist is
- Who can receive LPR hits how are they sent
- Active Hit Protocol
- Sharing hotlists
- Available hotlists
- Hotlist sources
- Terrorist Screen Center Alerts

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer for PowerPoint presentation
Projector
Projection Screen

Thumb drive handout
Terrorist Screening Center (TSC) Handling Codes Reference Card handout

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

Assessment Strategy

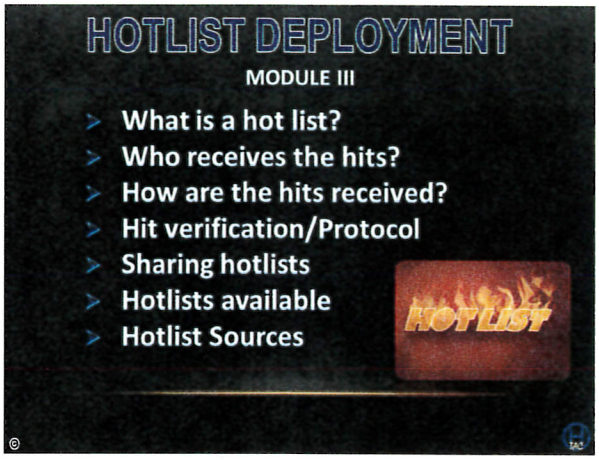
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Instructor's Note:

Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

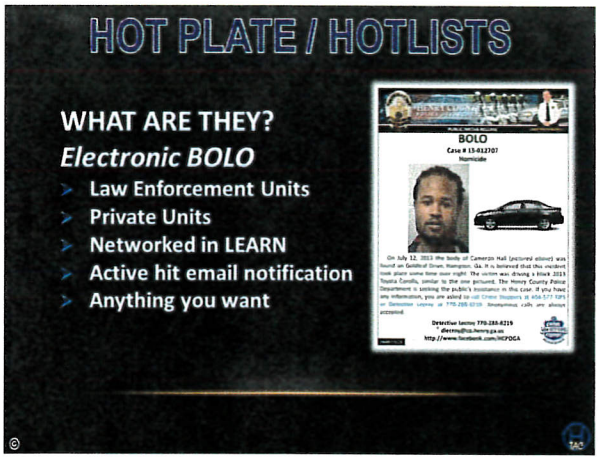
INSTRUCTOR NOTES

Explain what this module covers from the slide.



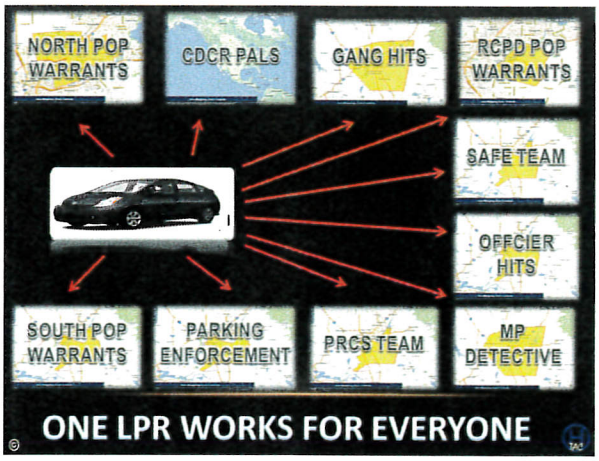
Hot plates or hotlists are simply electronic BOLOs. They can be used in conjunction with law enforcement LPR units or private LPR data. These hot plates/lists can be of a multitude of topics. The hits can be for informational purposes as not all hot-plated vehicles must have a want on them.

Keep it simple for the students by referring to hotlists as electronic Be On the Look Outs (BOLOs). Explain there is no need to have physical LPR systems as you can get alerts off of private data and other law enforcement agencies you share data with.



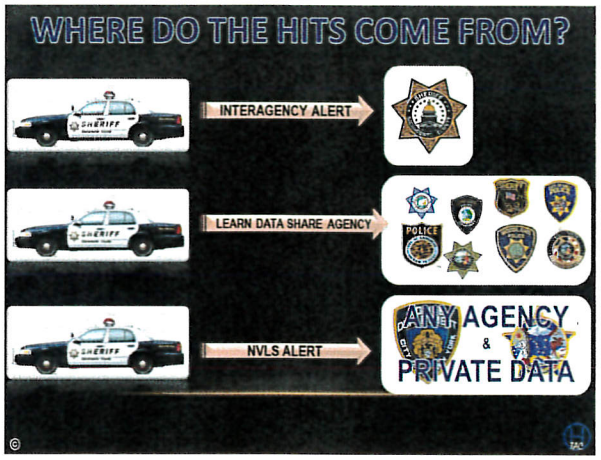
Networked LPR systems can work for a diverse group of officers, units, or agencies. Not all hotlists are sent to the vehicle, so as the LPR units detect plates, hits are sent to those who have entered the information into the database. This allows different officers, units, and agencies to receive hits from the LPR units while the operator of the LPR unit can receive a manageable amount of in-vehicle alerts.

This slide will play on one click. It will demonstrate how one LPR unit can work for all involved. At the conclusion of the slide an addition click will show a private LPR car to demonstrate the same alerts will be generated from the private cars as they are from the law enforcement vehicles.



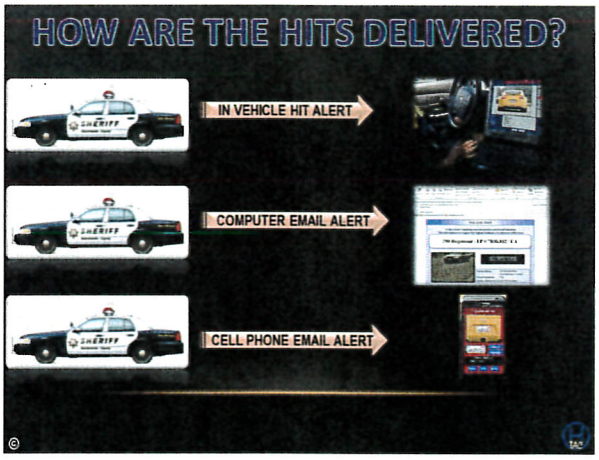
LPR hits are generated from multiple sources. Hits may be produced by agency equipment, equipment deployed by agencies that directly share LPR data, and agencies that contribute to the National Vehicle Locator System (NVLS). This allows agencies to multiply the amount of systems working for them in the same or adjacent jurisdictions.

Explain how alerts can be generated from LPR units within their agencies, agencies they share data with directly, or any agency that contributes to the NVLS system. This allows adjacent agencies to utilize data from each other acting as a force multiplier.



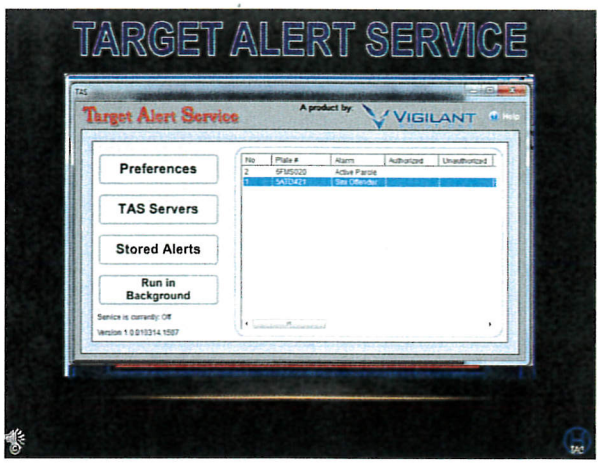
Delivery of the hits come in several different forms. From the traditional in-vehicle alert to the alerts being sent to any email address or even on a mobile device, LPR is becoming a diverse tool.

Explain the different processes in which an active hit alert can be delivered. This shows the diversity of the LPR system maximizing its use in the different areas and functions of law enforcement.



The Target Alert Service (TAS) operates similarly to the vehicle LPR system. This is a software program downloaded to an individual computer. This program allows a desktop computer to receive active field alerts near to real time. This model allows hits from private LPR vehicles or alerts from fixed assets or units with no enforcement authority to be acted on. TAS would allow an agency to technically have an LPR program with no physical equipment by utilizing shared LPR data or data generated from private LPR cars.

Explain the Target Alert System (TAS) highlighting the fact that this system can be configured to deliver



hits from certain units off of certain hotlists. This slide has two active alerts accompanied by audio towards the end of the slide.

This system will be activated to monitor attending agencies' jurisdictions after lunch.

The TAS user manual is included on the USB drive.

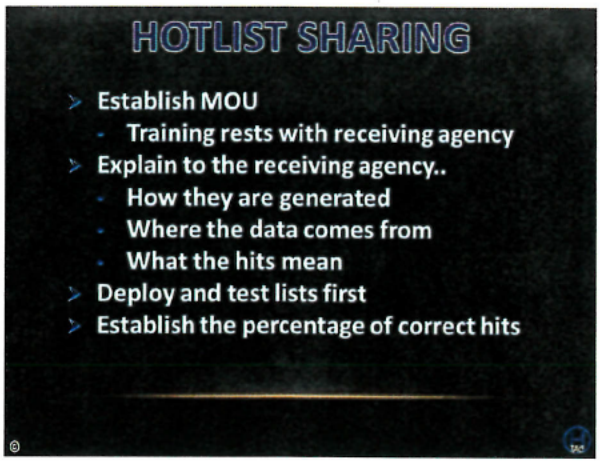
Active hit protocol is the most important topic covering the deployment of LPR systems in the field. This protocol needs to be followed closely, minus exigent circumstances. The most civil liability rests with active hits in the field and the officer's ability to quickly vet the information prior to taking appropriate action. Vehicle stops conducted pursuant to LPR hits where the officer failed to vet the information and identify a misread are highly scrutinized by the media. It is important to realize it is better to pass on a vehicle stop if the supporting information is not there to confirm the alert. LPR is far too great of a resource to push the limits on these vehicle stops.

The beginning of the slide is an actual hit with audio serving as an example of an in-vehicle alert. Explain this is the most important side for those attendees who operate an LPR vehicle. The highest liability in deploying LPR equipment rests with the LPR operators. Even though the operator must quickly vet the hit, it is more important to verify the information than to force a vehicle stop without exigent circumstances.

The officer heard in the radio transmission paints a clear picture for responding officers. He identifies he received an LPR hit off of the department's generated warrant list and the passenger meets the description of the person in the hit. While the dead air time has been removed, all radio transmissions are clear and concise.

Explain how the officer in the slide demonstrates the proper way of handling an active LPR hit received in the field. It is important to explain the audio has been condensed for the example, but what is important is how and what the officer broadcasts.

[redacted]



Hotlist sharing between departments that have overlapping or adjacent jurisdictions is a force multiplier. Memorandums of Understanding (MOU) need to be established between departments prior to sharing. Training officers on the hotlist rests with the receiving agency. The agencies need to be able to articulate how the alerts are generated, where the data comes from, and what the hit means.

The sharing agency should test the hotlist in the field prior to sharing the list. During the testing phase, the agency should establish the percentage of correct hits associated to the hotlist.

Explain the main purpose of the memorandum of

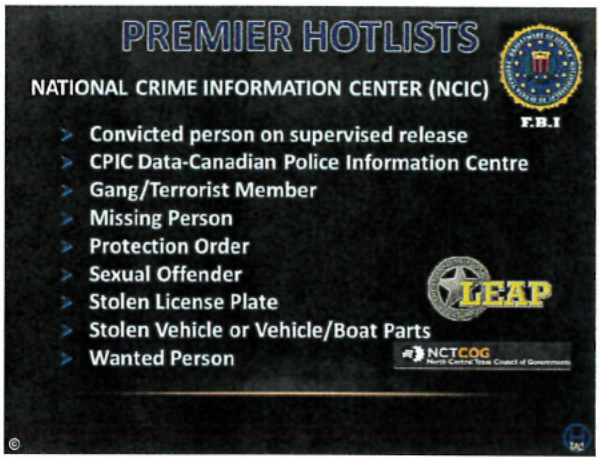
understanding (MOU) is to place responsibility and liability on the agency that is receiving the hotlist. Before sharing each hotlist, it needs to be tested to establish a percentage of its accuracy, which is then conveyed to the receiving agency.

Example MOUs are on the USB drive.

There are several premier hotlists available to agencies. These lists are generated at the state and federal level. At the state level, the California Department of Justice (CA DOJ) provides a hotlist which has three subsections: Stolen Vehicles, Stolen License Plates, and Felony Vehicles. These lists are updated every 12 hours and are uploaded directly to the LPR systems. If the agency is not set up to receive these lists automatically, they can also be download manually from the California Law Enforcement Web (CLEW).

It is important to highlight the download times of this list. If a vehicle is entered into the California Stolen Vehicle System (SVS), the information won't be broadcast until the preset download times. If the agency does not have a direct feed from the Department of Justice (DOJ), the lists can be manually downloaded from California Law Enforcement Web (CLEW). Instructor should further point out this list will only show alerts for vehicles entered into California's database, which means you could miss alerts on vehicles that were stolen outside of California.

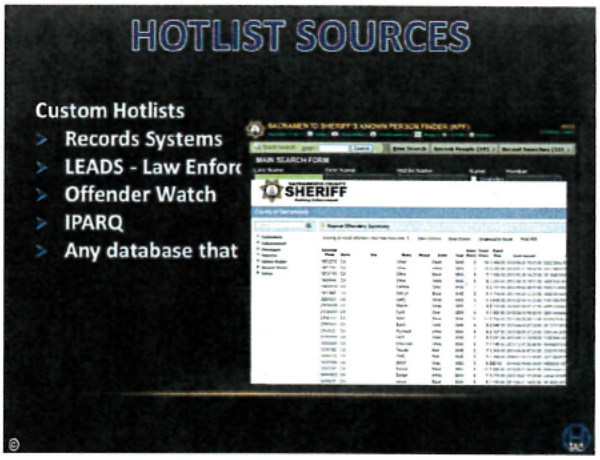
At the national level, the National Crime Information Center (NCIC) produces hotlists with multiple subsections. These subsections are updated by separate data streams which may overlap state hotlists. For example, in California, the Stolen Vehicle and Stolen License Plate lists overlap with the same hits. The NCIC list has more information in it as it shows which agency entered the hit and the description of the vehicle.



Explain this is a nationwide hotlist and it will overlap some of the state information. The most effective and accurate process to receive this list is directly from NCIC or DOJ. You may receive the list from LEAP, but our experience is the list is not as accurate as receiving it straight from NCIC/DOJ.

Required forms for NCIC list are on the USB drive.

Any database containing a license plate can be converted into a hotlist. Departments use information from records management systems, parking enforcement systems, computer-aided dispatch systems, and any other resources available.



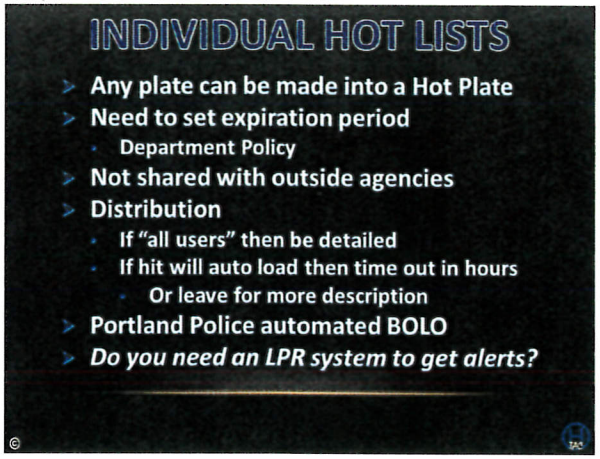
Explain this slide serves as an example of how to generate information that could be utilized in a hotlist. Since every organization is different with diverse databases, there are numerous unexplored possibilities when it comes to generating hotlists.

LPR hotlists can be generated for specific missions. While every officer does not need to see every alert, it is important to create a diverse pool of these alerts which can be directed to specific units. As an enhancement, the addition of booking photos for subjects listed in alerts would be a great resource to identify the subject by the officer receiving the hit.

This slide shows examples of different types of hotlists deployed by the Sacramento County Sheriff's Office. Explain the mug-shot photo on the "Arson Registrant" alert would be a great addition to an active field hit. This would take the guess work out of trying to identify the driver of the hot-

listed vehicle.

Individual hotlists can be created for any purpose. The threshold for entering a vehicle into CA DOJ or NCIC is much higher than that to enter it into an LPR system. These individual hot plates can be entered as an information trigger with no want whatsoever. This would be similar to asking a patrol officer to notify a detective if they saw a vehicle of interest during their shift. The LPR system would automatically send the alert to the requesting officer, thus providing information which may be useful.



This slide expresses the importance of placing an expiration date on the individual hot plates. Explain the possibility to receive multiple hits on the same plate, which allows officers to be more descriptive than a vehicle entered into a general premier hotlist. It is also important to reinforce you don't physically need to have an LPR to receive LPR hits.

The next module will address LPR databases.

This is the normal break time for lunch. Have this slide displayed during the break.

During lunch, the instructor needs to confirm all attendees' LEARN user accounts have been set up. Any student who did not pre-register needs to have a user account created prior to the beginning of instruction after lunch. Instruction after lunch includes hands-on scenarios utilizing the LEARN system.

It is important to configure the LEARN Target Alert Service (TAS) system according to the geographical jurisdictions whose employees are present. This will allow attendees to see real-time live LPR hits from their localities during class. If possible, display the TAS alerts on a separate screen so they won't interfere with the class presentation. If the additional screen is not possible and the number of alerts is frequent, the instructor may have to deactivate TAS.

Module IV: LPR Databases and User Instruction

Duration

1 Hour

Scope Statement

This module displays the different LPR databases that are available with a brief explanation of how to navigate them, highlighting private LPR information and how it is incorporated into certain databases.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify available LPR databases and how to use them.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe how private LPR data is generated
2. List the pros and cons between private and law enforcement LPR data
3. Demonstrate a basic knowledge of using NCRIC LPRWeb, EPIC DICE and Vigilant Solutions LEARN databases

Lesson Topics

This module includes the following topics:

- Private LPR data
- LEARN database
- LPR scenarios of prior use
- Data available by geographical location
- Private LPR data versus law enforcement LPR data
- NCRIC LPRWeb database
- EPIC DICE database

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer

Projector
Projection Screen

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

Assessment Strategy

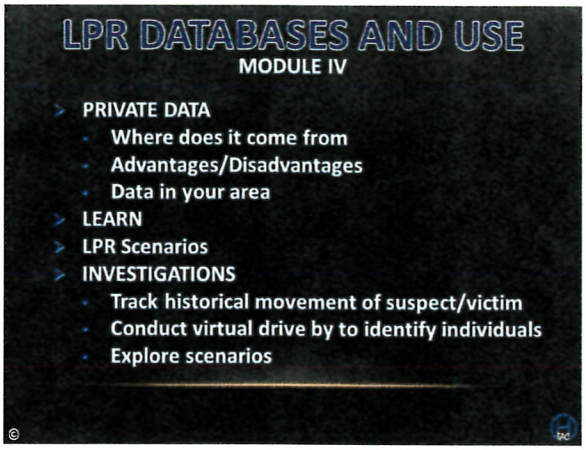
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Instructor's Note:

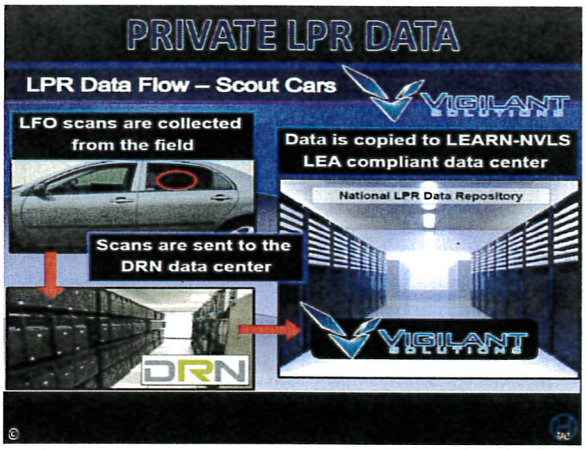
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

INSTRUCTOR NOTES

Explain from the slide what will be covered in this module.



Private LPR data is a huge resource that usually comes with a stigma. It is important to know the process in which law enforcement receives the information from these private LPR cars and what exactly the private LPR operators have access to. Most private LPR cars are owned by repossession companies or bank asset-tracking companies. These companies buy or lease the LPR systems which come with zero querying abilities. The LPR systems are uploaded with the national vehicle repossession list which is generally about 250K vehicles. The LPR operators traditionally drive during night time hours scanning areas which they think may produce an alert of a vehicle they can repossess. Once the operator receives an alert, they contact the company to confirm the information. That company then has two hours to take possession of the vehicle.



As the LPR scans plates, every plate is copied to the law enforcement server. This server, which has an FBI-approved ORI number, is contained in an NCIC-approved server room. Once the private detections are copied on the law enforcement server they are immediately cross-referenced with plates on hotlists. If there is a match on the detection an alert is sent to the appropriate person on email, Mobile Hit Hunter (MHH) or TAS. These detections are owned by the company which makes them available for research since they do not have an expiration time.

This slide usually prompts a fair amount of questions. [redacted]

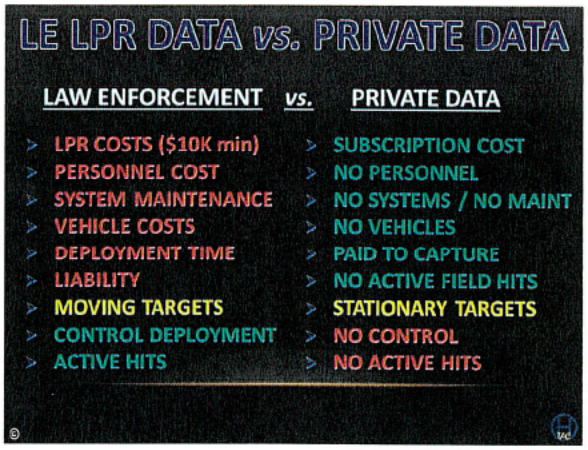
The instructor needs to detail the process of how private LPR data is copied into the law enforcement server where it is run against agency hotlists producing alerts on those plates that are listed.

In the Sacramento area every agency shares detections and hotlists. Mobile law enforcement systems scan approximately 725 plates a month. Private LPR vehicles in the same geographical area scanned close to 1.25 million in the same month. The benefit of the private scans is they are typically looking for parked or stationary vehicles where the law enforcement vehicles scan predominantly moving cars.

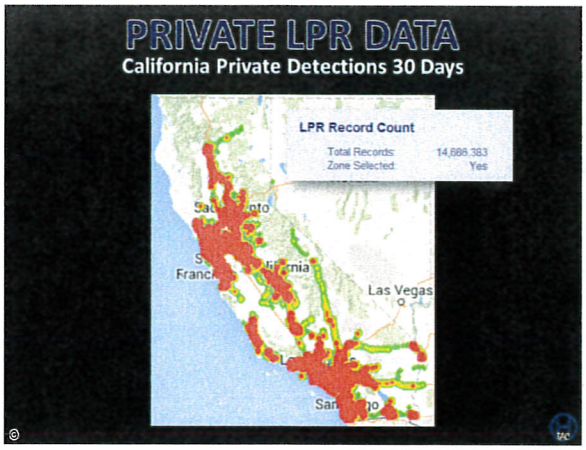
Explain the importance of sharing LPR data, especially with agencies that share jurisdictional boundaries. Each agency's equipment works for each other.

There are pros and cons between each deployment of private and law enforcement LPR data and systems. The perfect LPR deployment model incorporates private data with data generated by agency LPR equipment. While private data is more cost effective and has low risk of liability, the fruits of active field hits make the agency equipment just as valuable.

Text in RED would be considered a negative attribute of the topic, GREEN would indicate a positive attribute, and yellow could go either way based on the mission of the agency utilizing the system.

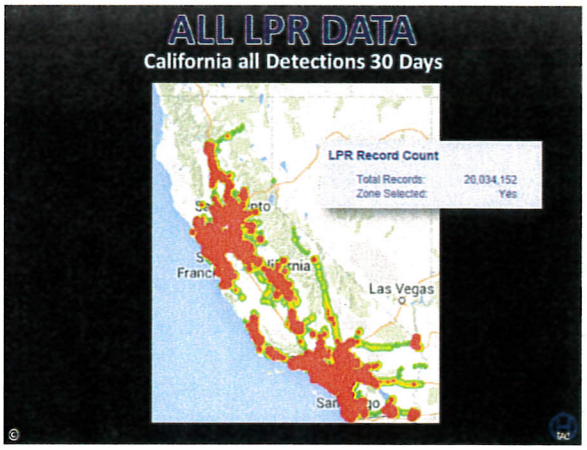


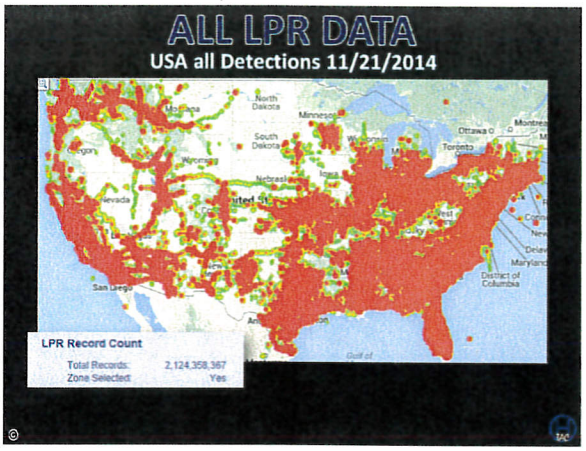
Private LPR data that is available in certain geographical areas is detailed here. An average law enforcement LPR car scans 10K plates a month. That does not mean agencies cannot establish a method to scan more, but that is the average. Applying the average scans of law enforcement vehicles to the amount of monthly scans on these slides and dividing the total by 10 will equal the number of cars needed to gain this amount of data. A two-camera LPR system costs about $13K. Using this theory an agency can determine if it is cost effective to purchase private LPR data.

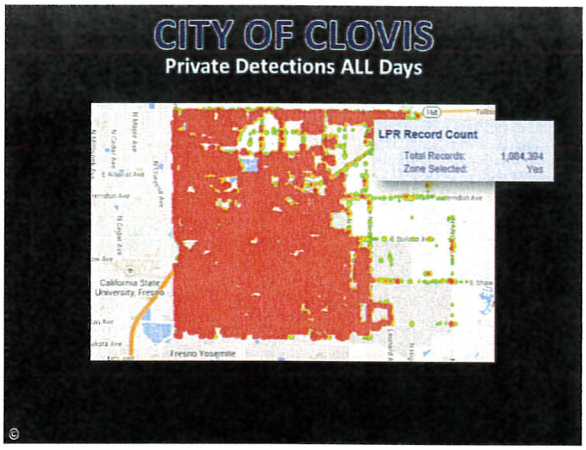


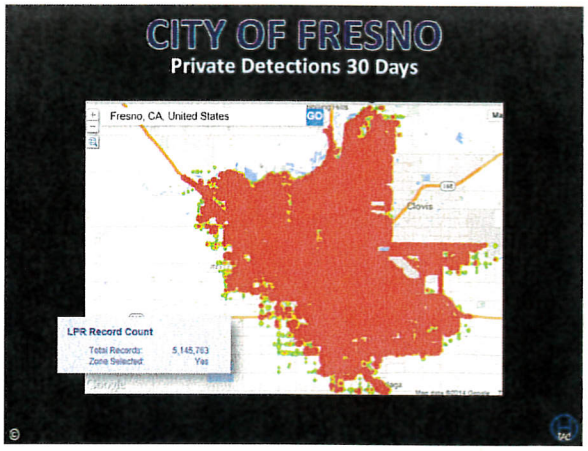
The following nine slides show heat maps that will change with each class.

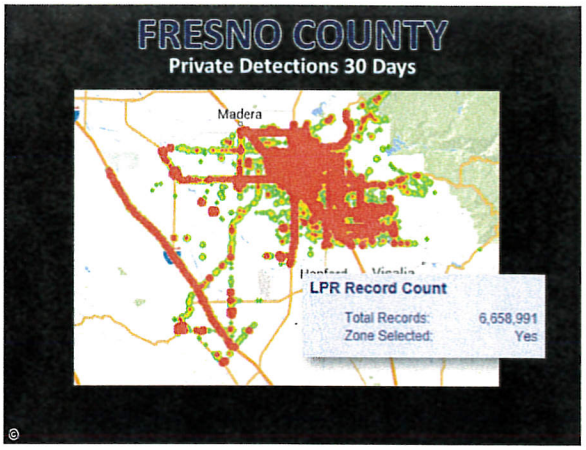
Once a roster is established and before class begins, the instructor needs to create these maps showing attendees the data available to them from private LPR units operating in their area. It is important to explain that, regardless of what LPR vendor they have, the private data would be in addition to that.

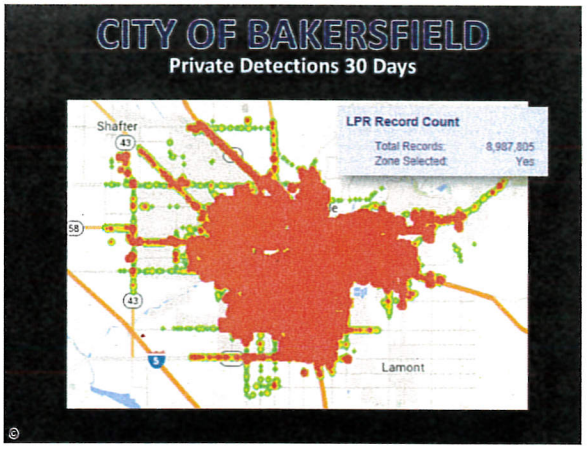


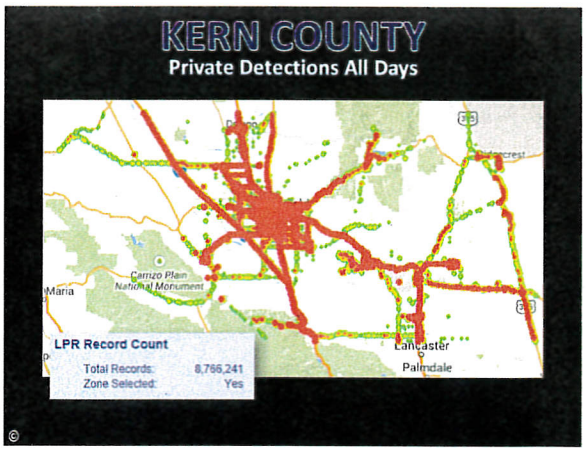

ALL LPR DATA
USA all Detections 11/21/2014
LPR Record Count
Total Records: 2,124,358,367
Zone Selected: Yes

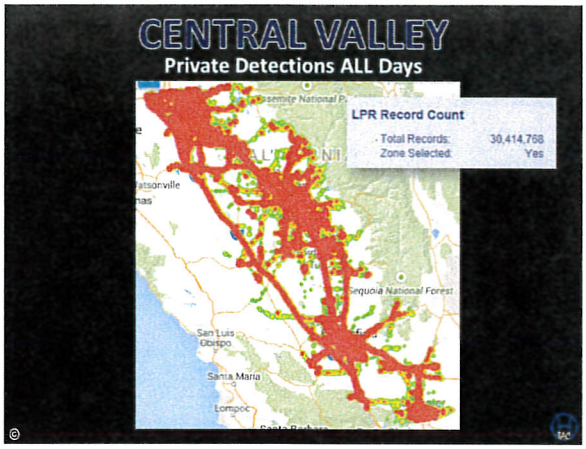

CITY OF CLOVIS
Private Detections ALL Days
LPR Record Count
Total Records: 1,084,394
Zone Selected: Yes


CITY OF FRESNO
Private Detections 30 Days
Fresno, CA, United States
LPR Record Count
Total Records: 5,145,763
Zone Selected: Yes

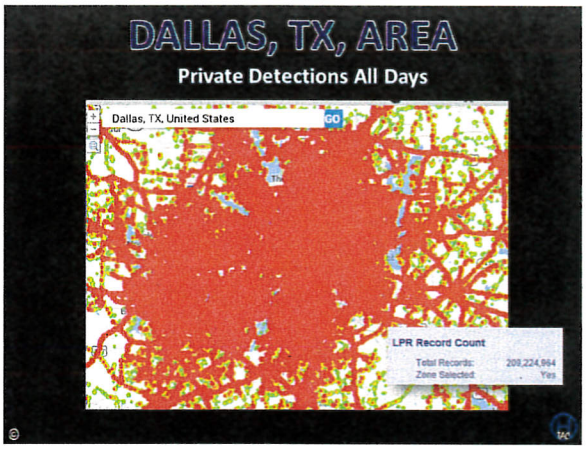

FRESNO COUNTY
Private Detections 30 Days
Madera
LPR Record Count
Total Records: 6,658,991
Zone Selected: Yes


CITY OF BAKERSFIELD
Private Detections 30 Days
Shafter
LPR Record Count
Total Records: 8,987,805
Zone Selected: Yes
Lamont


KERN COUNTY
Private Detections All Days
Carrizo Plain National Monument
Maria
LPR Record Count
Total Records: 8,766,241
Zone Selected: Yes
Lancaster
Palmdale



The final slide in this series shows the Dallas, Texas, area. This area was the birthplace of private LPR. In a month the Dallas area has close to 9.4 million private scans available to law enforcement. This would be equal to 940 law enforcement LPR cars scanning for the month. The cost for 940 LPR units would be about $12 million. The private data subscription cost for this data is $120K a year.



As a final example of the amount of private data that could be available, show the Dallas, Texas, slide as this is where private LPR data originated and by far has the most data available.

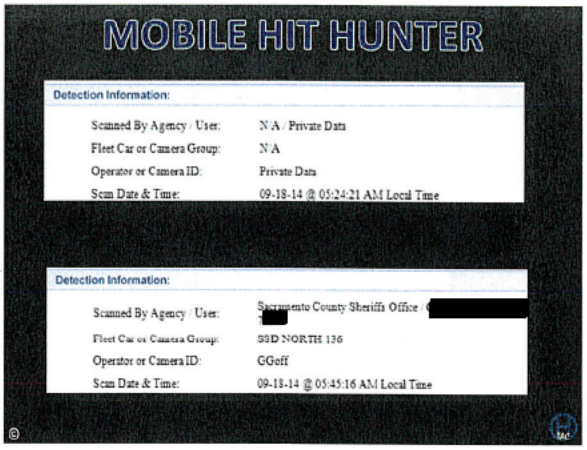
Mobile Hit Hunter (MHH) is a program which incorporates private data on a scope that moves with the officer. This scope will show any hit generated from your hotlists that was scanned by a private vehicle. The scope has a set perimeter around the moving LPR unit alerting the LPR operator when a new hit from a private car is detected within the area. This program allows the law enforcement unit to have the private cars work for them, thus being a force multiplier in the field.

This is a video clip of footage of an LPR-equipped vehicle traveling southbound on I-5 passing through Stockton, CA. All hits shown on Mobile Hit Hunter were generated by private LPR vehicles as at the time of this footage there was zero law enforcement equipment deployed in San Joaquin

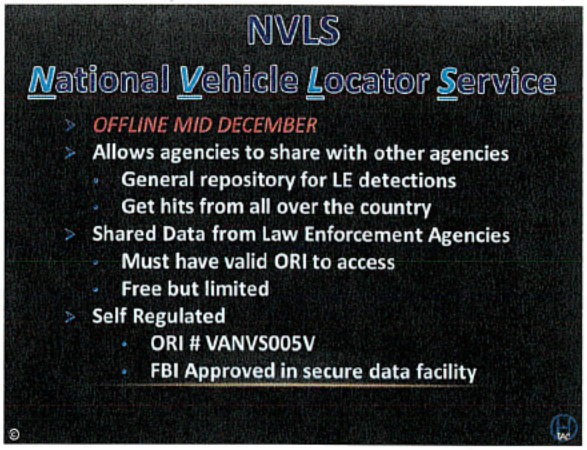
County.

As a real-time scenario, [redacted] was notified via MHH that a private LPR car had scanned a stolen vehicle at 0524hrs. [redacted] responded to the location of the alert where he located the reported stolen approximately 21 minutes later.

Be sure to point out the time stamps on both the MHH hit and the scan from the officer's LPR unit. This is a perfect scenario of how private LPR data can be a force multiplier in the field, seamlessly passing information to law enforcement about vehicles listed on the hotlists.



Most investigators are familiar with NVLS. This began as a free service which allowed access to the entire NVLS database. As officers' use of the system increased, unlimited querying was reduced to a set number of attempts and successful queries for a given period of time. This free service was offered in 2009 and after six years of great success was taken offline in December of 2014. NVLS data is now incorporated in the Vigilant Solutions Law Enforcement Archival Reporting Network (LEARN) cloud-based LPR solution database.



While the NVLS system was taken off-line mid-December 2014, it is important to explain how it worked and how it is now incorporated into the LEARN system. Explaining this to the students will show them the worth of private LPR data as the NVLS system was widely utilized prior to its deactivation.

Since not all agencies deploy LPR systems by the same vendor, the [redacted] created a central repository for this data. Currently 40 agencies contribute their LPR data to this server. The information is stored for a period of one year and the system has a simple query and alert function. It is important to note the data contained in the system may not be real time.

[redacted]

Explain to the class this is a compilation of LPR data from 40 different agencies, primarily in the San Francisco Bay Area. The Information is not real-time but does provide a clearinghouse for those agencies who use LPR systems that are not hosted. [redacted]

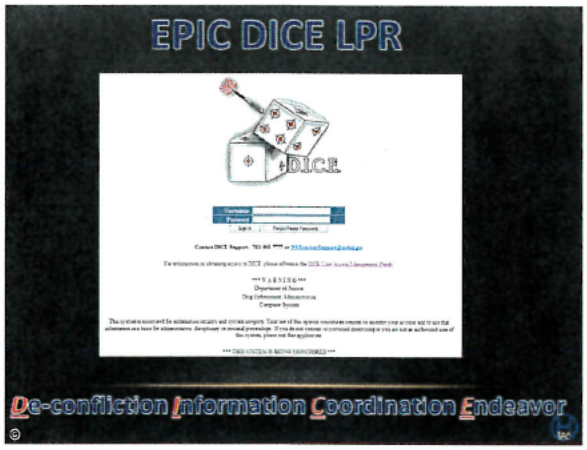
NCRIC's retention policy and user manual are on the USB Drive.

[redacted]

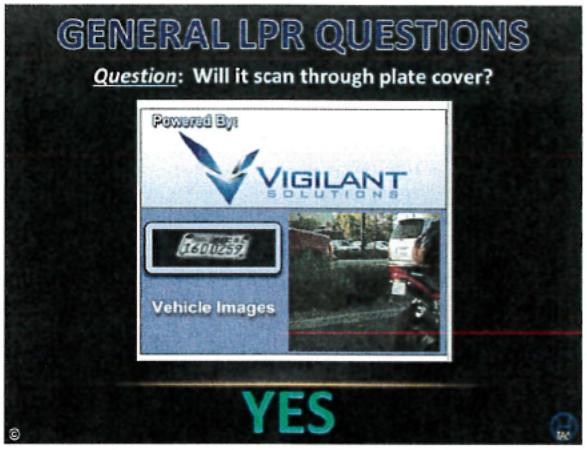
[redacted]

The [redacted] has created an LPR notification process. This process, known as the De-confliction Information Coordination Endeavor (DICE), allows a user to set up notifications if a plate is scanned by one of the LPR systems on their network. Plates can be queried one at a time with a DICE employee.

It is important to note this system does not have any querying ability. You may enter plates as hot plates, but that is it. This program covers all federal LPR systems.

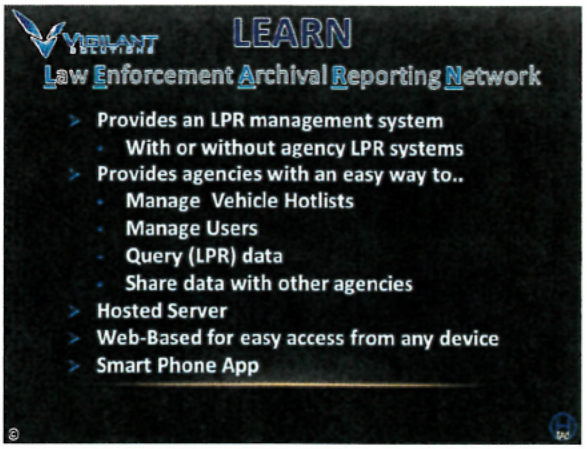


This slide reflects (and answers) general questions a typical class will ask.



LEARN is the database which students will gain access to and learn how to use. LEARN is the central database for agency LPR data, private LPR data, and LPR data contributed by NVLS sharing agencies. This database contains analytical search engines which have been used to establish suspect/victim travel patterns and identify vehicles used in crimes.

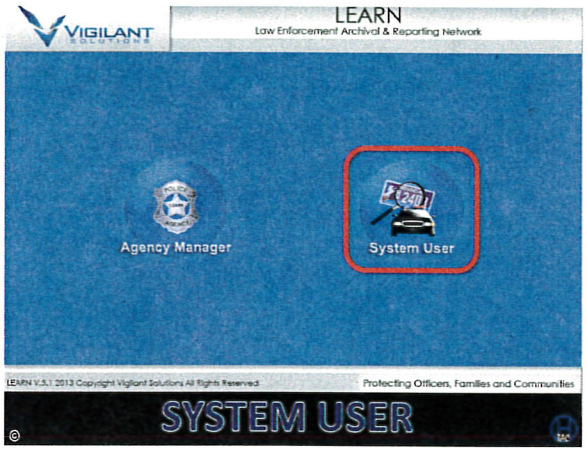
Explain what LEARN is per the slide.



Once on the home screen, all users will click the system user icon to enter LEARN.

This slide demonstrates how to navigate and use the LEARN program.

The User and Administrator manual is on the USB drive.



It is imperative the user account information is correct. We suggest that every LPR operator places their cell phone number next to their name prior to deploying the LPR car. This will allow employees with other agencies to contact them directly if they scan a plate of interest. This will eliminate the officer having to contact the department through a non-emergency line and then wait for a return call. The officer will have a direct means of communication with the LPR operator seamlessly providing information which may be time sensitive.

It is important to explain the importance of including a phone number the officer can be contacted at regarding an LPR hit/scan. Since this is a cloud-based solution, the officer could be contacted regarding a plate he/she had just scanned from anywhere in the United States.

The most common function utilized in the LAERN database is the query function. This is a very diverse tool which will help identify a vehicle by numerous different methods. From geographical location to a partial plate search (known as a wild card search), officers successfully identify vehicles used in crimes with the minimal amount of information in this area.

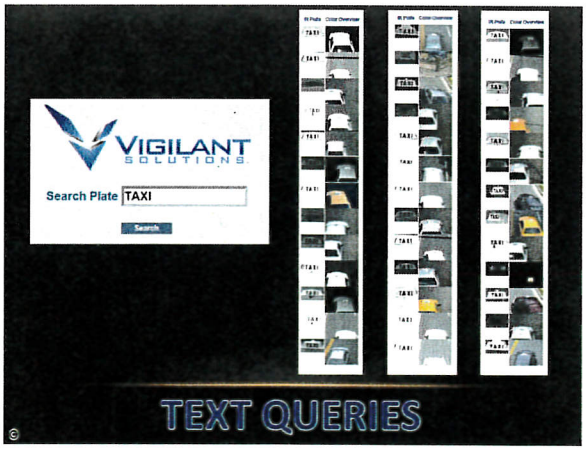
This slide demonstrates how to navigate and use the LEARN program's license plate query function. This section is one of the most utilized functions in the LAERN program. This section covers the simple search as well as how to conduct geographical searches and use wildcards.

Knowing how the cameras work will benefit the user. In this scenario it is demonstrated how the maximum amount of scans of one vehicle can be located using different search techniques.

Explain how unique license plate numbers can be queried in different ways to maximize the results. This is illustrated by searching a disabled plate three different ways.

As earlier stated in the class, the LPR simply translates what it sees into alpha numeric characters and creates a report. Here you can see how the camera scanned visible text which was not a license plate. This could easily lead to identifying a vehicle of interest where the plate itself was not scanned.

This slide demonstrated the earlier point that LPR reads text. This has several examples of text that was scanned.



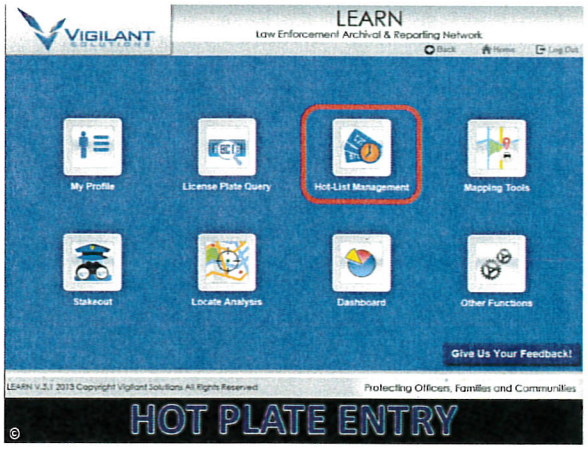
A batch search allows the user to search locations of multiple license plates (up to 100) at once. These plates need to be on an Excel spreadsheet where it is saved as a comma separated value (.csv) file. Browse, upload the file, and then search. The result will be detections of every vehicle on that list on one search result. The user may map all detections at once, which will show places in common with all the vehicles.

This slide shows the process of conducting a "Batch Query" in LEARN. This feature allows a user to conduct one search on numerous plates (up to 100) at one time. This is a great tool to identify common locations visited by numerous vehicles.

The hotlist management function is the second most commonly used function. This section will allow a user to upload a single hot plate or hotlist. This area will function solely on a single hot plate entry as entering a manual hotlist or automatic hotlist is covered in the advanced class.

This slide demonstrates how to navigate and use the LEARN program hotlist management function. In this area students will learn how to enter a plate as a hot plate into the system. The student will also be instructed on how to check to see if a plate has been entered into the system as well.

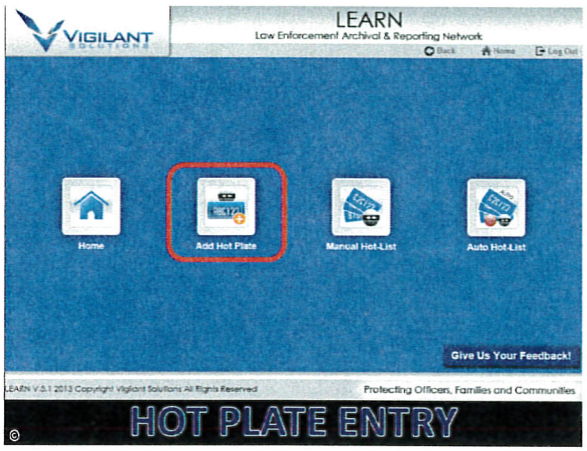
A demonstration video on how to use this function is on the USB drive.



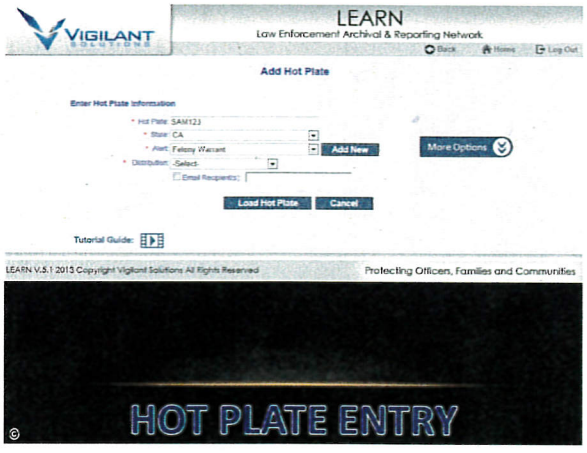
This slide demonstrates how to navigate and use the LEARN program's function of entering a hot plate into the system.

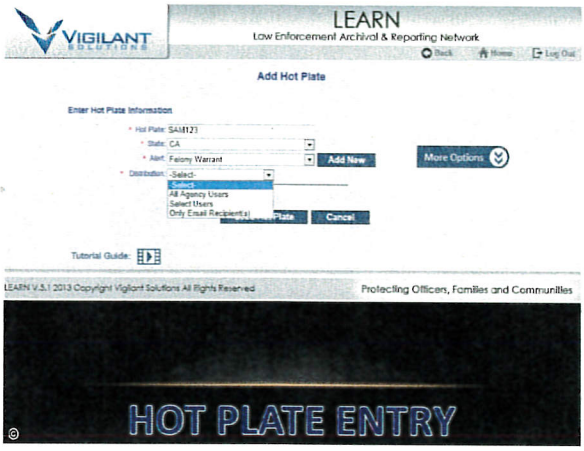
The following nine slides demonstrate how to navigate and use the LEARN program's function of entering a hot plate into the system.

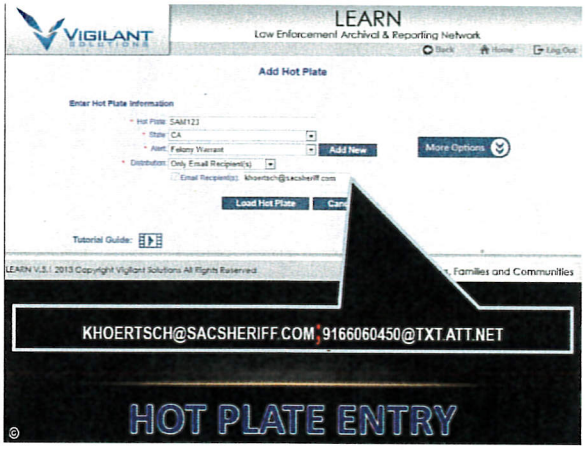
A list of all cell phone carriers .txt and .mms addresses is on the USB drive.



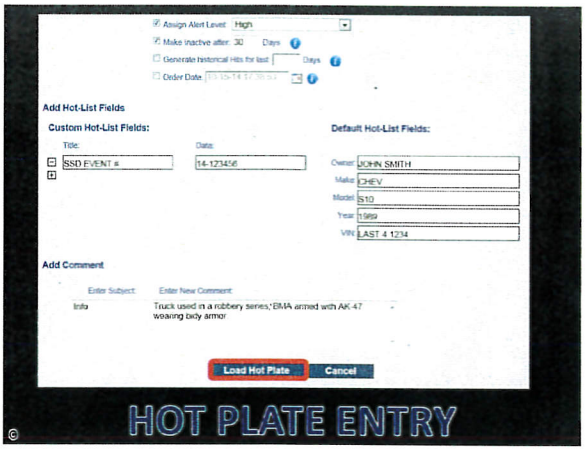
The following eight slides demonstrate how to navigate and use the LEARN program's function of entering a hot plate into the system.



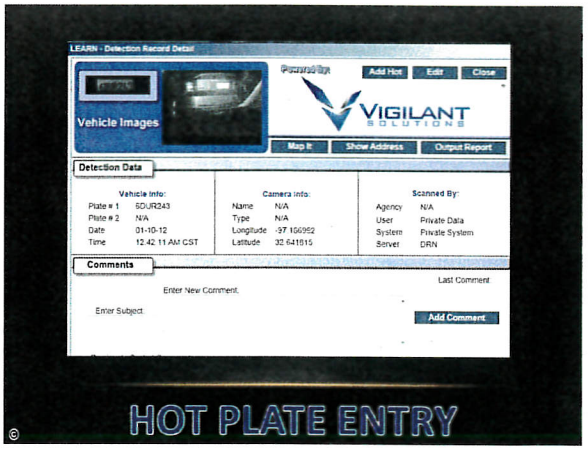

VIGILANT SOLUTIONS
LEARN
Low Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Load Hot Plate
Cancel
Tutorial Guide:
LEARN V.5.1 2013 Copyright Vigilant Solutions All Rights Reserved
Protecting Officers, Families and Communities
HOT PLATE ENTRY


VIGILANT SOLUTIONS
LEARN
Low Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Load Hot Plate
Tutorial Guide:
KHOERTSCH@SACSHERIFF.COM, 9166060450@TXT.ATT.NET
HOT PLATE ENTRY


VIGILANT SOLUTIONS
LEARN
Low Enforcement Archival & Reporting Network
Add Hot Plate
Enter Hot Plate Information
Add New
More Options
Load Hot Plate
Cancel
Tutorial Guide:
LEARN V.5.1 2013 Copyright Vigilant Solutions All Rights Reserved
Protecting Officers, Families and Communities
HOT PLATE ETRY



In addition to adding a plate as a hot plate through the hotlist management, the plate may be entered a different way. Once the target vehicle is identified utilizing the query function, it can be easily entered here. Simply view a record and then click the add button. This will then take the plate and begin the hot plate entry process.



This slide demonstrates how to navigate and use the LEARN program's function of checking the system to see if a plate is currently on a hotlist.

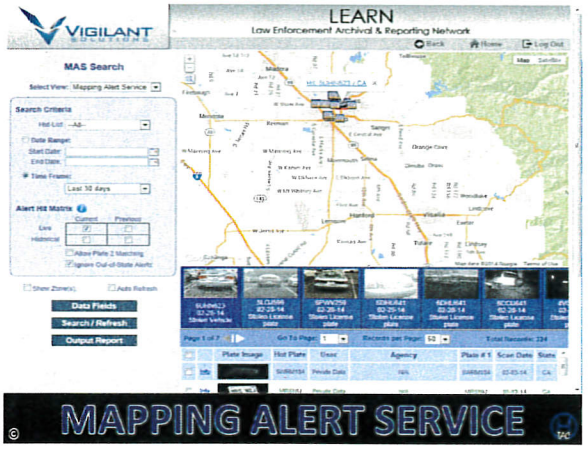
Slide demonstrates how to navigate and use the LEARN programs function of checking the system to see if a plate is currently on a hotlist.

A demonstration video on how to use this function is on the USB drive.

This slide is the base slide for the mapping tools functions.

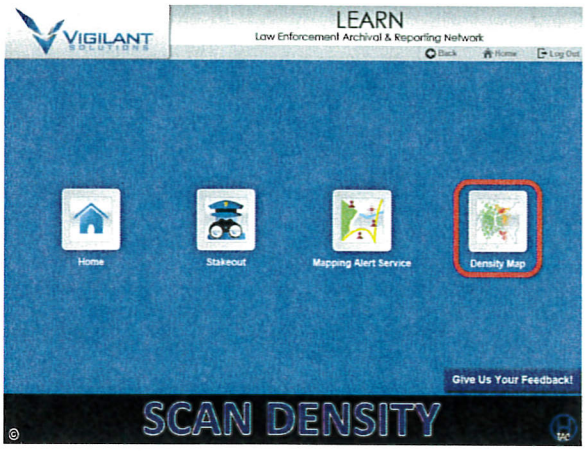
The Mapping Alert Service will place icons on the displayed map area for specific user-defined parameters. Although this is not a commonly used function in LEARN, it is a good visualization of where certain hits are concentrated on the map.

Explain to the students Mapping Alert Service (MAS) functionality. This function is not widely used.



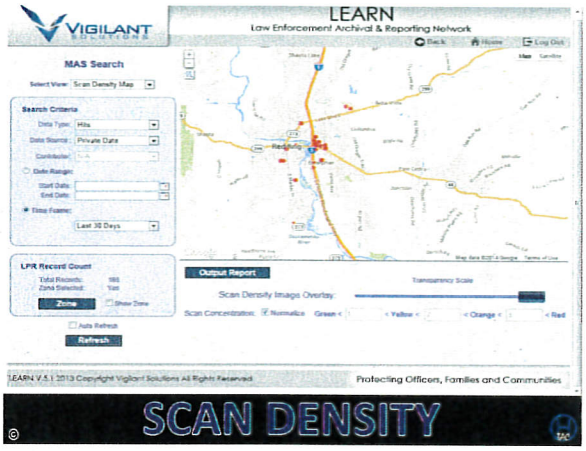
The scan density map allows the user to quickly see the amount of detections and hits in a geographical area. The user may define a specific time period and even geo zone an area for more specific data.

Explain to the class that the scan density map is a quick resource to identify how many scans are in a geographical area. This allows the user to separate the data by source as well as identify hot spots for active hits.



This slide shows an example of utilizing the Scan Density Map.

Show the students the difference between the data points in the density scan slide.



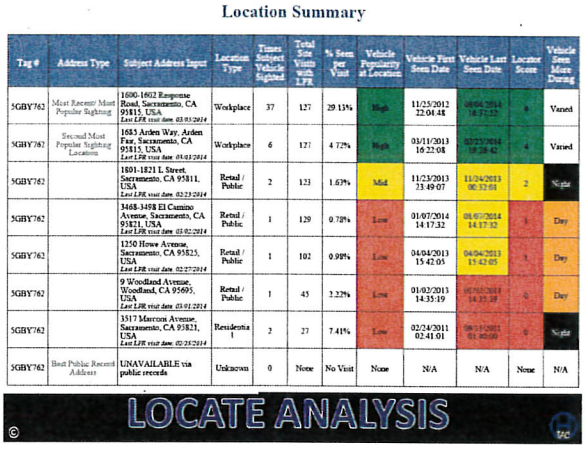
Stakeout is one of two analytical resources commonly used in LEARN. Stakeout will allow the user to conduct a virtual drive-by of a specific location. This will allow the user to identify vehicles where the license plate is unknown. The query will return with every single pass an LPR-equipped vehicle made within the predefined search area. This function also allows a daytime thumbnail to be placed in a night time scan to be used a reference for those detections where the user would normally not be able to determine the description of the vehicle.

Since this function has all scans in a certain area, the photos captured could be next to real time providing situational awareness for an officer conducting an investigation in a specific area.

Explain to the class the Stakeout function in LEARN is one of the two analytic resources provided in the system. It is important to explain in detail how this function works as it is a huge resource and time saver to the users. Point out the fact that they will be using this tool during the hands-on scenarios.

The end of this slide contains a demonstration video on how to utilize "Stakeout," which is also included on the USB drive.

Locate Analysis is a complex analytical search function which is very easy to use. Simply enter the license plate number and search. Locate Analysis will conduct all research on the plate and locations that have been scanned. This function calculates the number of times an LPR car has been by the location detailing its geospatial information as well. This allows the user to also manually enter addresses so it can incorporate into the report information specific to that location, even though the target vehicle may not have been scanned there.

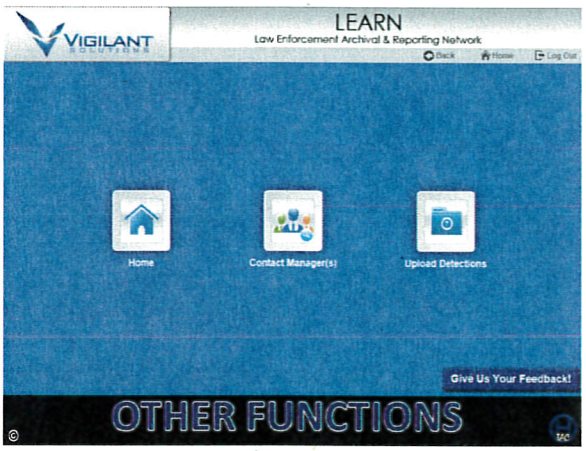


Explain to the class that the Locate Analysis function in LEARN is one of the two analytic resources provided in the system. While this is a simple function to use by simply searching a single license plate, the information produced in this function is very in-depth.

The end of this slide contains a demonstration video on how to utilize "Locate Analysis" stakeout, which is also included on the USB drive.

This section will show system administrator information.

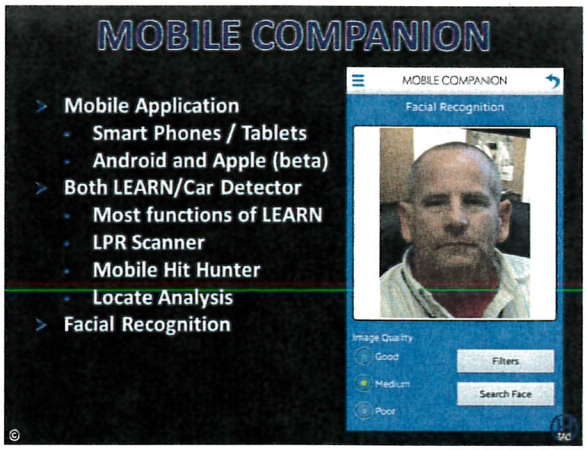
Click through the slide, which is self-explanatory. This system is new and evolving so there may be changes to the appearance of the application. It is important to stress that this may be used on mobile devices and all information is uploaded to the same server LPR scans from fixed and mobile units upload to.



Mobile Companion was created to combine the most utilized functions of LEARN and CarDetector into one mobile application. This application has almost every function of LEARN with the availability to use the mobile device as an LPR scanner. All detections from the mobile device are uploaded to the LEARN server making them part of the LPR database. This application is a great resource for officers assigned to foot patrol, bike patrol, mounted patrol, or investigations where LPR data could take the place of transcribing the information.

In addition to the LPR functions this application also has Face Search. Face Search is a mobile facial recognition program that can be used on the mobile device.

This mobile application is part of the systems accessible to all students for 30 days after the class.



Module V: Investigative Uses of LPR

Duration

1 Hour

Scope Statement

This module will cover the diverse uses of LPR data, highlighting cases in which it has been successfully used in the past.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be able to identify investigations where LPR could play a key role.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe the versatility of LPR during investigations
2. List ways LPR could be incorporated into investigations

Lesson Topics

This module includes the following topics:

- Historical uses as it relates to both suspect and victims
- Crime series
- BOLO's
- Confirm or disprove statements
- Suspect identification
- Vehicle identification
- Geographical evidence

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

None

Assessment Strategy

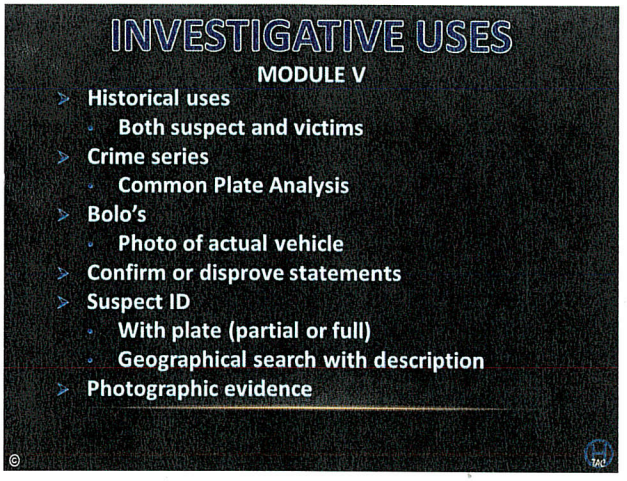
Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

Instructor's Note:

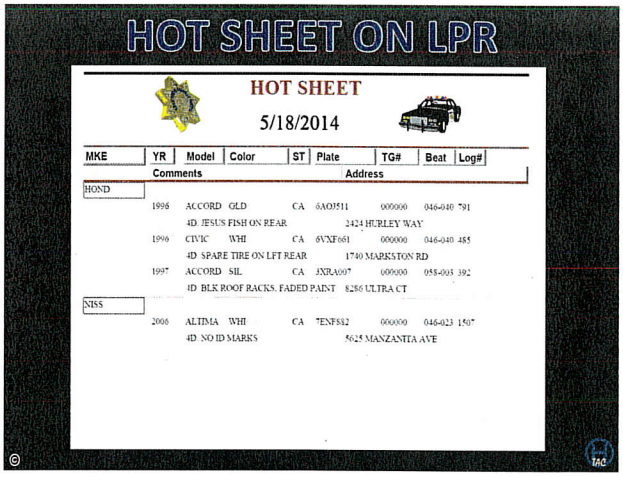
Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

INSTRUCTOR NOTES

Discuss what is covered in Module V.



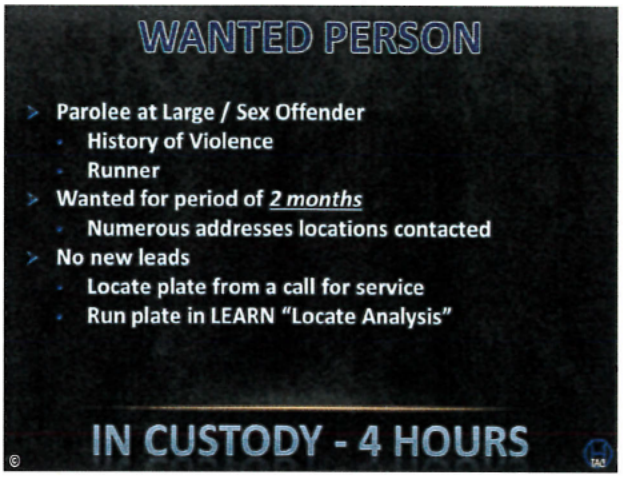
Most agencies either create a stolen vehicle hotlist or receive one daily from the agency that is responsible for auto theft investigations. These hotlists usually are in the form of a Word document with the vehicle description. LPR would allow the hotlists to contain a photo of the actual stolen vehicle from a historical scan. For example, on this hot sheet the Honda is described as a sedan when a historical photo shows that it is actually a station wagon.



This slide shows students an example of a stolen vehicle hot sheet, then shows the same hot sheet with photos of each stolen vehicle. The last segment shows a photo of a station wagon where the hot sheet describes it as a sedan. It may be unnoticeable if it is displayed on a screen in less-than-dark conditions.

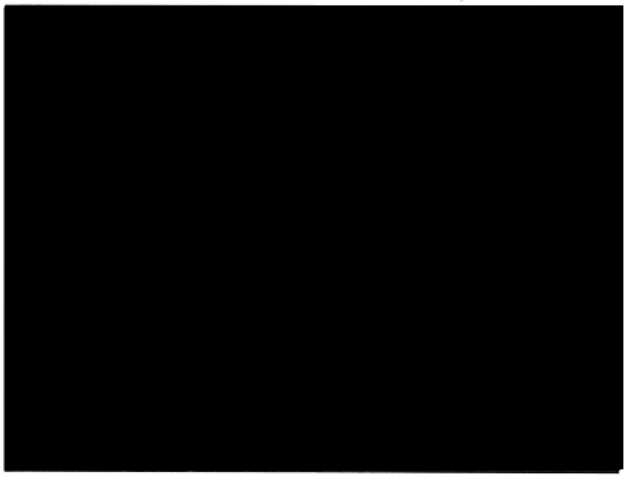
This example highlights how an investigation, which had been ongoing for several months, to the whereabouts of a violent parolee at large was concluded within four hours with the use of LPR. The suspect's location was discovered from a historical scan of a vehicle he had been known to drive. This address was not known to the investigating officers prior to the LPR query.

Click through the slide concerning locating a fugitive. Note the amount of time which had passed while units who did not have access to LPR data were looking for him.



Although LPR is primarily used to receive active field alerts and in criminal investigations, it has other important uses. In this example a sex offender's vehicle is scanned behind a business during a time that would be considered after hours. A check of the offender shows he listed a culinary school as a place of business. The location on the map shows this is where his car is being scanned. If there was any additional information needed, the person receiving the alert could simply call the patrol officer at the number listed on the hit.

This slide illustrates how LPR isn't just an enforcement tool; it can assist with keeping track of those individuals who may be monitored by law enforcement (sex offender, arson registrants, probationers, parolees etc.).

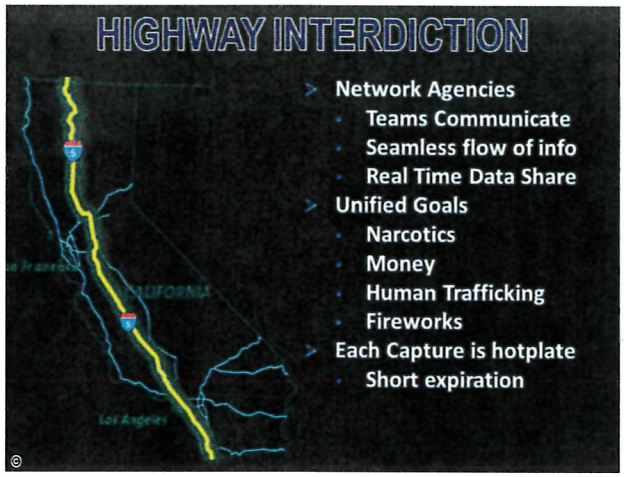


Drug smuggling is a crime that crosses many jurisdictional boundaries. Knowing this fact, agencies that have major interstates or freeways have established highway interdiction teams. These vehicles are usually equipped with power tools, radios programmed to communicate with multiple agencies throughout the state, a narcotics K9, and LPR equipment.

This is an introductory slide to a proposed highway interdiction program utilizing the existing agencies currently deployed throughout the state. Point out the three-camera LPR systems on the front of the

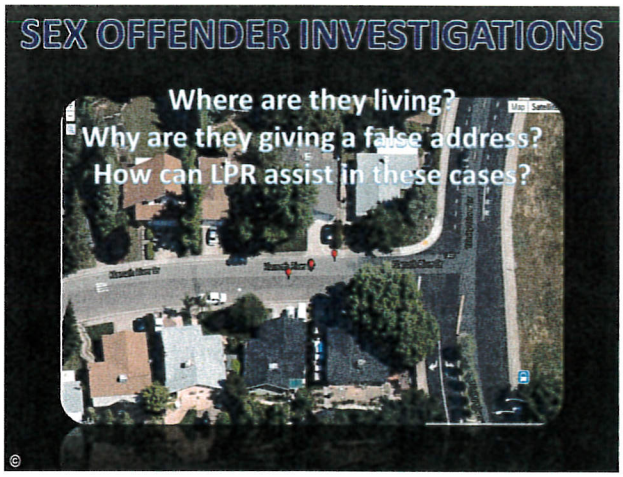
vehicle.

The LPR equipment is an active resource used to scan passing vehicles looking for cars that may have been entered as hot plates. If the systems were able to be networked with other jurisdictions, this would be a huge resource. This would allow the interdiction units to be alerted to vehicles traveling on known narcotics couriers' routes. This information would be beneficial to those who investigate narcotics and other criminal activity who utilize highways.



This is a hypothetical slide on a request for a future interface for highway interdiction units in the state. The importance should be placed on seamless, real-time data sharing between agencies.

LPR used in sex offender investigations is a great and efficient resource. While sex offenders on parole in California are fitted with GPS ankle monitors, the agent has to manually query each device. Once a sex offender hotlist is created, a person who investigates sex offenders can receive alerts on the offender's location. These alerts will trigger an investigation on the offender's true location which can also be used as evidence in court if a case is generated.



This slide contains information that was used in sex offender investigations. Point out the fact that the sex offender was on parole, equipped with a GOS ankle monitor. It should be noted the task force was alerted to his behavior by receiving LPR alerts on his vehicle.

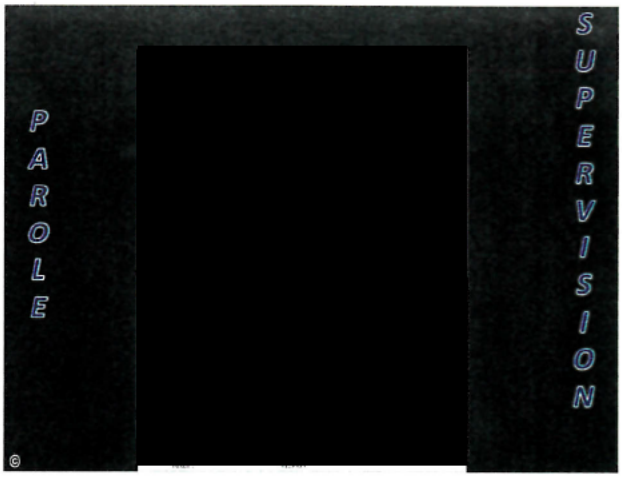
In the course of one afternoon numerous vehicles were burglarized. During one of the burglaries the suspect was confronted by a vehicle owner. The suspect brandished a firearm and fled the scene after the owner was able to get the suspect's license plate. This plate was entered into the LPR systems, where moments later a Sheriff's Parking Enforcement LPR system captured the plate, triggering an alert.

The audio in this slide is played at real time demonstrating the efficiency of LPR equipment.

This slide contains a real call for service regarding a burglary suspect located by a sheriff's parking enforcement car equipped with LPR. It is important to note the audio is played in real time and has not been altered. The main point of the slide is to put plates in the system as quickly as possible, ultimately increasing the number of units looking for the vehicle.

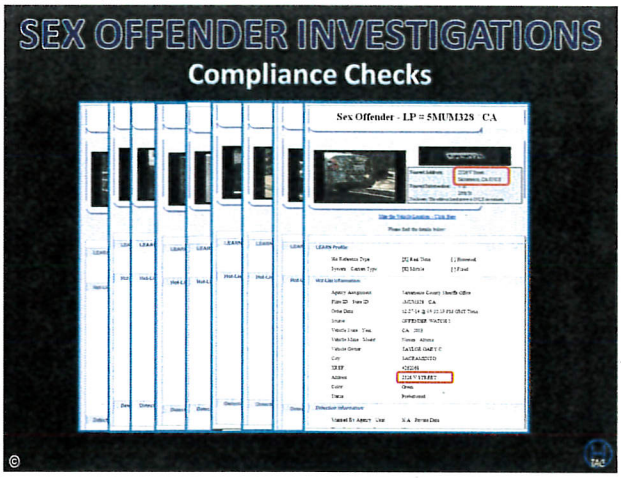
The audio plays automatically at the end of the slide.

This slide contains another prime example of using LPR to keep track of offenders. This is an alert from an Active Parolee hotlist. The alert was vetted to the parolee listed in the alert. It was determined he was in violation of his parole by traveling outside his limitation of 50 miles. While this was not a violation where he was arrested, this serves as an example of using LPR to be notified of persons of interest's locations.



This slide demonstrates how LPR can assist officers keeping track of probationers and parolees who may be assigned to them.

These slides represent a night's worth of detections of sex offenders' vehicles captured out front of their registered addresses. This process allows detectives to focus on those alerts where the offenders' vehicles are continually being scanned at locations away from their address of record. These automatic LPR compliance checks allow officers to use their time more efficiently by identifying those who are not in compliance with the law.

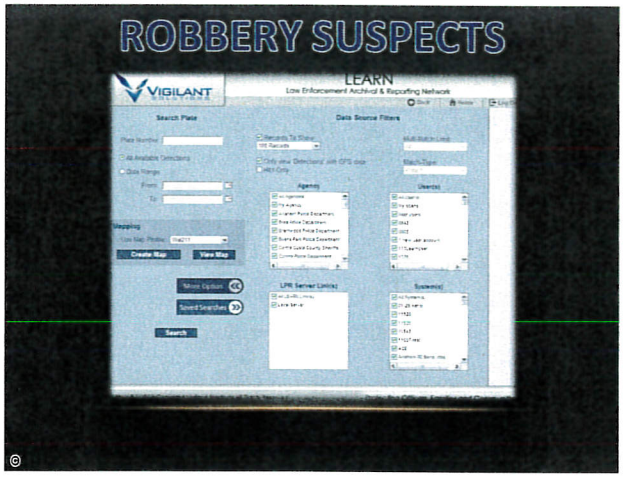


This slides shows a series of sex offenders' license plates that were scanned during one night. With staff shortages, the LPR system allows officers to be more productive by focusing on those offenders whose vehicles are not scanned in front of their address of record.

Traditionally, stolen license plate alerts are not acted upon. The reason for this is the stolen license plate database is very inaccurate. By running these stolen plate alerts through historical LPR records the information can be used productively, identifying vehicles the plate does not belong with. In this example a stolen vehicle was identified by a person in the communications center. Once the vehicle was identified, an alert was entered into the system. An LPR system located the car, where it was confirmed to be stolen and it was recovered for the owner.

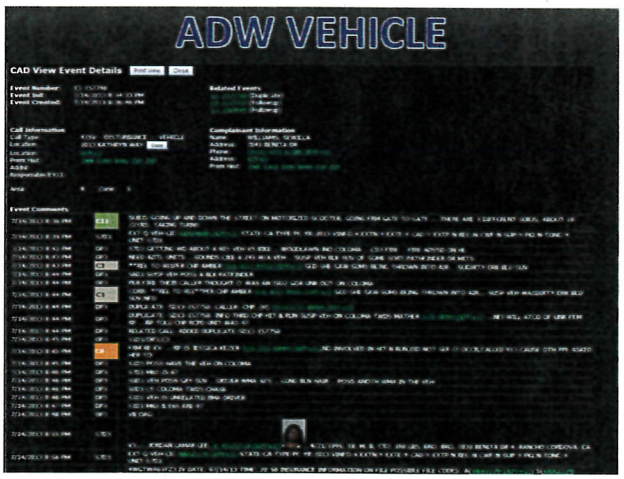
This slide shows how stolen license plate hits can be dissected to identify stolen vehicles or "cold plated" vehicles. The red boxes that appear show the inconsistencies between the two vehicles. Once vehicle was identified as a possible stolen vehicle, and when it was located with LPR, a hit was triggered. The officer then recovered the vehicle, which otherwise would not have been recovered.

Based on witness descriptions of robbery suspects, coupled with the location of the crime, the suspect vehicle was identified utilizing LPR data. While both suspects were inside of the victim's store, a parking enforcement unit equipped with LPR was scanning the parking lot looking for violations. The suspect car was one of the vehicles that was scanned during this time. Witnesses described the suspect vehicle as an early 2000 green Ford Mustang parked near the garden section of the store. A geographical search of the lot during that time frame produced the vehicle parked in the location described by witnesses. Both suspects were positively identified after researching the vehicle.



This slide shows how two robbery suspects were identified utilizing the geographical search function in the license plate query area of LEARN.

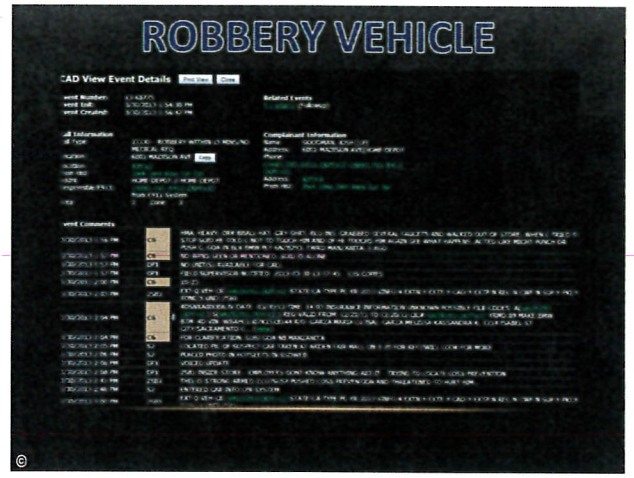
Utilizing historical records the officer driving an LPR car was able to check historical records when he was waived down by citizens regarding a man who was just intentionally run over. The citizens stated the suspect car had just fled in the same direction the officer came from. A check of his scans showed the suspect vehicle. After contacting the registered owner, the true driver was identified and ultimately arrested off another LPR hit at a local mall.



This is an example of how an assault with deadly weapon suspect was identified utilizing LPR. After being identified, an LPR scanner detected the plate from the car the suspect was driving and he was ultimately arrested.

After loss-prevention officers stopped a person suspected of shoplifting, the person pulled a handgun. The male suspect fled the scene in a vehicle officers were able to get the license plate of. The plate was entered into the LPR system where an officer received an alert several weeks later. The male occupant fled on foot and was ultimately taken into custody. The photo taken of the plate had a clear photo of the suspect that was captured as a collateral photo.

This slide is an example of an active hit notification on a robbery suspect vehicle. It is important to point out the suspect was photographed next to the vehicle before he fled on foot. The photo can be used as evidence when he claims he was not the person who ran from the car.

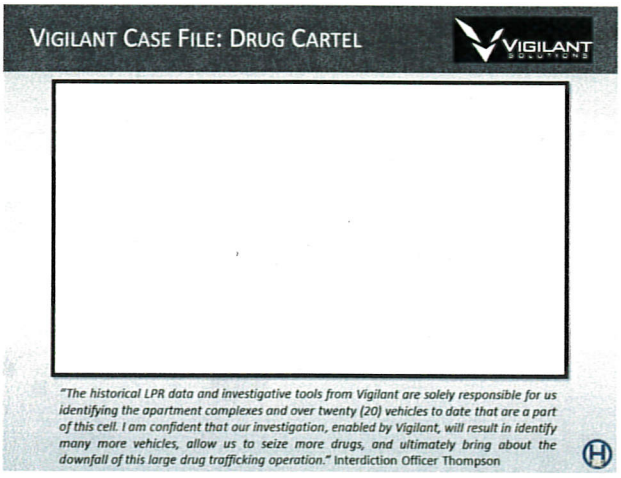


By using the Stakeout function, both occupants of a vehicle who fled on foot were identified as two suspects involved in a shooting several weeks prior. Without this information provided to the officers on scene, they would have been searching for misdemeanants instead of two possibly armed suspects wanted in a previous shooting.

This slide demonstrates how the "Stakeout" feature works from a real-world scenario that was previously used.

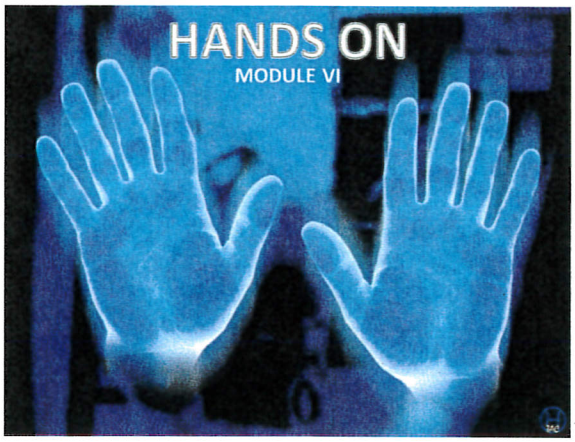
This slide contains a 1:30 minute video on a success story where LPR was used to uncover a large drug cartel.

This slide contains a one-and-a-half-minute video on a success story where LPR was used to uncover a large drug cartel.



The next module will involve hands-on demonstration of the diverse uses of the LEARN database.

This slide should be displayed during a 10-minute break before the last module begins.



Module VI: Hands-On Scenarios

Duration

2 Hours

Scope Statement

This module is the hands-on portion of the class demonstrating the diverse uses of the LEARN database while working through real-world scenarios that have previously been solved utilizing LPR technology.

Terminal Learning Objectives (TLO)

Upon the successful completion of this module, students will be confident in the basic functions of the LEARN database.

Enabling Learning Objectives (ELO)

At the conclusion of this module, students will be able to:

1. Describe LEARN use
2. Successfully navigate investigative scenarios utilizing the LEARN database
3. Enter a hot plate into the LEARN system

Lesson Topics

This module includes the following topics:

- Hands-on use of the LEARN database
- Clean up user profile
- Required audit
- Run plates related to investigations
- Utilize Stakeout
- Utilize Locate Analysis

Resources

Classroom facility suitable for 40 students
Instructor Guide
Participant Guide
PowerPoint presentation
Computer
Projector
Projection Screen

Computer with LEARN Program (1 computer per student is preferred; however, students can share computers if necessary)

Handout: Cell Phone SMS/TXT reference sheet

Instructor-to-Participant Ratio

1:40 Maximum

Reference List

See Appendix A

Practical Exercise Statement

Participants will work on their own or in a group setting, depending upon the setup of the training room. A series of scenarios based on either real scenarios or hypothetical situations will mimic daily queries of the LPR database. Participants will utilize various functions of the LEARN system within each scenario to allow the participants to become familiar with the diverse functions of the LPR database.

Assessment Strategy

Instructor will observe participant contributions in classroom discussion. In the final module of this course, students will participate in a group scenario-based assessment.

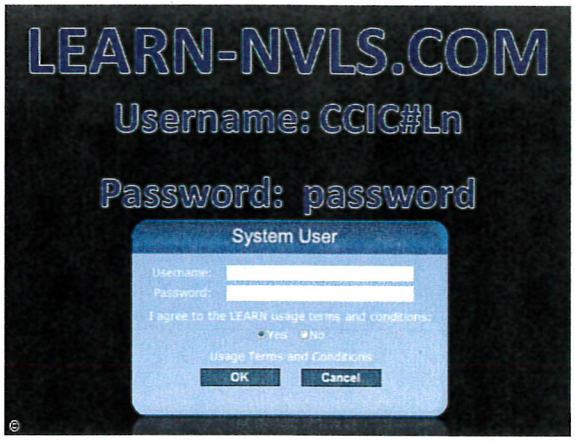
Instructor's Note:

Instructor notes (in red) are contained throughout the lesson plan as appropriate. Many slides contain several elements that are displayed automatically or upon mouse clicks.

INSTRUCTOR NOTES

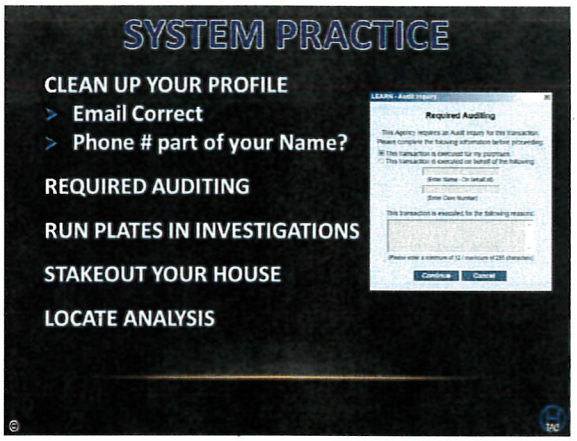
The URL address for the LEARN database is www.learn-nvls.com. Once the home screen appears, each student will log into the systems utilizing the logon credentials provided by the instructor.

This is the beginning of the hands-on portion of the class. All students will have a demo account in the LEARN database. This system will, at a minimum, have access to the 2.6 billion private records. This slide will change as the format of the login will change from class to class.



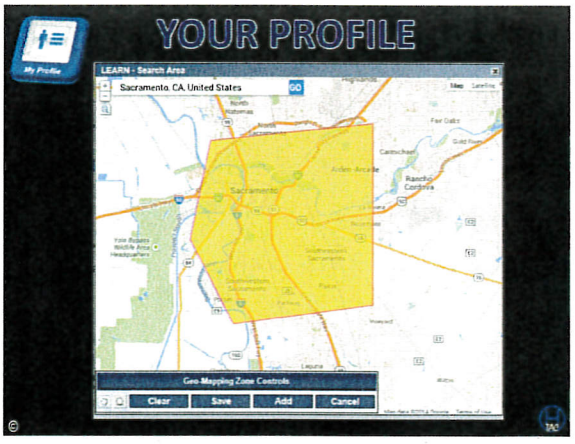
Prior to working through the scenarios, each student needs to confirm their information is correct. They will be given a chance to test drive the system by conducting Stakeout on a known address, run plates identified as being involved in crimes, and produce a Locate Analysis report. There is a standard transaction audit that will appear for every action on the LEARN system.

Explain to the class what the first portion of the hands on section will cover (see slide for details).



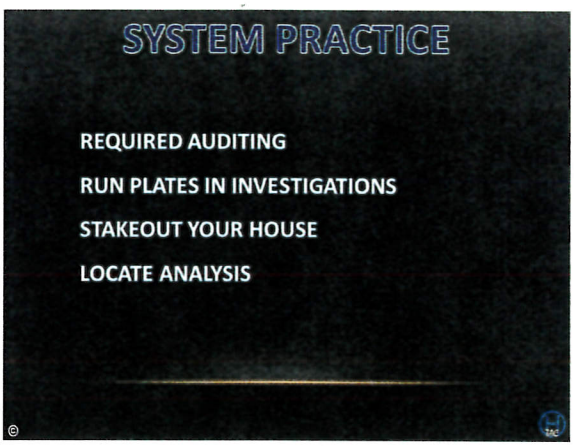
In the user account there are several important topics that need to be addressed. As this is a nationwide database, it is important to geo zone the area in which the alerts are generated. If there is no geo zone setup, the user will receive a large amount of email alerts from all over the nation. This geo zone needs to be established prior to checking the email service button.

Let students verify the information on each of their accounts is correct. Give them time to make any changes and answer any questions they may have. This will allow those who may be at a higher computer skill level to conduct some searches. This will clear the way to let students focus on the scenarios that are next. Make sure the "Email Service" box is checked after the user account is



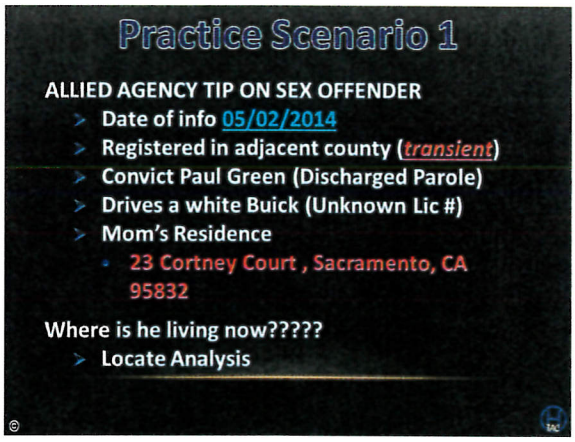
geo-zoned. If it is not done in this order, the student will receive a large number of emails in a short period of time on hits of vehicles throughout the United States.

Advise the students of the audit log that will appear for every query. This is the time for students to utilize the system to run plates from investigations they may have brought to the class.

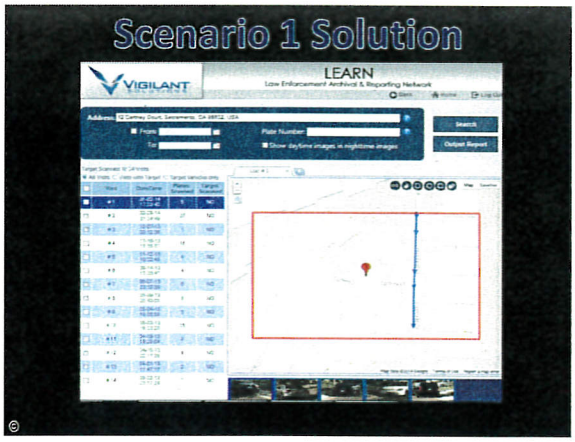


(Text applies to this slide and the following slide.)

Click through the information one line at a time. Emphasis the information the student will need to identify the vehicle and suspects location. The date of the crime is important since this database is ever changing. Some will find the information quickly. Walk around the room and assist those who appear to be having problems. Point out the fact that this was a real case which yield a felony conviction with minimal man-hours involved.



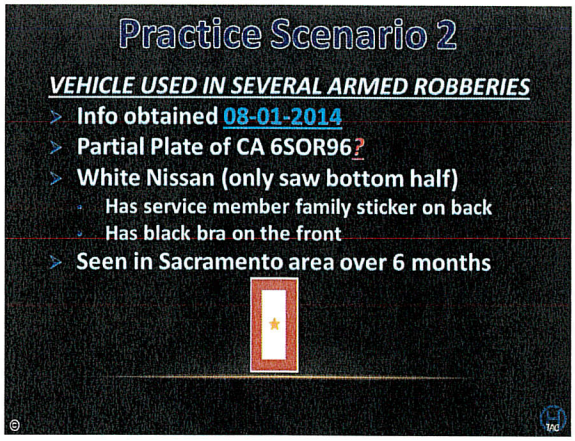
The hands-on Scenario 1 is a real case that was investigated in 2014. A Placer County detective notified the Sacramento SAFE team of the possibility of sex offender Paul Green residing in their county illegally. This would be a felony violation since Green was registering as a transient sex offender in Placer County. The only information given to the Sacramento SAFE team was his name, his mother's name, and a vehicle described as a white Buick sedan in which he drove to his last registration event. With the limited information, detectives were able to locate Green's mother's residence, which was used as the anchor point for a Stakeout search. The Stakeout search



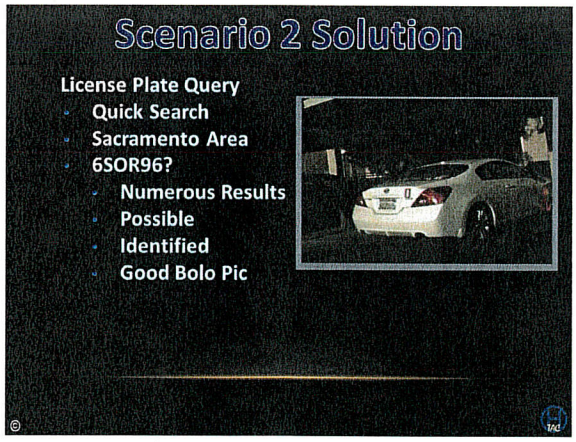
produced a white Buick sedan a records check showed had a release of liability to Paul Green. A Locate Analysis report showed Green had moved from his mother's house to a new, unregistered location and was possibly attending a local junior college which he also had not registered with. A search warrant was served at his residence where he was arrested.

(Text applies to this slide and the following slide.)

Click through the information one line at a time. Emphasis the information the student will need to identify the vehicle and suspects location. The date of the crime is important since this database is ever changing. Some will find the information quickly. Walk around the room and assist those who appear to be having problems. This was a fictitious scenario that was created for training purposes.



Scenario 2 is a hypothetical scenario created to be used as an example of how to use a wildcard search.

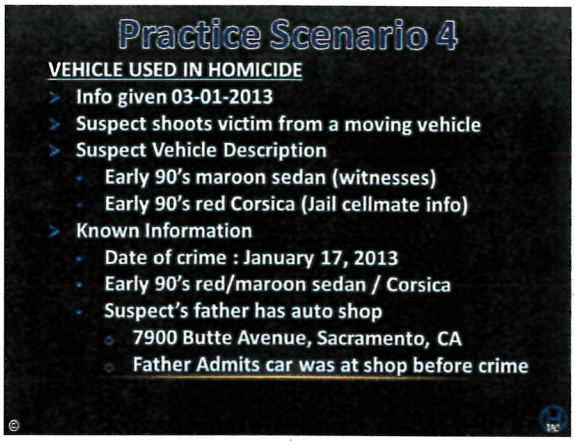


This is the process to quickly enter a plate into the system as a hotplate.

Display this slide while students are entering the listed plate information into the system. Make handout available to those who may have a cellular phone by a carrier other than one that is on the slide. Once this slide is complete, the instructor can run the hot plate example which should produce a hit alert to both the students' phones as a text message and the email address they listed in their profile.

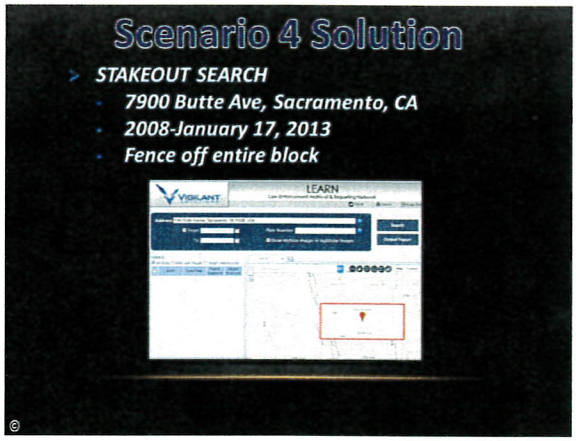
Click through the information one line at a time. Emphasize the information the student will need to identify the vehicle and suspect's location. The date of the crime is important since this database is ever-changing.

Some will find the information quickly. Walk around the room and assist those who appear to be having problems.



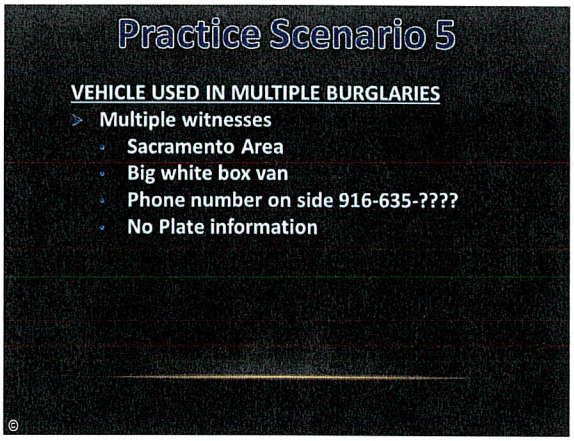
In this case the suspects are known, but the district attorney needs proof of existence of the suspect's vehicle.

This is a real scenario that was used by district attorney investigators during a homicide investigation. Occupants of two cars exchanged words one evening. This resulted with one occupant shooting the victim in the other car. Since it occurred at night, there was a rough description of the suspect's vehicle described as a maroon sedan. Information led investigators to the suspect's identity, but they did not have enough information to charge him with murder. One key point of evidence was the description of the maroon sedan. Utilizing the Stakeout function investigators were able to locate a collateral photo of the suspect vehicle parked in front of his father's auto shop. This photo was entered into evidence in the case. The car was never located as the suspect used a saws-all and cut it into small pieces where it was melted down.



The suspect's vehicle is located as a collateral photo, but the true license plate has never been found. This was used as evidence at the trial where they were both found guilty. The first suspect sustained burns to his face when he attempted to torch a vehicle he used in a different shoot.

This is a hypothetical scenario created to highlight the great resource of searching for text in the license plate search area.

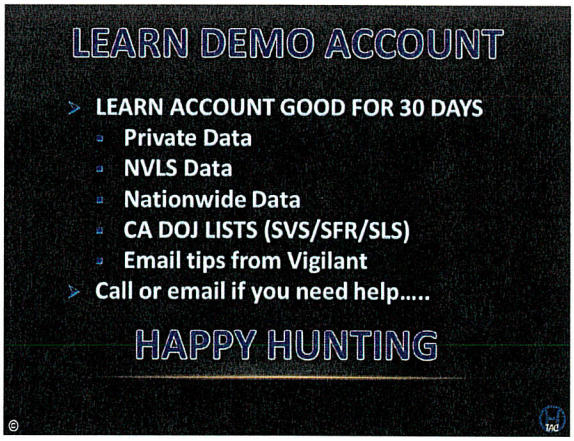


Click through the information one line at a time. Emphasize the information the student will need to identify the vehicle and suspect's location. The date of the crime is important since this database is ever-changing.

Some will find the information quickly. Walk around the room and assist those who appear to be having problems.

This scenario emphasizes how LPR can be used to identify vehicles from text it has scanned where it is not the plate. This is a fictitious scenario created for training.

Display this slide during closing remarks. If time permits, offer to assist those who want to identify vehicles used in criminal cases they may be working.



Distribute course evaluations to the students and collect completed documents.

APPENDIX A

Reference List

- Algorithm for License Plate Recognition. VISL, Technion. 2002.
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