

**DISASTER PREPAREDNESS MEETS ECONOMIC CRISIS
REGIONAL TECHNOLOGY CENTER MODEL**

by

**Wendy Petry
Pasadena Police Department**

March 2009

COMMAND COLLEGE CLASS #44

The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

The views and conclusions expressed in the Command College Futures Project and journal article are those of the author, and are not necessarily those of the CA Commission on Peace Officer Standards and Training (POST).

DISASTER PREPAREDNESS MEETS ECONOMIC CRISIS REGIONAL TECHNOLOGY CENTER MODEL

Have you ever attended a trade show only to be left with the sinking feeling that your agency does not have the manpower or financial resources to keep up with technology, or that your region is not as prepared for a disaster as it could be? New products designed to enhance day-to-day operations and improve outcomes in large-scale emergencies are widely available. Yet it is becoming increasingly difficult to dedicate manpower and financial resources toward the implementation of new technologies. If you could find a method to implement technology projects and develop regional emergency response plans using limited man-hours while improving emergency preparedness would you consider changing the way you do business?

Regional technology centers may hold the key to improved efficiency at a fraction of the cost of business as usual. On the pages that follow, you will see a path toward a technology center which allows agencies to maintain their operational autonomy while enjoying the benefits of leveraging the combined resources of multiple agencies. The net result is a process to encourage region-wide strategic planning for desired technologies and simplified acquisition and implementation efforts for the benefit of all involved.

Shared Resources

To get a feel for the difference a technology center would make, it is useful to provide an example. Let's compare the traditional individual agency model of implementing a project to the technology center model using license plate readers as an example. License plate readers use advanced character recognition to scan the license plates of vehicles within sight of the reader. Readers can be active at fixed locations

where vehicles drive by or they can be affixed to vehicles for mobile deployment. The application of license plate readers is two-fold. License plates are automatically compared against the stolen vehicle database so officers are immediately informed of a nearby stolen vehicle which serves an immediate enforcement function. The system also allows for the collection of mass data concerning the time and location of both moving and parked vehicles which serves future investigative needs.

Using the standard method of deployment, each agency assigns a team to research and compare available products, identify a funding source, run the project through the agency's approval process, and deploy and manage the technology and data. This typically requires police officers, managers, and computer experts to spend hours bringing the technology into use and then devote time to continued management of the system. In the case of license plate readers, management of the technology would entail downloading stolen vehicle information at regular intervals from the national database, and electronically storing license plates, photos and time and location information on local servers. License plate readers are then deployed in the field for patrol officers to identify stolen vehicles and investigative officers within that agency have access to the stored information.

If the same technology project were assigned to a technology center, each agency involved in the center would keep their officers in the field until the technology experts in consultation with officers had researched products and narrowed the options to the most appropriate candidates. Representatives from the involved agencies would then come together to learn about the pros and cons of each system and make an educated selection for the region based on unit price and overall capability. Officers would then return to

the field and let the technology center manage the procurement process, deployment, and management of the system. Once deployed a shared system would allow for a common collection and retrieval point so every agency would have access to the combined data.

This approach will save staff time in that one small team of individuals would do the research, complete contract and acquisition issues, implement the solution, train users, and work with a marketing team to complete a marketing campaign. This is in comparison to each of 12 agencies having at least one person manage the entire project for the benefit of a single agency. The ratio of staff hours spent to implement a project for a group of 12 agencies could be as high as 12 to 1, and some agencies would benefit from projects without having to be involved until the implementation and training phases.

Contrasting the technology center model to common methods reveals that officers will stay in service more of the time, a single research effort will benefit many agencies, and overall manpower needs will be decreased exponentially based on the number of agencies involved. Consider a group of twelve agencies of various sizes working together. Where twelve projects would have been needed, and conceivably twelve disparate systems installed or implemented, only one project and a handful of professionals will be needed to implement a system that will improve information sharing between the agencies.

Imagine the public's confusion if twelve agencies in close proximity to one another each implement a different solution with a different phone number. Many agencies are considering implementing "text-to-tip" capabilities in their communities which allow cell phone users to text information to police departments anonymously. Each agency wishing to receive such messages would be assigned a keyword that needs

to be the first word of the message to a specific phone number so the message will be routed properly. With the technology center model, agencies could realize the added benefit of mass marketing the new “text-to-tip” capabilities for the entire region with everyone operating on a shared platform and using a common keyword structure. This model stands a good chance of enhancing public trust both by saving time and money, and also enhancing service to the community.

Texas uses a Council of Government (COG) approach to implementing Statewide 911 systems. Agencies are assigned to Councils that handle equipment acquisition and implementation for a number of agencies. This is in contrast to the California model where individual agencies are reimbursed for equipment deployed for the benefit of a single agency. Because of on-going regional efforts Texas was able to deploy new IP based 911 technologies as soon as they became available. In contrast, California agencies are still grappling with developing funding mechanisms for solutions that involve more than a single agency. You can read more about the Texas COG approach at the Texas Association of Regional Councils website <http://www.txregionalcouncil.org>.

The Phased Approach

Development of a technology center involves four phases: Phase I includes building trust between involved agencies. In Phase II a governance structure is developed to allow partners to conduct research and plan projects together. Phase III requires a secure virtual connection to allow for improved communication and resource sharing among the agencies. Phase IV is the designation of a virtual and or physical entity that serves the combined technology and emergency planning needs of partner agencies.

Agencies and regions come in all shapes and sizes, so consider your region, your agencies' needs, and your ultimate goals. Consider what operational partnerships exist or that your agency could benefit from within your region. **The first phase is to build trust**, so evaluate the trust that exists between the agencies and identify an initial group of partners to work with that stand a good chance of success. If deep trust has already been established it may be possible to work toward a significant project. If there is still a need to develop trust, select a meaningful project with clear objectives that the group is likely to easily reach consensus about. It could be something as simple as three agencies researching the best satellite backup systems available for use in the event of a telephone outage. Sometimes it is easiest to build trust between entities when there is little or no financial risk involved. Sharing resources or data with neighboring agencies has become a common requirement in grant specifications. Framing a project around an available grant that requires such partnerships could simplify gaining acceptance from the partners you hope to work with. The most important thing is to get started with building partnerships and trust because these are the foundations of successful regional cooperation.

Maintaining operational autonomy is often a valid concern in trust building. Each agency wants to hold fast their ability to develop culture and define priorities. Specifying that operational autonomy is an important aspect of your regional effort will help build trust and develop alliances. Selecting a project that will require few operational directives will help build trust where there is none. Once trust is developed, operational requirements can be co-developed by the group with everyone's interests in mind. While

compromises may be necessary from time to time, an open dialogue in settling differences will keep trust strong.

Joint projects often require some level of governance whether to develop procedures or to co-mingle assets. **Phase II is the development of a governance structure.** In California we use joint powers authorities (JPA) under GC6500. Ask attorneys in your jurisdiction how to develop an appropriate governance structure for your region. As soon as there is a need for governance for a project, take the opportunity to develop a governance model that meets the needs of the current project while also encouraging regional planning and providing governance for future projects. Design your governance board and committees with membership and meeting requirements to encourage region-wide strategic planning. The virtual entity created through a governance structure can provide added benefits such as combined emergency planning and cooperative training efforts.

Communication and information sharing are vital components in any regional effort. **Phase III is the implementation of a secure network** to connect all involved agencies. Early planning efforts are likely to identify this need. It is possible there are already networks in place and available for use. The governing board should bring together the best network minds to research and present the best network solutions available for the region. With a network in place it will be easier to plan and deploy future projects.

Working with a dedicated technology team for the benefit of a number of agencies will be efficient for vendors as well. The procurement process is likely to require fewer demonstrations, proposals, contract variations, training sessions, and

maintenance agreements. A single implementation process will further improve efficiency. With these factors in mind as well as bulk purchasing power it stands to reason that vendors will be more motivated to win contracts for regional efforts bringing added financial benefits.

After the region has been working together on a number of projects it may become apparent that developing a separate entity is the next logical step. **Phase IV is the implementation of a separate physical entity, a technology center.** Once a technology center is implemented it can provide added benefits such as having employees engaged as part of the regions' disaster response. Imagine a technology center serving the needs of twelve communities following an earthquake that has impacted each agency in varying degrees. The technology center can correct shared technology issues for the benefit of all twelve agencies, and technology center employees can be trained to manage certain tasks associated with the regional EOC. Consider management and delivery of charged batteries as one simple and important example.

Regional Partnerships

There are joint efforts in existence that hold valuable clues to the rewards and complications that might be encountered. Consider these examples:

LARICS and ICIS

Los Angeles County is home to two radio interoperability programs. The concept for both of these systems began forming as early as 2001 when radio interoperability became a key issue after the events of September 11, 2001.

First is the Interagency Communications Interoperability System (ICIS). ICIS formed as a Joint Partnership Authority (JPA) with a handful of agencies in 2003. This

group has since implemented an integrated trunked radio system of systems that now covers more than a third of the Los Angeles region and more than 7,500 radios from more than a dozen municipal cities operate on the system. The system grows and incorporates new users every year.

Second is Los Angeles Regional Integrated Communications System (LA RICS), affectionately known as 'ICIS on steroids,' which stemmed from the Regional Interoperable Steering Committee (RISC). RISC was formed in 2005 and LA RICS finally has a JPA governance structure in place as of February 2009 with a Board to be seated in April 2009. LA RICS plans to serve the radio interoperability needs of all public safety agencies in Los Angeles County. The earliest hope for LA RICS implementation is 2012 with conservative estimates placing implementation closer to 2018. Some are concerned that technology incorporated in the 2009 system design will be out of date prior to system implementation. It is unknown at this point whether or not the components of ICIS will be incorporated into the system.

N-DEx

A May 2008 article in Computerworld outlined what progress has and has not been made toward improving data sharing among federal, state, and municipal law enforcement agencies¹. Robert Mitchell said "In the first phase of the \$85 million project, N-DEx will incorporate about 100 million records, including records from federal agencies." That's 85 million dollars just to begin an extraction process to collect and share data from relatively few of the disparate systems that need to share data.

¹ Mitchell, Robert L. (May 2008). Criminal Negligence: The state of law enforcement data sharing. Retrieved May 18, 2008, from Computerworld Government <http://www.computerworld.com>

Verdugo Fire Communications Center

The Verdugo Fire Communications Center came into being in 1978 when Glendale, Burbank, and Pasadena recognized the benefits of combining efforts. Each agency was able to move fire and medical dispatching out of their respective police department dispatch centers to provide a more specialized service. Today the Center dispatches for the eleven municipal fire departments that make up the Los Angeles County Area 'C' operational area and have recently expanded to include the first city outside of the operational area. (<http://fire.ci.glendale.ca.us/verdugo>)

West Covina Services Group

West Covina Services Group (WCSG) is a revenue producing division of the West Covina Police Department. The operation began developing software and providing services to other agencies in 1995. Today they provide hosted CAD/RMS and other law enforcement software and associated services to nearly thirty other law enforcement agencies. Most agencies served by WCSG are within the greater Los Angeles area, and they serve Sparks Nevada. (www.wcsg.net)

There is a threshold when it comes to economy of scale. If the initial scale is too large, the benefits may not be realized due to the complexities of the massive undertaking. The question of scale and the benefits of phased implementation are clear in the preceding examples. The success of LARICS is still an unknown, but in contrast to ICIS it is already expected to take at least four times as long to reach the implementation phase. With technology changing at such a rapid pace, there is concern the project will be operating on old technology before it ever gets started. It is important, therefore, to select partners and projects in consideration of the size and scope of the project as well as

the complexities of the technology. In some cases, fewer agencies developing a limited application first is prudent, with other partners joining the project after the concept is proven, as was the case with both ICIS and Verdugo Fire Communications. ICIS started with six agencies who connected to a master radio site one at a time, and Verdugo Fire Communications started with three agencies and grew to the current 12 members over a number of years.

One Model

On March 31, 2009, twenty agencies involved in Los Angeles County Disaster Management Area C, the Interagency Communications Interoperability System (ICIS), Verdugo Fire Communications, and/or the Foothill Air Support Team (FAST) came together to consider the Interagency Partnership for Emergency Planning Joint Partnership Authority (iPEP JPA). These agencies met the trust requirements of Phase I long ago. The purpose of this JPA is “to create an agency that will engage in regional and cooperative planning and coordination of governmental services to enhance day-to-day public safety operations and emergency preparedness. As part of this purpose, Members will collectively select, research, identify funding sources, and implement or recommend implementation methods for a variety of projects.” Once the JPA is adopted Phase II will be complete.

The first project, and the catalyst of this JPA, is the Regional Integrated Next Generation-ready 911 System (RING911). This system will be funded under the usual state funding mechanisms for 911 equipment, and it will enhance continuity of operations and communications between agencies on the IP based network that is being developed for this purpose. Implementation of a secure IP network will complete Phase III.

The Operations Committee of the JPA will meet monthly and the full board will meet at least quarterly. Each of the involved agencies has a stake in how Urban Area Strategic Initiative (UASI) grant funds are allocated in Los Angeles County. There is a good chance that 20 iPEP agencies can work in concert to positively influence that allocation process which has historically been strongly inclined to favor larger agencies in the region. These are the first steps toward Phase IV. In the future it may develop into a physical entity with enhanced capabilities and even broader implications.

The model for your region may look much different from this. Wherever you provide service, you have partners to consider. With proper planning and through connecting with those partners, the benefits can be significant.

Conclusion

Isn't it time for you to identify your partners, solidify or build trust, and develop a governance structure that will encourage region-wide strategic planning? Those efforts will allow you and your partners to work toward improved outcomes and efficiencies immediately. If nothing else good comes out of this economic crisis, let improved efficiencies be born in your region. The partnerships developed and strengthened now will continue into better economic times for even greater opportunities in the future. Once it is understood how the technology center model can employ the efforts of a single agency for the benefit of many, strategic planning efforts are likely to result in a long-range vision toward developing a regional technology center.