Police Information Systems within Ventura County

Background

The Ventura County Grand Jury reviewed key information systems within the County that support law enforcement. They included computer aided dispatch systems which support first responder efforts; resource management systems which store and allow the analysis of crimes; and criminal patterns and post apprehension systems which track individuals from apprehension, through trial and up to release and probation. These types of systems are summarized below.

Computer Aided Dispatch Systems (CAD)

These systems are the communications hub of daily police activity and handle emergency calls and dispatch calls. Their function includes maintaining an ongoing awareness of the location and activity of field personnel and responding to calls for service. Calls for service range from the serious (shots fired, robbery, accidents with injuries) to the most mundane. The data stored in these systems include location and status of units as well as a record of the types of response. The data in the CAD system is useful in developing statistics as to the location and type of criminal activity and is also an aid in the detection of patterns for proactive enforcement efforts. CAD system data supports patrol plan analysis, hot spot analysis and support for special unit response such as gang violence and domestic violence. This data may be integrated with specialized mapping programs for graphical analysis.

Record Management Systems (RMS)

These systems provide the main repository of data used in the documentation and investigation of criminal activities. RMS systems contain field reports, case documentation, preliminary charge documentation and support the production of standardized reporting for local and higher agency use.

The Ventura County Integrated Justice System (VCIJS)

In 1997 the Sheriff, District Attorney, Public Defender, Probation Officer and the Court Executive Officer agreed to integrate the "core" justice systems for the County. These include: criminal and traffic case management for the courts; criminal complaint filing and case management for the District Attorney and Public Defender; inmate and jail management; Sheriff report and records management; crime laboratory results and findings; issuance, inquiry and maintenance of all warrants and Correction Services Agency intake/investigations, field case management, inmate and facility management and central reporting and records management. This system provides a focus for all agencies within the County for tracking individual cases from initial booking through probation. This system was funded by federal grants. The system now supports police agencies throughout the County.

Methodology

The Grand Jury had discussions with agencies across the County. This included discussions with working level officers and crime analysts as well as discussions with senior police personnel. The Grand Jury also surveyed all five cities that had their own police departments as to the nature of their CAD and RMS Systems.

Findings

- F-1. RMS and CAD within the County represent a heterogeneous mix of technology. The complexity, variety of technical features and organizational interfaces make it difficult to compare systems directly. (See Table 1)
- F-2. Some RMS and CAD systems within the County are very advanced (e.g., Ventura and Simi Valley). Some are not. The Sheriff maintains RMS and CAD support to the five cities with which he has a contract to provide police services. These cities are Ojai, Moorpark, Thousand Oaks, Camarillo and Fillmore.
- F-3. Due to their size and budgetary constraints the smaller cities have relatively less sophisticated systems.
- F-4. Some RMS and CAD systems are designed to work together and minimize redundant information entry. Other RMS/CAD systems are stand-alone and may not share data easily, if at all.
- F-5. Some CAD systems have a Global Positioning System (GPS) capability. This capability exists in a number of systems but is not activated. (See Table 2.)
- F-6. There have been significant recent investments by larger police agencies in communications and information technology. (See Table 3.)
- F-7. The newer CAD/RMS systems provide a significant capability to improve police responsiveness.
- F-8. The VCJIS provides a successful model for technical cooperation among justice agencies throughout the County.
- F-9. The networked nature of the VCJIS provides a technical basis for developing a data warehouse of shared public safety information across the County.

- F-10. Criminal activities do not respect jurisdictional boundaries. In response to this fact, public safety agencies have established multi agency task forces to respond to specific issues such as illegal drug sales and criminal gangs.
- F11. Crime analysts and working officers have had to depend on informal contacts to access requisite information in multiple jurisdictions in order to develop a County wide view of specific criminal activities.

Conclusions

- C-1. In Ventura County, cross-jurisdictional information on criminal activities is difficult to gather and evaluate due to the variety of computer and software systems used to store police information. (F-1, F-2, F-3, F-4, F-5, F-6, F-7, F-8, F-9, F-10, F-11)
- C-2. Dispatch systems are central to any police agency. Considering this centrality, jurisdictional issues and recent investments it is not feasible to pursue a common system across the County at this time. (F-2, F-6, F-7)
- C-3. In order to share data across the County a networked data warehouse may be the best alternative in dealing with these disparate information systems. (F-9)
- C-4. In order to address information sharing across the County it is necessary to involve both Public Safety personnel as well as specialists in information and communication systems. (F-1, F-2, F-9)
- C-5. GPS tracking technology is available but not completely utilized. (F-5)

Recommendations

- R-1. The Sheriff and Police Chiefs charter a working group composed of crime analysts, sworn officers (from gang and street crime task forces) and technical specialists to identify the conceptual design of a data warehouse for Countywide police information. (C-1, C-2, C-3, C-4)
- R-2. The County Information Technology Department should provide technical support to the working group to evaluate the cost and technical characteristics of such a data warehouse. (C-4)
- R-3. The Sheriff and Police Chiefs evaluate this conceptual design and if appropriate:
 - A Pursue a federal grant to expand the Ventura County Integrated Justice System to include a data warehouse to also contain City RMS and CAD data. (C-3)
 - B. Make as part of the grant the acquisition of two integrated RMS/CAD systems for small departments that would be compatible with the data warehouse.

These systems would replace the current CAD and RMS systems operational in Port Hueneme and Santa Paula. (C-3)

- R-4. The Sheriff and Police Chiefs together evaluate, on a Countywide basis, the advantages and organizational, personnel and technical issues in deploying the GPS technology which already exists. (C-5)
- R-5. Considering the technical issues associated with modern policing, we recommend that the Sheriff and Police Chiefs support the establishment of two standing technical working groups. One group formed to consider data systems and a second group for communications. The objective of these working groups would be to address issues of technical standardization, coordination, identify improvement in capability through new technology and lowering costs. They would provide a resource for recommendations on investment in technical capability and provide a "Lessons Learned" resource from a technical point of view. These groups would be supported by the County Information System Department. (C-1, C-2)

Commendations

The Grand Jury commends the Sheriff, District Attorney, Public Defender, Probation Officer and the Court Executive Officer for their enlightened cooperation in the development and support of Ventura County Integrated Justice System.

The Grand Jury commends the crime analysts and working officers who have developed informal working relationships in sister agencies in order to make up for the lack of an integrated view of criminal activities across Ventura County.

Responses Required

Ventura County Sheriff R-1, R-2, R-3, R-4, R-5 Chief of Police, Oxnard R-1, R-2, R-3, R-4, R-5 Chief of Police, Port Hueneme R-1, R-2, R-3, R-4, R-5 Chief of Police, Santa Paula R-1, R-2, R-3, R-4, R-5 Chief of Police, Simi Valley R-1, R-2, R-3, R-4, R-5 Chief of Police, Ventura R-1, R-2, R-3, R-4, R-5 Ventura County Chief Information Officer R-1, R-2, R-5

		Date		
Systems	Agency	Acquired/Upgraded	Vendor(s)	DBMS
RMS	Oxnard	1999/1999	LittonPRC	Oracle
CAD	Oxnard	1999/1999	LittonPRC	Oracle
RMS	PT Hueneme		Spillman	Oracle
CAD	PT Hueneme	N/A	N/A	N/A
RMS	Santa Paula	1988/2002	TRACNET	
CAD	Santa Paula	1988/2000	"	
RMS	Sheriff	-/1999	PSSI	HP Turbo image
CAD	Sheriff	2002/2002	Tiburon	Oracle
RMS	Simi Valley	2002-Approved for 2003	Versaterm/ECM/TDSI	IBM Informix
CAD	Simi Valley	"	"	"
RMS	Ventura	2002/2002	Printrak/Motorola	SQL
CAD	Ventura	"	"	SQL

Table 1. RMS and CAD In Ventura County

Table 2. Comments on RMS/CAD systems

Systems	Agency	Comments	
RMS	Oxnard	Supports Police and Fire	
		Separate from RMS. Supports GPS- Not	
CAD	Oxnard	Activated	
RMS	PT Hueneme System for smaller agencies		
CAD	PT Hueneme CAD not implemented		
RMS	Santa Paula	Smaller system	
CAD	Santa Paula	No GPS	
RMS	Sheriff	Scheduled to be replaced	
CAD	Sheriff	Supports GPS-Not activated	
		Transitioning to a new integrated RMS/CAD	
RMS	Simi Valley	System	
CAD	Simi Valley	Supports GPS-Not activated	
RMS	Ventura	New CAD/RMS integrated system	
CAD	Ventura	GPS operational	

Systems	Agency	Acquisition Cost (\$K)
RMS	Oxnard	752
CAD	Oxnard	1,066
RMS	PT Hueneme	N/A
CAD	PT Hueneme	N/A
RMS	Santa Paula	N/A
CAD	Santa Paula	N/A
RMS	Sheriff	As part of Maint contract
CAD	Sheriff	2,082
RMS	Simi Valley	2,662
CAD	Simi Valley	For Both
RMS	Ventura	1,250
CAD	Ventura	For Both

Table 3. RMS/CAD System Costs