

# 2006 NASCIO

*Recognition Award Submission*



*State of California*  
*Office of the State CIO*

*Digital Government: Government to Government*

## **Executive Summary**

Amongst a myriad of responsibilities, the California Department of Justice (Cal-DOJ) is tasked with the oversight of firearms purchases and eligibility clearance processing for the most populous state in the country. These activities are carried out by the Firearms Division, which serves the people of California through education, regulation, and enforcement actions regarding the manufacture, sale, ownership, safety training, and transfer of firearms.

Firearm laws are a critical component of California's responsibility to ensure public safety. Each year these laws are amended, refined, supplemented, or eliminated. For all persons who attempt to acquire a firearm through a transfer or purchase, statutes require that the Firearms Division perform a Basic Firearms Eligibility Check (BFEC) to determine the person's eligibility. Until Senate Bill 950 (SB950) was passed, none of the laws passed to ensure public safety, nor resources expended to enforce these laws, addressed the need to enforce existing firearm prohibition laws. There were no statutory provisions made for the timely identification, investigation, and prosecution of prohibited persons, and the confiscation of illegally possessed firearms. Consequently, there were no available resources or existing processes to compare and match firearms registration or ownership records with prohibited category records in order to identify persons who have become convicted of firearms prohibiting crimes or released from the care of mental facilities subsequent to legally acquiring firearms. That has changed now with the passage of SB950 and the subsequent development of the Armed Prohibited Persons System (APPS.)

To enforce laws that prohibit certain persons from possessing firearms, Cal-DOJ developed the Armed Prohibited Persons System (APPS,) making California the nation's first state to build an automated system for tracking handgun and assault weapon owners who pose a threat to public safety. APPS maintains information about persons who have been, or will become, prohibited from possessing a firearm subsequent to the legal acquisition or registration of a firearm or an assault weapon. It also provides authorized law enforcement agencies with inquiry capabilities to determine the prohibition status of a person of interest.

Cal-DOJ will populate APPS with all handgun and assault weapon owners across the state and match them up against criminal history records to determine who might fall into a prohibited status. Automatic notifications from State and Federal criminal history systems will be received daily to determine if there is a match for a current California gun owner. When a match is found, the system automatically raises a flag to Firearms Division staff, which triggers an investigation into the person's status. The key benefits of the system include:

- **Leveraging the Internet to eliminate incompatibilities between disparate systems.** Internet technology provides a common denominator that allows for firearms data maintained in one system and criminal history information maintained in multiple, disparate systems to be brought together in an automated fashion to identify potentially prohibited persons.
- **Speeding up the process.** Prior to APPS, the multi-step process to identify potentially prohibited persons was an arduous, manual investigation process at best. By the time all of the paperwork could be gathered to conduct an investigation, a person's status could have already changed. The new system speeds up the process by receiving ongoing daily criminal history updates for all persons in the system.
- **Reducing costs.** In addition to providing better service to the law enforcement community, APPS streamlines the overall process by eliminating much of the manual, paper-based effort required to review firearms and criminal history information when identifying a potentially prohibited person. This in turn reduces the time and the cost of the "people" factor in the process.
- **Doing more with less.** The Automated Firearms System (AFS) is the statewide, central repository of firearms information. It contains over 6.6 million historical records. The Automated Criminal History System is California's central repository for criminal history information and contains over 5.5 million automated criminal histories and indexes approximately 100,000 manual criminal records. The development of APPS allows for these two systems to match gun and person information with a person's criminal history in an automated fashion that enables law enforcement to have up-to-date prohibition information on a person within minutes or hours, rather than days or weeks. APPS enables Cal-DOJ to deliver more accurate, timely information with fewer resources and lower costs.

## **A. Concise description of the business problem and solution, including length of time in operation**

A PPS is a Java/J2EE based application built to assist Cal-DOJ Firearms Division Supervisors/Analysts to manage persons who have been, or may become, prohibited from possessing a firearm subsequent to the legal acquisition of a firearm or registration of an assault weapon. The system was implemented in January 2006.

The new application performs the following high-level functions:

- Merge Dealer Record of Sale and Assault Weapons Registration data to create a consolidated APPS database
- Process a Basic Firearms Eligibility Check and present the results to Firearms Division users to evaluate and determine if a person should be prohibited from possessing firearms
- Process daily triggering events from legacy systems:
  - Prohibiting Triggering Events (from Automated Criminal History Systems)
  - Weapon Triggering Events (from Automated Firearms System)
  - Dealer Record of Sale Triggering Events
- Respond to inquiries from authorized criminal justice users and indicate if an individual has been prohibited from possessing firearms
- Generate notification letters, management reports and statistical reports

### **Architecture Overview**

The APPS architecture is an integration of the following components:

- Use Struts application framework to build the APPS Web application
- Utilize Cal-DOJ Firearms Interface Gateway (CFIG) middleware to process APPS Basic Firearms Eligibility Check (BFEC) requests
- Interface with the new Cal-DOJ Criminal Justice Information System (CJIS) Control gateway and its components to facilitate Law Enforcement Agencies to inquire APPS database
- Process daily triggering events from legacy systems and update the APPS database with the latest changes to gun information as well as firearm owner's status
- Use Oracle AS 10g Report Services to generate all APPS reports
- Interface with DOJ Web portal to facilitate application access security
- APPS was designed using industry standard design patterns to facilitate code reuse and ease of maintenance

- The APPS architecture framework is extensible to meet future needs

*Technical Environment*

Application Server	Oracle 10g AS
Development Tools	Oracle JDeveloper
Programming language and technology	Java/J2EE
Application Framework	Struts framework
Database	Oracle 9i
Load Balancing	CISCO Content Services Switch
Quality Assurance	Compuware Suite

**APPS Interfaces**

APPS relies on external applications to fulfill its processing needs. Existing Cal-DOJ Web Security provides APPS application access security. The new CFG application provides APPS with the background check validation (BFEC) process. The New CJIS Control application gateway provides APPS with an interface to receive law enforcement inquiries and send responses back to Law Enforcement via California Law Enforcement Telecommunications System (CLETS).

**Cal-DOJ Web Security Portal**

Cal-DOJ Web Security Portal is the front door to APPS. An APPS user must first be authenticated and authorized by the Web Security Portal prior to accessing the application. The DOJ Web Security portal uses username and password as the basis of access security. APPS also implements role-based security to limit a user’s access only to authorized APPS functions.

**CFG**

APPS uses CFG to process APPS BFEC transactions. Upon completion of the BFEC request, APPS user can view and analyze the BFEC results in order to determine an individual’s eligibility to continue to own firearms.

**New CJIS Control**

APPS provides Law Enforcement with the ability to inquire into the APPS database for person prohibition information. APPS utilizes New CJIS Control as a means to receive a request from the requesting Law Enforcement and send a response back.

## **B. Significance to the improvement of the operation of government**

APPS provides the benefit of promoting peace officer and public safety while supporting the Attorney General's constitutional responsibility to uniformly and adequately enforce the law. APPS provides 5 key operational improvements:

1. **Ability to identify prohibited persons.** Because APPS allows what used to be disparate systems to share information with each other, the ability to identify prohibited persons is now readily available.
2. **Ability to process data from disparate systems to find matches of person possessing firearms and persons who have been prohibited from possessing them.** APPS bridges the gap between person information with firearms and person information with criminal history and allows for a determination to be made as to prohibition status.
3. **Ability to query the APPS data from the field.** APPS provides the query capability so that officers in the field may get immediate information regarding a suspect's status.
4. **Ability for Firearms Division Management to prioritize workloads based on the prohibition factors associated with a person.** APPS uses a scoring model based on prohibiting factors that allows supervisors to prioritize cases for review based on prohibition factors, which are potential risk factors.
5. **Ability to provide statistical reporting to counties and law enforcement agencies across the state.** APPS provides reporting capabilities so that individual counties and law enforcement agencies can receive meaningful statistics related to the number of prohibited persons by area.

### **C. Benefits realized by service recipients, taxpayers, agency or state**

APPS is easy to use, efficient and enhances the ability of law enforcement to protect its citizens. Specifically, the benefits realized include the following:

- APPS drastically decreases the time it takes to identify prohibited persons. Updates to APPS occur as soon as available and therefore reduce the time from days, weeks or months to as little as a few hours identifying criminals and others who are prohibited from possessing firearms with those known to have legally acquired them in the past.
- APPS allows for 30 staff members to perform the work that a manual method would require hundreds to perform.
- APPS allows for cases to readily be prioritized or assigned to other analysts in order to manage the workflow and speed the identification and prohibition process based on risk or other prohibiting factors.
- APPS puts the ease of an intuitive, automated, web-based system to work to help improve the safety of Californians.

#### **D. Realized return on investment, short term/long term payback (include summary calculations)**

APPS was developed as the first system of its kind in the nation to improve public safety efforts in the state of California by identifying armed persons who have subsequently become prohibited from possessing firearms. Unlike a financial system that can purely be quantified in terms of dollars saved, improved public safety can be difficult to quantify. With that said the benefits derived to the 33 million citizens of California are substantial and include:

- Identification of at least 15,000 prohibited persons (1.5% of total persons) with the initial evaluation of existing persons, plus an additional 120 persons every month thereafter.
- Ability to receive updates on prohibited persons within hours of a new or updated record hitting the Automated Criminal History System.
- The ability for law enforcement officers throughout the state to receive information, on demand, on potentially prohibited persons while working a case, investigation, or arrest in the field.
- APPS also provides numerous process improvements that result in cost savings, such as:
  - Reduced handling and manual review of paper files;
  - Reduced data entry; and,
  - Reduced handling of electronic media (i.e., tapes, diskettes, CDs).

#### **Summary**

In summary, not only has Cal-DOJ improved its public service to the citizens of California but APPS stands to revolutionize the way other states implement systems related to armed prohibited persons. Building upon the success of APPS, this initial investment may be leveraged to provide additional services that allow states to share information with one another. APPS is the springboard for extending such capabilities to the public at large, thus compounding the benefits of public safety via data exchange in the years to come.