

## **CLEMIS PROJECTS**

### **OAKLAND COUNTY, MICHIGAN**

**As of March 2009**

#### **LAW ENFORCEMENT PROJECTS**

The County's law enforcement projects provide the County and its citizens through the Sheriff's Office and police departments a unique ability – tools necessary to fight crime. These tools are a critical component in providing a quality of life that the County's citizens have come to expect. Combined with the County's fire records management system and Emergency Response and Preparedness unit, the County believes it is actively providing unparalleled homeland security services to its residents.

Oakland County selected the same law enforcement record management system (RMS) vendor as the Michigan State Police (MSP) and the City of Detroit. Unfortunately MSP was unable to implement the system and chose to revert back to their legacy system. The City of Detroit completed the implementation of their RMS, and is sharing their law enforcement data with CLEMIS – providing an incredible investigative tool for use by law enforcement agencies in southeastern Michigan.

The County's law enforcement initiatives are very extensive and involve many inter-related projects as described below:

#### **CLEMIS - General**

The Court and Law Enforcement Management Information System (CLEMIS) is a combination of central information systems targeting public safety needs and more. The strength of CLEMIS is the sharing of data in County-operated and maintained regional databases which, in the aftermath of September 11<sup>th</sup>, places Oakland County's initiative in a truly unique position. CLEMIS is an organization supported by information technology that has existed for over forty years. CLEMIS is believed to be the largest law enforcement consortium in the nation providing full service functions. CLEMIS presently serves over 225 police, fire, emergency medical service agencies in a six-county region of Southeastern Michigan, via the use of the applications by the current 133 member agencies. Thirty three percent of the sworn Law Enforcement officers in Michigan are served by CLEMIS.

Few police departments in the nation are capable of sharing data with their neighbors (despite the mistaken belief by the public at large that this is routinely occurring). Because one of CLEMIS's guiding principles is data sharing, the centralization of this data places Oakland and its CLEMIS member agencies in a unique position for homeland defense. CLEMIS is an integral system in use by Oakland and other regional communities, as well as the State Police, Federal Bureau of Investigation, Immigration and Naturalization Services and other federal agencies.

In addition to its investigative powers, CLEMIS is used for mandated reporting to the State and federal governments, analyzing criminal activity, incident reporting, and other purposes. Chiefs of Police, Public Safety Directors, Sheriff Offices, Prosecutors, Courts and the Oakland County Executive work cooperatively towards a single purpose through the CLEMIS Advisory Board: to reduce criminal activity in Oakland County and the region. In addition CLEMIS facilitates integration between Police, Fire and Emergency Medical responses that serve the citizens within the six County Area.

Through the years, CLEMIS has continually improved their award-winning computer systems and capabilities. In December 1998, the County received \$17.1 million from Community Oriented Policing Services (COPS) office from a COPS MORE grant. The County and local police departments' share of the grant award and other County contributions have approached \$7.5 million. Oakland County provided these matching funds for the County's law enforcement agencies.

CLEMIS technology consists of:

- Central records management system with query tools for investigative purposes and mandated federal and state statistical reporting.
- Over 1,700 mobile data computers in police vehicles for transmission of data from dispatch to the vehicle as well as the required wireless infrastructure, these computers enable reports to be produced in the field in lieu of the office and provide access to data - keeping the officers in the field longer. It is noteworthy to point out that these in car computers are also an effective communication system allowing for a parallel and redundant communication between all mobile units and all dispatch points distributed over the Southeastern Michigan footprint.
- Seventy Seven computer-aided dispatch centers in six counties are using Computer Aided Dispatch (CAD) offered through CLEMIS covering the 225 public safety agencies. These tools are spatially referenced (that is, contain internal geographic information systems for subsequent analyses of criminal activities by area).
- Automated vehicle location - to control the assignment of public safety units in a police district and to facilitate mutual aid communications.
- Regional Mugshot system and related query tools with over 2 million images covering approximately 1,100,000 arrest cases, with approximately an additional 800 daily.
- Video arraignment (conferencing) system – see subsequent discussions.
- Partial capital funding of the OAKNet project.
- Criminal query tools based on GIS and the records management system.
- Livescan fingerprints, Automated Fingerprint Identification System (AFIS), and related query tools.
- Other functions serving to mitigate crime or improve in its investigation.

### **E 9-1-1 Call-Taking Equipment**

In late 1990s, the call-taking equipment at the then 31 public safety answering points (dispatch centers) within the County's borders did not conform to federal mandates involving wireless /

cellular telephone communications. The County Executive recommended and the Board of Commissioners approved the funding (roughly \$3.0 million) of this project from the County General Fund (despite having no legal requirement to assume these costs on behalf of the CVTs). The project was completed in early fiscal 2003. The CLEMIS provided Computer Aided Dispatch (CAD) utilized at the dispatch centers are Phase II compliant.

### **Public Safety Radio Communications (Voice and Data)**

In 1998, the law enforcement community requested that the present radio communications (voice) system be upgraded. Interoperable communications between dispatchers at PSAPs and emergency vehicles (police, fire, EMS) on local 150 MHz, 420 MHz, and 806 MHz systems could not communicate with one another with ease. Accordingly, the inability to communicate between dispatchers, public safety agencies and public safety vehicles in the field in emergency situations posed safety risks for public safety officials and residents.

To date, all 36 tower sites have been constructed and are ready for operation. The project is on budget but is roughly 18 to 24 months behind schedule arising from unanticipated regional frequency interference issues (now resolved), console interface issues (continuing) and new mobile / portable radios that will be provided by the radio vendor that will substantially improve communications. The system became operational, on a limited basis in 2008.

### **Fingerprint Systems**

Oakland County has 91 fingerprint units (Livescans) in operation within the CLEMIS consortium over a 6-county region. The live scans generate roughly one-quarter of the arrests in the State of Michigan. The program will continue to expand when federal grant awards are made available. The current CLEMIS fingerprint data base has 1,054,244 records that reflect arrests made in the last four years state-wide. Of all criminal cases solved with latent prints as evidence one third are palm prints. CLEMIS now provides the only digital data base with search capabilities in Michigan.

Oakland County has received two Federal appropriations, totaling \$2.5 million, to implement IBIS (Integrated Biometric Identification System) which will consist of an AFIS (Automated Fingerprint Identification System) housing over two million finger print records, growing at a rate of over one thousand print records each day. A key to this new system is the mobile handheld wireless fingerprint units for identification of suspects in the field and new Livescans that will enable the ability to capture palm prints. The county has reached an agreement with the Michigan State Police to share both sets of fingerprints. This project started in the 3<sup>rd</sup> quarter of 2006 and completed in February 2009.

Several of the Livescan fingerprint units are now at the end of their useful life. These units will require replacement. Funds for the replacement have already been set aside in the CLEMIS Operating Fund along with an \$874,670 Federal Appropriation awarded in 2008 for police departments located within Oakland County.

### **Video Conferencing (Arrestment)**

The County issued bonds to cover the funding of the video conferencing project (and jail

management as well). This project is one of the more complex video conferencing projects in the nation. It includes 43 police departments, 16 District Courts (involving over 40 judges and magistrates), 20+ Circuit and Probate Court judges, 3 jail locations, Community Corrections, the Prosecutor's office, and defense attorneys, and more. This project is unique in the nation because it involves a multi-point conferencing project available over the County's Wide Area Network (OAKNet). The project is so unique that the County has copyrighted it and will be marketing it through a vendor, with commissions being driven back into its maintenance.

The arraignment of offenders are conducted in police holding cells, mitigating the need for offender transport, security issues in local holding cells / County jail and otherwise accelerating the administration of justice. The County estimates that the impact of this component alone (time savings) would have the effect of adding roughly 200 new police officers on the streets without creating new police positions. This effort is a key component to the success of CLEMIS over the next several years and a required component to the COPS MORE grant commitments.

The video conferencing relies heavily on the County's OAKNet network connections between the County offices and the CVTs. Without OAKNet in place, the ability for the County to implement a video system that would be as effective would only be a dream. The speed of the video transmissions would have been too slow. The OAKNet system is being leveraged through the video conferencing system both for the County's use and the local police departments.

As a secondary component of the video arraignment project, the transmission of CLEMIS forms involving the arrest, warrants and other prosecutor information and subsequently court records can be assembled entirely electronically. Thus, the heavy reliance on faxes and transmission of paper forms will be alleviated with the implementation of this system. The electronic filing of the video arraignment, forms and other documentation is accessible via the Internet. The video arraignment system is also used by the police departments and the county prosecutor's office to accomplish the process of warrant requests. The system allows the ability for the prosecutor's to receive and review documents, evidence and have face to face conversations. The savings due to the need to no longer travel to the prosecutor's office has saved many hours of police officer's time.

The County has now finalized the deployment of the video equipment to the courts. The prosecutor, jail, community corrections and a number of police departments and courts are fully functional. The deployment of the video arraignment project was entirely dependent upon the gigabit network upgrade (see OAKNet discussions). The OAKNet bandwidth increase was necessary to accommodate the video conferencing efforts.

With the completion of the video arraignment project, the County will begin using the system for other functions involving video conferencing, including remote telemedicine for jail inmates, international conferencing for economic development, remote training, etc. The County CIO was a speaker in a presentation set in Australia using the video equipment, all from the County's Information Technology facility.

The County has copyrighted the video conferencing software and has begun to market it through an outside vendor. The County expects to receive 5% of the gross sales of the product as a commission.

The OakVideo function is now also providing connectivity to the State of Michigan prison system. This will reduce the requirement of transporting inmates from the State Prisons to Oakland County Courts. Macomb County and an adjacent County will also be using the OakVideo project shortly. In doing so, further economic benefits for both counties will be obvious as cross-county transports of inmates will be a thing of the past. The benefits are clearly increased safety to the public as well as a substantial saving in Public Safety man hours. The OakVideo has provided the ability to facilitate testimony from Arizona and New York for Oakland County trials. Interstate arraignments have taken place with the defendant four and five hours driving time away while they were incarcerated in County or State correctional facilities, saving the tax payers thousands of dollars for transport and lodging.

### **Mugshot**

The County started implementation of a new web-based mugshot system in 2005. Almost all of the law enforcement agencies in the County's borders were provided a mugshot capture station as well as many of the CLEMIS members using Livescan for a current total of 87 capture stations located in 82 agencies. Combined with the fingerprint system, the County will have the most advanced biometric system in the State.

### **Jail Management System**

The County started the effort of replacing the jail management system in 2006, and is in the final efforts with an expected migration by the 3<sup>rd</sup> quarter of 2009. The County's present system has been developed over time with significant limitations in securing accurate information on a timely basis for use in managing the offender population being held in the County jail. The new system is expected to allow the County to manage its offenders better and assist the judiciary in moving low-risk offenders into diversionary programs. A bond is funding the jail management system.

### **Web Hosting**

The County began hosting web sites for law enforcement agencies in 2004. The present web-hosted sites, CrimeWatch, are for public access for programs such as neighborhood watch, securing forms and similar efforts. The County has finished the internal police departmental sites that would reside behind firewalls not accessible to the public. Finally, the web site architecture is also finished for the data sharing components of the web site. By the end of 2006, the County implemented 13 local law enforcement agencies. Additional agencies have expressed a desire to utilize this service and non-Oakland County agencies have stated they will be funding Oakland County for the effort.

### **COMPLETED PROJECTS**

In addition to the projects cited above, the following projects have been completed in the past several years and are now operational:

- **Fire Records Management System (FRMS)** - The Board of Commissioners appropriated approximately \$900,000 towards the completion of a centralized FRMS for 29 fire

departments located in Oakland County. This uniform system allows relatively seamless data transmissions between these separate applications (that is, dispatch stations and records management system). The FRMS enables fire departments to comply with federally mandated (but unfunded) reporting requirements. Few fire departments, if any, would have been compliant had the FRMS not been developed.

- **OAKNet** - Because of the increased communications needs between the County and CVTs relating to CLEMIS, E9-1-1, GIS, data warehouse, land records system, public radio voice, video and other initiatives, the County launched a study entitled Metro-Area Network / Wide-Area Network (now named OAKNet). The OAKNet study involved determining the size of the communication network (or bandwidth) necessary to accommodate the data, video and voice transmissions. The project was largely completed in 2001.

This connectivity to the CVTs enables the County to address the law enforcement needs, land records data sharing, video arraignments of offenders, mugshot transmissions, public safety radio (voice) communications, Internet service to CVTs, and much, much more. Presently, half of the CVTs in the County use the OAKNet services to access the Internet and related email services. There are roughly 170 individual sites connecting to the OAKNet. The County recently updated this fiber optic network to a gigabit speed.