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INCREASING INFORMATION SHARING AMONG INDEPENDENT POLICE DEPARTMENTS

by

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March 2009

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One can argue that the need for accurate information shared in a timely manner is the lifeblood of any agency responsible for defending the home front. This dynamic is further enhanced when municipal law enforcement agencies exist within a large urban area such as Los Angeles County (CA), which is a target rich environment.

Using a quantitative analysis this thesis examines information and intelligence sharing networks, data collection methodologies, common technical platforms (voice and data), and financial considerations toward increasing information sharing among independent police departments and suggests methods to improve information sharing capabilities.

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INCREASING INFORMATION SHARING AMONG INDEPENDENT POLICE DEPARTMENTS

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I. INTRODUCTION

The 9/11 Commission Report identified several factors that contributed to the government's inability to detect or prevent the attacks on the World Trade Center. In part, the Commission identified a lack of information and intelligence sharing among American law enforcement agencies (federal, state and local levels) as a significant shortcoming.[1] This point was again illustrated in a 2005 report, Lessons Learned, Information Sharing, *LLIS Intelligence and Information Sharing Initiative: Homeland Security Intelligence Requirements Process,* wherein the Homeland Security Advisory Council (HSAC) Intelligence and Information Sharing Final Report identified the lack of a formal intelligence requirement process as a missing critical component within the nation's domestic intelligence sharing framework.[2]

American law enforcement agencies have made some progress in their efforts to increase information sharing since the 2001 World Trade Center attacks; however, consistently sharing timely and accurate information continues to represent a significant challenge. The mission for American law enforcement is clear and well defined: We must collect and generate information, analyze the data to develop accurate intelligence estimates, and use the final product to strategically deploy police resources at all levels and across the nation to combat terrorism and criminal activities. This thesis will focus on the information and intelligence sharing among American law enforcement agencies operating in metropolitan areas based on a quantitative analysis of the 46 independent police departments located in Los Angeles, CA. The independent police chiefs in Los Angeles were selected, in part, because they are perceived (by other law enforcement executives throughout the United States) as innovative homeland security leaders addressing issues such as, regional response, resource integration, and interagency

[1] National Commission on Terrorist Attacks Upon the United States. *The 9/11 Commission Report, Final Report of the National Commission on Terrorist Attacks Upon the United States* (W.W. Norton & Company, New York, 2004).

[2] Lessons Learned, Information Sharing, LLIS Intelligence and Information Sharing Initiative: Homeland Security Intelligence Requirements Process (n.p: December 2005), http://www.dhs.gov/xlibrary/assets/Final_LLIS_Intel_Reqs_Report_Dec05.pdf [accessed September 3, 2008].

cooperation. Accordingly, American law enforcement agencies often look to the independent chiefs of police within Los Angeles County when considering how best to implement strategic response, prevention, and preparedness protocols. Additionally, the independent police chiefs operating within Los Angeles County, like their metropolitan municipal counterparts, have the authority to make, change, influence, and implement homeland security polices, which can increase the safety margin at the local level. Moreover, the 46 independent police chiefs share like and similar concerns with their counterparts who are responsible for securing the home front, maintaining public order, and preserving democracy.

The research, analysis, and conclusions contained in this thesis are based on two primary assumptions. First, police departments operating in metropolitan areas throughout the United States experience similar information and intelligence sharing challenges and are limited, in part, by well defined budgets. Second, by increasing information and intelligence sharing among American law enforcement agencies, it will likely increase their capacity to detect, derail, or prevent terrorist attacks or criminal activity.

A. PROBLEM STATEMENT

Information sharing between independent police departments in Los Angeles is a crucial component in the effort to increase terrorist and criminal detection capacity at the local level. Of equal concern is the nature of the sharing of information between independent police departments and their regional fusion or intelligence centers. There are two primary reasons why independent police departments operating in Los Angeles County have not effectively shared information or intelligence with other similar organizations.

First, independent police agencies have not shared their information needs with their contiguous cities, in part because they are encouraged to operate independently of one another. For example, the Santa Monica Police Department is bordered by the Los Angeles Police Department on all sides, and yet interaction between police officers from both agencies at the line level usually occurs only during law enforcement activities or

emergencies. The two departments have rarely proactively exchanged information needs relating to homeland security efforts in order to increase their capacity to disrupt terrorist groups.[3] In other words, the Santa Monica Police Department conducts policing duties, for the most part, independent of and without concern for the needs of the Los Angeles Police Department and vice versa.[4]

Second, many independent police departments in Los Angeles County do not have the technical platform (data or voice networks) necessary to facilitate effective and timely information exchange between agencies.[5] For example, the Santa Monica Police Department is separated from the Culver City Police Department by less than five miles (the City of Los Angeles separates the two jurisdictions). Since the Santa Monica Police Department operates disparate data and voice networks, they cannot easily exchange information with Culver City.[6]

The inability to effectively share information is complicated when independent police departments attempt to communicate with their fusion center or other intelligence units for the same reasons.[7] As a result, independent police agencies in Los Angeles County and their regional fusion centers, for the most part, are unsure or unaware of one another's information or intelligence needs. For example, in Los Angeles County information and intelligence is not consistently shared between police agencies and of equal concern it is not consistently shared with the Los Angeles Joint Regional Intelligence Center (LA JRIC). The information gap contributes to an overbroad intelligence report distributed by the LA JRIC that offers no perceived value for police

[3] Michael Hillman (Deputy Chief of Police, Los Angeles Police Department), remarks in a private conversation with the author, Los Angeles, February 15, 2008.

[4] For example, the Santa Monica Police Department has not shared its homeland security response protocols, mitigation or preparedness efforts with the Los Angeles Police Department even though both agencies share jurisdictional borders. Moreover, neither agency has exchanged information or intelligence needs requirements. As a result, information is not collected in the same method nor subjected to the same analysis.

[5] Rick Adams (Commander, Los Angeles County Sheriff's Department – LA RICS Law Enforcement Liaison Officer), remarks during a private conversation with the author, Los Angeles, January 22, 2008.

[6] Eric Uller (Senior System Analyst, City of Santa Monica), remarks during a private conversation with the author, Santa Monica, January 31, 2008.

[7] Robert Galaneau (Lieutenant, Los Angeles County Sheriff's Department – Assigned to the Los Angeles Joint Regional Intelligence Center), Los Angeles, January 14, 2008.

agencies and is not frequently used to deploy police resources.[8] Typically, the LA JRIC collects and distributes open source material or newsworthy articles in an effort to inform their clients. As a result local independent chiefs feel they cannot use the intelligence to increase operational capacity or deploy police resources to combat crime or terrorism.[9]

The lack of information exchanged between local law enforcement and their fusion centers is not a problem to police agencies in Los Angeles County; rather it is a national concern among local law enforcement agencies.[10]

Information, voice and data, is critical for American law enforcement agencies and is used to detect, deter, prevent, prepare for, and if necessary respond to violent acts of terror. Additionally, information plays a critical role in the pursuit and eradication of criminal activity.

Information sharing among independent police departments is particularly important in Los Angeles County (CA). Los Angeles County is one of the largest urban areas in the nation. In terms of land area, Los Angeles County is more than 4, 000 square miles and is home to more than 9,948,081 people. [11] The county is policed by 46 independent municipalities and the County Sheriff who is responsible for providing contract police services to another 41 cities.[12] Each independent police department has a Chief of Police while the Los Angeles County Sheriff's Department is lead by a Sheriff elected by the people.

The vast majority of the independent municipal police departments in Los Angeles County have between 50 – 149 sworn police officers, with the exception of the following agencies: Burbank, El Monte, Glendale, Inglewood, Long Beach, Los

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[8] Michael Downing (Deputy Chief of Police, Los Angeles Police Department), remarks during a private conversation with the author, Los Angeles, January 14, 2008.

[9] Statistical results extracted from an online survey conducted by the author as part of this research. The Los Angeles County independent chiefs of police served as the respondents. The entire survey is outlined in Chapter IV.

[10] Michael Downing (Deputy Chief of Police, Los Angeles Police Department), opening remarks at the Joint Regional Intelligence Conference, Los Angeles, April 10 – 11, 2008.

[11] United States Census Bureau, *State and County Quick Facts, Los Angeles County, California, 2006 Estimate*, http://quickfacts.census.gov/qfd/states/06/06037.html [accessed, March 12, 2008].

[12] *Los Angeles Almanac*, http://www.laalmanac.com/crime/cr67a.htm [accessed, March 25, 2008].

Angeles, Pasadena, Pomona, Santa Monica, and Torrance.[13] The Los Angeles County Sheriff's Department is comprised of more than 9,000 sworn deputies and is considered by many as the lead law enforcement agency in the county.[14] The nexus linking the greater law enforcement community in Los Angeles County is information, which enhances the collective law enforcement community's ability to protect lives and property, mitigate emergencies, and preserve public order. Without accurate and timely information, the efforts of the independent police departments to maintain public order would be greatly diminished.

Effective information sharing is difficult to quantify, define, or achieve, in part because the needs, resources, and performance expectations of the 46 independent police departments in Los Angeles County are as different as the communities they serve.[15] Adding to the complexity of sharing information is how it is collected, analyzed, distributed and interpreted by the police departments and the intelligence agencies in the county. However, these challenges must be overcome if America's independent police chiefs hope to increase information sharing among their contiguous municipal partners and their fusion centers.

B. RESEARCH QUESTIONS

This thesis begins to answer the following questions:

- Do independent law enforcement agencies operating in metropolitan areas share information effectively among themselves and their fusion centers?

[13] For the purposes of this thesis the research has divided the Los Angeles County Independent Police Departments into the following categories: Small agencies 0 – 49 sworn officers, medium agencies 50 – 149 sworn officers, and large agencies 150 or more sworn officers.

[14] The Los Angeles County Sheriff's Department is responsible for and provides services to the independent police chiefs within the county, which includes the Los Angeles Police Department. For example, the Sheriff's Department is mandated by law to provide Mutual Aid Response assistance, provide custody facilities for post arraignment prisoners, and serves as the region's liaison to the State of California, Office of Emergency Services.

[15] For instance, the communities demand and expect different styles and levels of law enforcement services, engagement, and integration. In other words, many law enforcement agencies throughout the United States tailor their policing services to best fit and meet community expectations. For example, community policing might be the operational strategy used to combat crime in a particular region while in another community the public expects an overt, almost military, police presence to deter criminals.

- Are independent law enforcement agencies operating in metropolitan areas using intelligence estimates [reports] to increase capacity to detect terrorists or criminals and/or assist with deployment strategies?

- Additionally, the following associated questions will be briefly examined and will be helpful in exploring or answering the primary question:

- Can a common technical platform or network (interoperable communications) increase information sharing between independent police departments operating in metropolitan areas and their fusion centers?

- What would be the impact to information sharing between independent law enforcement agencies operating in metropolitan areas and their fusion centers if federal funding is withdrawn?

C. SPECIFIC RESEARCH OBJECTIVE

The specific research objective in this thesis is to identify effective methods for information sharing between independent police agencies and their fusion centers towards a strategic and comprehensive effort to safeguard the homeland while protecting their communities. Next, to determine if sharing information with their contiguous municipal partners will significantly assist in the homeland security effort. These challenges are complex and have national implications. For example, if law enforcement agencies are unable to increase information and intelligence sharing between one another, they are predestined to operate independently, which erodes the collective homeland security effort. In other words, American law enforcement agencies can increase their effectiveness to combat terrorists or criminals if they are aware of each other's information and intelligence needs and work collaboratively to resolve data needs. Moreover, by increasing information sharing independent police chiefs will improve their ability to assess future threats, protect assets, and deploy police resources strategically.

D. SIGNIFICANCE OF RESEARCH

As noted in a report released by the Director of National Intelligence, J.M. McConnel in February 2008, information sharing is a top priority in the nation's strategic

agenda for change.[16] The need for information sharing is significant at all levels of government. Homeland security leaders and practitioners interested in increasing information sharing to combat terror and suppress criminal activity includes: The Department of Homeland Security, the Federal Bureau of Investigations, the Department of Immigration and Customs, and the Drug Enforcement Administration to name just a few. Additionally, the private sector should also be included in the list of homeland security practitioners who are also interested in better information sharing. Lastly, information sharing impacts and is critical to the future education of homeland security leaders and practitioners. There are numerous colleges, universities, and other education institutions currently developing future homeland security experts that could also benefit from the findings of this research.

- The immediate consumers of the research provided in this thesis are: the independent chiefs of police in the county; the Los Angeles County Sheriff's Department; metropolitan chiefs of police operating throughout the United States; the Los Angeles Joint Regional Intelligence Center; other intelligence centers operating in Los Angeles County (JTTF, EWTG, etc); non-municipal law enforcement (Los Angeles School/Campus Police); and the port security organizations (Los Angeles Port Authority, Los Angeles World Airport Police). Since the Los Angeles Joint Regional Intelligence Center serves a six county region, those counties beyond Los Angeles (Orange, Riverside, San Bernardino, Santa Barbara, and Ventura) would also benefit from the data contained in this thesis. The immediate list of consumers is not limited to the local and county levels of law enforcement.

- Literature: the significance of this research will prove the value of information sharing between independent police agencies in Los Angeles County and their fusion center, LA JRIC, by using local information collection methods and producing localized, timely and relevant intelligence. Little has been written in this realm; however, this thesis will add to the existing body of work.

[16] United States Office of the Director of National Intelligence, *Information Sharing Strategy* (Washington, DC: United States Intelligence Community, 2008), http://www.dni.gov/reports/IC_Information_Sharing_Strategy.pdf [accessed November 16, 2008].

- Future research efforts: future research efforts should include corroboration of this thesis's findings and extensions of these concepts into other communities and professions, both public and private. Future research efforts to determine if the Joint Terrorist Task Force (JTTF), the Terrorist Early Warning Group (TEWG), or other intelligence centers diminish the operational capacity of the fusion center as they compete for the same information and currently operate disparate information sharing systems. Lastly, future efforts should examine the causal factors (social, cultural, environmental, political) contributing to information gaps within the law enforcement community.

E. REVIEW OF RELEVANT LITERATURE

1. Information Sharing

How information is shared is a critical component to fuse local, state, and federal law enforcement resources. The opportunity for justice information sharing is often thought of in two dimensions: vertical sharing among local, state, tribal, and federal government entities; and horizontal sharing among first responders, detectives, and intelligence analysts. Improving information sharing throughout the justice community is a national priority and remains a critical function of the fusion centers.

In the research prepared by the Integrated Justice Information System Institute, Alan Harbitter, Chief Technology Officer, and PEC Solutions illustrates that information sharing is a national priority and remains a critical function.[17] There are a number of documents recommending that local, state, and federal agencies share information with one another to increase law enforcement's ability to disrupt terrorist organizations, including the *National Criminal Intelligence Sharing Plan* (NCISP). By following the recommendations set forth in the NCISP, law enforcement agencies can increase their capabilities to improve intelligence sharing.[18]

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[17] Alan Harbitter, "A Critical Look at Centralized and Distributed Strategies for Large-Scale Justice Information Sharing Applications: A White Paper Prepared by the Integrated Justice Information Institute." (n.p., n.d.) http://www.ijis.org/db/attachments/public/16/6/CentVSdistrAHH.pdf [accessed, September 20, 2008].

[18] United States Department of Justice, Bureau of Justice Assistance, *National Criminal Intelligence Sharing Plan* (Washington, DC: Bureau of Justice Assistance, 2005), http://it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf [accessed January 5, 2008].

The National Strategy for Information Sharing[19] clearly supports the GAO's findings and recommendations [to Congress] that federal leadership is needed with respect to fusion centers and information sharing.[20] Referencing Guideline 2 of the President's December 16, 2007, *Memorandum to Heads of Executive Departments and Agencies,* and the information sharing strategy illustrates the need for a "common framework" governing the roles and responsibilities between the local, state, federal and tribal governments, and the private sector entities.[21] The *National Strategy for Information Sharing* considers how state and local fusion centers may further disseminate terrorism related intelligence and information to others in the region primarily through a fusing process.

Moreover, the strategy addresses the important issue of public and private collaboration and integration to increase law enforcement's ability to combat terror and protect critical infrastructure. The plan also identifies the sensitivity of critical infrastructure information provided by the private sector, and the critical need to maintain confidentially of the data.[22]

a. Common Technical Platforms

The desire to share information between independent police departments and their contiguous municipal partners and the fusion center is but a single component of communicating information or intelligence needs. Another critical component towards increasing information sharing is how the data is exchanged. The current research suggests that interoperability, or in other words sharing information on a common technical platform, is a crucial element to enhance data sharing.

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[19] White House, *National Strategy for Information Sharing: Successes and Challenges in Improving Terrorism-Related Information Sharing* (Washington, DC: White House, 2007), http://www.whitehouse.gov/nsc/infosharing [accessed January 5, 2008].

[20] United States Government Accountability Office, *Homeland Security: Federal Efforts are Helping to Alleviate Some Challenges Encountered by State and Local Information Fusion Centers* (Washington DC: GAO, 2007). http://www.gao.gov/new.items/d0835.pdf [accessed January 5, 2008].

[21] *National Strategy for Information Sharing.*

[22] Ibid.

For example, in 2006, the New Jersey State Police developed a policing model called "Intelligence-Led Policing." The model is revered as revolutionary as it is used to allocate police resources, enhance communication, and inform decision-makers at all levels to disrupt terrorist groups and criminal organizations.[23] At the core of the intelligence led policing model is a common communication (data) platform known as the Emergency Preparedness Information Network (EPINet).[24] EPINet allows the New Jersey State Police and numerous other law enforcement agencies throughout the state to upload emergency operational, traffic, tactical, and recovery plans into the network, which allows authorized users immediate access to up-to-date and comprehensive levels of information in the event of a major incident. Recently, the Houston Police Department in Texas purchased an information sharing network that provides a real time exchange of information and intelligence data for police officers and other first responders to assist them with critical incident management and emergency response.[25]

The Statewide Information Sharing System is yet another example of a common technical communication platform and seems to meet the recommendations set forth in the *National Strategy for Information Sharing*. The Statewide Information Sharing System (SWISS) is used by a number of medium sized law enforcement agencies and their fusion centers throughout the United States to share data. Developed by Raytheon Company, SWISS is a network designed to improve the exchange of critical information amongst state and local law enforcement, public safety and homeland security agencies.[26] The system electronically exchanges, stores, and facilitates analysis of data maintained by public safety and law enforcement agencies.

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[23] New Jersey State Police, *A Practical Guide to Intelligence Led-Policing* (New Jersey: Center for Policing Terrorism at the Manhattan Institute, 2006) http://www.cpt-mi.org/pdf/NJPoliceGuide.pdf [accessed February 5, 2008].

[24] Ibid.

[25] Michael Fickes, "Calling All Radios," *Government Security* (June 1, 2005) http://govtsecurity.com/mag/calling_radios/ [accessed September 28, 2008].

[26] Raytheon, "Raytheon to Demonstrate New Communications Capabilities for Emergency Response and Public Safety Application" (January 17, 2007), http://www.prnewswire.com/cgi-bin/micro_stories.pl?ACCT=742575&TICK=RTNB&STORY=/www/story/01-17-2007/0004507529&EDATE=Jan+17,+2007 [accessed September 28, 2008].

The concept of operations allows the field officer to enter incident information using a business processes and record management system. The data is submitted to SWISS via a secure CJIS network to ensure privacy. Submissions are controlled by the client (department) who determines which incidents are shared, when they are shared, and what parts of the incidents are sent to SWISS. Submitted data is stored in a standardized format in the SWISS data warehouse. Clients are able to query the SWISS data warehouse to solve crimes and aid investigations using the SWISS application and their own technology. The system provides interoperable communications (data) among municipal, regional, and state agencies. This system has proven to be most effective with respect to accessing data for analysis and ease of use.[27]

COPLINK is another very sophisticated network for sharing information on a common technical platform among network subscribers.[28] The system provides some of the most advanced privacy and security features available to law enforcement agencies. The system offers completely integrated solutions and is a tactically sophisticated network that organizes and rapidly analyzes vast quantities of structured and seemingly unrelated data. The system is a highly secure intranet-based platform that stores data in various incompatible databases and record management systems.

The TrapWire network increases the probability of detecting pre-attack preparations by terrorist groups who may be monitoring multiple facilities to assess their vulnerabilities.[29] The system is designed to prevent terrorist attacks on critical infrastructure by detecting various discreet but identifiable indicators. Infrastructure sites attached to the TrapWire network are protected through counter-surveillance techniques

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[27] The Commonwealth of Massachusetts, *Statewide Information Sharing System (SWISS): The Commonwealth of Massachusetts' Public Safety Data Warehouse.* Global Justice Information Sharing Users' Conference, Chicago, Illinois, August 22, 2007, http://it-ojp-gov.iir.com/process_links.jsp?link_id=5908 [accessed November 16, 2008].

[28] COPLINK helps prevent acts of terrorism by consolidating, sharing, and identifying he most valuable information stored in law enforcement databases and criminal records, http://www.coplink.com/overview.htm [accessed January 6, 2008].

[29] TrapWire was developed by Abraxas Applications and is unique predictive software system designed to detect patterns of pre-attack surveillance, http://www.abraxasapps.com/trapwire.html [accessed September 11, 2008].

combined with a unique sensor system and data mining capabilities to detect attack preparations and allow law enforcement or security personnel to deter or intercept terrorist operations.

The data listed about these networks is typical of the technology available to enhance information sharing capabilities among law enforcement agencies and the private sector. Each system has strengths and weaknesses. However, based on the research, the vast majority of the agencies attempting to enhance information sharing (through the fusion center) have incorporated one or more of these technologies.

Regardless of the network selected to enhance information and intelligence sharing among independent police departments and/or their fusion centers, the system should be robust (which may include data and voice information capabilities), affordable, and operate on a common technical platform to ensure access by the client agency and encourage network participation. For example, in the 2008-2009 Los Angeles/Long Beach Urban Area Security Initiative (LA/LB UASI), the 46 independent police chiefs in Los Angeles County, the Los Angeles County Sheriff's Department, and several other public sector agencies supported funding to expand COPLINK capabilities.

As a result, the LA/LB UASI Work Group submitted Investment Justifications (IJ) to secure and purchase COPLINK software, which will enhance data sharing throughout Los Angeles County. [30]

b. Financial Considerations

Identifying a common technical platform to enhance information and intelligence sharing is but a single aspect of resolving the issue. Securing funding to develop or purchase a communication network can be challenging. Historically, communication networks have been cost prohibitive for many local law enforcement

[30] The author participated in the 2008 – 2009 Urban Area Security Imitative (UASI) process as a representative of the Santa Monica Police Department. During the process, improving information and intelligence sharing was identified as a critical need throughout Los Angeles County. Accordingly, the UASI Working Group proposed to secure funding towards the purchase and implementation of COPLINK as a data sharing network , in part because the system is robust and operates on a common technical platform.

agencies. As a result, a number of medium sized law enforcement agencies continue to maintain and operate antiquated data networks that are not capable of effectively sharing information with like municipal agencies. Federal law enforcement agencies are not immune from the negative impact associated with limited resources or budgets. Federal agencies suffer from the lack of interoperable communications on a common technical platform when they are unable to communicate directly with local law enforcement officials via radio or data networks. For example, the Federal Bureau of Investigation (FBI), West Los Angeles Field Office cannot communicate directly with the Santa Monica Police Department on an interoperable radio network.[31] As a result, field investigators and officers are required to use alternate modes of communication, such as cellular phones. However, cellular communication can be unreliable depending on the user's location, proximity to transmitters, or the volume of calls.[32]

Information sharing is further complicated when law enforcement agencies attempt to exchange information or intelligence on disparate communication networks.[33] For example, the Santa Monica Police Department is separated from the Culver City Police Department by less than five miles (the City of Los Angeles lies between the two departments). Since the Santa Monica Police Department operates disparate data and voice networks, they cannot easily exchange information (on a common platform) with Culver City.[34]

Attempting to locate funding many independent law enforcement agencies have relied on federal programs such as the Urban Area Security Initiative (UASI).[35] Non UASI cities have relied on state funding. For example, the City of Santa Monica applied

[31] Eric Uller (Senior System Analyst, City of Santa Monica), remarks made during a private conversation with the author, Santa Monica, September 5, 2008.

[32] Ibid.

[33] Eric Uller (Senior System Analyst, City of Santa Monica), remarks made in a private conversation with the author, Santa Monica, January 31, 2008.

[34] Ibid.

[35] Department of Homeland Security, Urban Area Security Initiative (UASI), http://www.ojp.usdoj.gov/odp/grants_programs.htm [accessed February 21, 2008].

for and received funding from the State Homeland Security Program (SHSP) to assist with the purchase of personal protective equipment and training.[36]

Regardless of the funding source, without assistance it is unlikely that medium sized law enforcement agencies will be able to afford to purchase a common technical communication platform. Without the ability to operate on a common technical platform, emergency mitigation efforts are seriously hampered. For example, if a local law enforcement agency is unable to communicate directly with their counterpart in Fire; efficient incident management would likely erode. This scenario is experienced daily across America when emergency personnel respond to traffic collisions, chemical spills, and other life threatening hazards. However, the inability to communicate is routinely dismissed, in part because of the nature of the incident. Yet, even a moderate terrorist attack would likely exceed current communications capabilities among law enforcement agencies and/or other first responders. Without a common technical platform to

exchange timely and accurate information, law enforcement agencies and other first responders are simply not operating at optimum levels, unnecessarily risking lives, and wasting valuable resources.

c. Intelligence in Law Enforcement

Almost every book, article, or body of research attempts to define criminal intelligence and how it is used to combat crime and identify threats or vulnerabilities. For example, Dr. Michael Warner, Central Intelligence Agency, History Staff suggests that the key elements of intelligence are information and secrecy.[37] Another definition taken from "Mainstream Science on Intelligence," published in 1994 provides an opinion that intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, and comprehend complex

[36] Department of Homeland Security, State Homeland Security Program (SHSP), http://www.ojp.usdoj.gov/odp/grants_programs.htm [accessed February 21, 2008].

[37] Michael Warner, "Wanted: A Definition of 'Intelligence,' Understanding our Craft" *Studies in Intelligence* 46, no. 3 (April 14, 2007) https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no3/article02.html [accessed November 16, 2008].

ideas.[38] These skills, of course, are necessary when attempting to determine threats, vulnerabilities, or develop a refined intelligence product.

In his book, *Intelligence: From Secrets to Policy*, Mark M. Lowenthal said, "Intelligence is a subset of the broader category of information. Intelligence and the entire process by which it is identified, obtained, and analyzed respond to the needs of policy makers. All intelligence is information; not all information is intelligence." [39]

According to Lowenthal's research, the word intelligence largely refers to issues related to national security, that is, defense and foreign policy and certain aspects of homeland security. While Lowenthal's research clearly has relevance in military and foreign affairs, establishing the nexus to increase local law enforcement's ability to detect terrorist activity may be a bit more challenging. Nevertheless, Lowenthal's work seems to capture the essence of intelligence in law enforcement.

Again the role of intelligence in law enforcement was outlined in a CRS Report for Congress, *Intelligence and Law Enforcement: Countering Transnational Threats to the U.S.*[40] The data raised some concerns with respect to administrative difficulties that have been only partially overcome despite the creation of elaborate coordinative mechanisms under the oversight of the National Security Council. The research stated concerns about the greater use of information derived from intelligence sources in judicial proceedings fearing that it may lead to over reliance on surreptitious means of information collection and thus undermine civil liberties.[41]

Similar concerns were illustrated in a body of research published in December 2007 by the American Civil Liberties Union (ACLU).[42] The research voiced

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[38] Linda Gottfredson, "Mainstream Science on Intelligence," *Wall Street Journal* (December 13, 1994), A18.

[39] Mark M. Lowenthal, *Intelligence: From Secrets to Policy*, 3rd ed., (Washington, DC: CQ Press, 2006), 2.

[40] Richard A. Best, Jr., *Intelligence and Law Enforcement: Countering Transnational Threats to the U.S*. (Washington, DC: Congressional Research Service, December 3, 2001), http://www.fas.org/irp/crs/RL30252.pdf [accessed January 26, 2008].

[41] Ibid, (Summary).

[42] The American Civil Liberties Union, "What's Wrong with Fusion Centers - Executive Summary,"http://www.aclu.org/pdfs/privacy/fusioncenter_20071212.pdf [January 20, 2008].

concerns about serious privacy issues during a time when new technology, government powers and zeal in the "war on terrorism" were combined to threaten Americans' privacy at an unprecedented level. The data asserted that the expanding scope of intelligence agencies was an invitation to abuse [intelligence] particularly when most of their business is conducted in secret. The report alleged there had been a long-standing history of abuse surrounding vaguely defined proactive intelligence as carried out by domestic law enforcement agencies at the local, state and federal levels.[43]

The potential to abuse intelligence is of great concern. However, the government has implemented protective measures, in part by creating the National Security Council.[44] Notwithstanding the civil liberty concerns, the CRS report firmly establishes a nexus between international terrorist incidents and the impact those events can have on domestic (local) jurisdictions. Moreover, the report establishes the clear role intelligence needs to play to increase law enforcement's ability to detect, derail, or disrupt terrorist groups.

Governance and training also dictates how intelligence is used in law enforcement. Following the attacks on the New York World Trade Centers, Intelligence Centers and their counterparts at the state and federal levels experienced a number of reforms and reorganizations resulting in several changes. The government's audit and scrutiny were necessary as the U.S. Intelligence Community was unable to "connect the dots" due to inefficient information sharing mechanisms. The gaps in domestic intelligence led to a significant effort to improve the nation's intelligence network.[45] The

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[43] The American Civil Liberties Union, "What's Wrong with Fusion Centers - Executive Summary,"http://www.aclu.org/pdfs/privacy/fusioncenter_20071212.pdf [January 20, 2008].

[44] National Security Council (NSC) is responsible for coordinating policy on national security issues and advising chief executives on matters related to national security.

[45] National Commission on Terrorist Attacks upon the United States**,** *The 9/11 Commission Report* (New York: W.W. Norton & Company, 2003), 408; U.S. Congress, House, Permanent Select Committee on Intelligence Select Committee on Intelligence, *Report of the Joint Inquiry into the Terrorist Attacks of September 11, 2001*, 107th Congress, 2nd Session, December 2002, S. Rept. No. 107-531, H. Rept. No. 107-792, 45, http://www.gpoaccess.gov/serialset/creports/pdf/fullreport_errata.pdf.Testimony provided to the Joint Inquiry revealed that the FBI had not conducted an assessment of the terrorist threat facing the United States, [accessed January 26, 2008].

final outcome gave birth to the largest reorganization of the Intelligence Community since 1947 and served as an inspiration for reformists to increase information sharing within the intelligence community.[46]

In order to achieve a meaningful and consistent impact on terrorist activities, there must be a better understanding of the multi-dimensional efforts terrorists use to attack the nation. Understanding begins with training, education, and introspective analysis. This is as true for the government as it is for the private sector. To truly understand how law enforcement can disrupt terrorist groups, agencies' executives and line officers must increase their knowledge with respect to terrorist cultures, methods of operation, and how missions are financed. Collecting, analyzing, and sharing intelligence to derail terrorist activity is an essential part of this process. Attempting to achieve this goal, in 2007 the U.S. Department of Justice developed the Minimum Criminal Intelligence Training Standards in part to provide additional direction to local law enforcement with respect to training its employees while encouraging agencies to follow the recommendations.[47] The data in this report takes a huge step forward in the government's attempt to establish a consistent method to train personnel in the collection, analysis, and sharing of intelligence.

2. Fusion Centers: Critical Information Nodes

Fusion centers are state-created entities largely financed and staffed by the states. However, there is no one model mandating how a center should be structured or staffed. In order to assess the effectiveness of the fusion centers an examination is warranted. Many of the centers follow an all-crimes model and thus are generally managed by a director with a law enforcement background.

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[46] Office of the President, *National Strategy for Homeland Security* (Washington, DC: GPO, July 2002), http://www.whitehouse.gov/homeland/book/nat_strat_hls.pdf [accessed January 26, 2008].

[47] United States Department of Justice. *Minimum Criminal Intelligence Training Standards for Law Enforcement and Other Criminal Justice Agencies in the United States: Findings and Recommendations*, version 2 (Washington, DC: Global Justice Information Sharing Initiative, October 2007) http://www.iir.com/global/products/minimum_criminal_intel_training_standards.pdf [accessed September 19, 2008].

a. Los Angeles Joint Regional Intelligence Center

The Los Angeles Joint Regional Intelligence Center (LA JRIC) located in Norwalk, California, is one of the newest additions to the fusion center family.[48] The LA JRIC collects information using an all-crimes approach converting the information into operational intelligence and disseminating the intelligence to prevent terrorist attacks and combat crime throughout a six county region. The LA JRIC fully integrates criminal and terrorist intelligence into its analysis especially when it has the potential to affect the greater Los Angeles region.

The LA JRIC disseminates developed intelligence, provides analytical case support, analyzes trends, and provides tailored analytical products to its clients. The LA JRIC does not serve as the primary investigative entity in terrorist or criminal matters as the center's investigative activities are limited to those necessary to support intelligence gathering and analysis.[49] The LA JRIC also functions as the State of California Regional Terrorism Threat Assessment Center (RTTAC) and provides training relating to terrorism awareness and analysis to its clients at the state level.[50]

The governance of the LA JRIC includes the Assistant Director in Charge of the Los Angeles Field Office of the FBI, the Sheriff of Los Angeles County, the Chief of Police of the Los Angeles Police Department, the United States Attorney for the Central District of California, and the Chief of the California Department of Justice Criminal Intelligence Bureau or their designees. The responsibility for the overall policy and direction of the LA JRIC rests with the Assistant Special Agent in Charge (ASAC) or Program Manager of the FBI. The Center adheres to the Fusion Center Guidelines (FCG) and the National Criminal Intelligence Sharing Plan (NCISP) and provides the following

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[48] Los Angeles Joint Regional Intelligence Center, Norwalk CA, https://www.lajric.com/index.htm [accessed January 22, 2008].

[49] Historically, the Joint Terrorist Task Force (JTTF) serves as an independent multi-jurisdictional enforcement group in the Los Angeles region. The JTTF is typically viewed as an enforcement component capable of conducting target surveillances, gathering field intelligence, and following up on investigative leads. The LA JRIC (fusion center) provides intelligence leads, alerts, and bolos to the JTTF, which can be further vetted and investigated at the operational level.

[50] Robert Fox (Lieutenant, Los Angeles Police Department – Assigned to the Joint Regional Intelligence Center, Co-Program Manager) statements made during a Joint Regional Intelligence Presentation, Los Angeles, January 2005.

intelligence products (deliverables): net assessments, situational reports, advisory reports, BOLO alerts, warnings, general alerts, bulletins, threat assessments, executive reports, and tactical liaison reports.

The LA JRIC primarily relies on raw information collection from its clients. Officers or other field personnel collect data and report the information to their agency Intelligence Unit. The agency unit analyzes the data, and if warranted, passes along the information to the LA JRIC for further analysis. The LA JRIC analysis verifies the information, adds data or other intelligence components as appropriate, and distributes the final product to its clients.

The Center maintains state of the art technology for intelligence collection, analysis, and information sharing. For example, the Center uses COPLINK[51] and TrapWire[52] programs to analyze data or assess threats. The LA JRIC was designed to house 85 agents and analysts; however, currently it is operating with only 45 full-time employees.[53] The LA JRIC is not currently meeting its clients' expectations, in part because the information provided to the end user is often over broad or too general.[54]

b. Commonwealth of Massachusetts Fusion Center

The creation of the Commonwealth of Massachusetts Fusion Center (CFC) is one of many intelligence facilities created after the New York World Trade Center attacks. The CFC's mission is to impact and enhance information sharing and

[51] COPLINK helps prevent acts of terrorism by consolidating, sharing, and identifying he most valuable information stored in law enforcement databases and criminal records, http://www.coplink.com/overview.htm [accessed January 6, 2008].

[52] TrapWire was developed by Abraxas Applications and is a unique, predictive software system designed to detect patterns of pre-attack surveillance, http://www.abraxasapps.com/trapwire.html [accessed January 18, 2008].

[53] Robert Galameau (Lieutenant, Los Angeles County Sheriff's Department), remarks made during a private conversation with the author, Los Angeles 14, 2008.

[54] Ibid.

collaboration capabilities both vertically (municipal, state, federal) and parallel coordination between state homeland security partners.[55]

The CFC collects and analyzes information from all available sources to produce and disseminate actionable intelligence to stakeholders for strategic and tactical decision-making in order to disrupt domestic and international terrorism. Its deliverables include:

- Working in partnership with local, state, regional and federal public safety agencies implementing a secure, comprehensive mechanism for the timely exchange of information.
- Providing accurate and timely intelligence products; providing direct analytical support for investigations that involve precursor criminal activity.
- Providing awareness of priority requirements to the Commonwealth.

The CFC serves as a point of contact for local entities seeking to receive information from federal agencies. The Center collects and analyzes information to produce and disseminate actionable intelligence to support decision-makers and operational personnel. Intelligence analysts in the Center are assigned duties which focus on terrorism and organized criminal activity. Each analyst assigned to the Center develops contacts and forms partnerships with clients in their area of operation (AO) and is responsible for becoming intimately familiar with their subject areas, focusing on threats to the Commonwealth. Intelligence deliverables includes: alert bulletins, intelligence and information briefings, and assisting with strategic assessment and planning.

The CFC aspires to the principles and recommendations set forth in the *National Criminal Intelligence Sharing Plan and Fusion Center Guidelines*, working to share and integrate information with local, state, regional and federal law enforcement agencies as well as partners in the private sector. The CFC utilizes a number of

[55] Commonwealth Fusion Center (CFC), Fusion Center Overview, Mission, and Stated Goals, http://www.mass.gov/?pageID=eopsterminal&L=3&L0=Home&L1=Homeland+Security+%26+Emergency+Response&L2=Commonwealth+Fusion+Center&sid=Eeops&b=terminalcontent&f=msp_homeland_security_terrorism_fusion_center_fusion_center_overview&csid=Eeops [accessed September 28, 2008].

intelligence sources, including the Homeland Security Information Network, the Regional Information Sharing System, and the National Incident Based Reporting system.

In addition, the CFC uses specialized software to analyze raw information, which includes COPLINK.[56] The CFC relies on a number of collection sites for raw information. Field personnel send raw information to the CFC for analysis via data input in the Statewide Information Sharing System (SWISS), network implemented in 2006 that electronically exchanges, stores, and facilitates analysis of data maintained by public safety and law enforcement agencies throughout the Commonwealth.[57] The SWISS network facilitates and allows for a timely exchange of information between the CFC and its clients.

The CFC is also an all-crimes fusion center; however, it differs from the LA JRIC on three primary fronts. First, the CFC's stated goals include assisting clients to establish intelligence requirements. Second, the CFC assigns analysts to a particular geographic area of the Commonwealth, which allows the analysts to establish professional relationships with the end users thereby increasing their knowledge of the clients' intelligence needs. Third, field personnel working within the area of operation (AO) of the CFC are able to input raw data directly into the center, which facilitates analysis.

c. The Southern Nevada Counter-Terrorism Center

The Southern Nevada Counter-Terrorism Center (SNCTC) began operating in July 2007.[58] The high-tech operation was made possible after the state was awarded $4.6 million from the federal government. The Center joins 42 other "fusion

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[56] COPLINK helps prevent acts of terrorism by consolidating, sharing, and identifying he most valuable information stored in law enforcement databases and criminal records, http://www.coplink.com/overview.htm [accessed January 18, 2008].

[57] The Commonwealth of Massachusetts, Statewide Information Sharing System, 2007 Global Justice Information Sharing User's Conference, August 22, 2007.

[58] Jeff German, "Anti-Terrorism Fusion Center Comes Together," *Las Vegas Sun* (July 31, 2007) http://www.lasvegassun.com/news/2007/jul/31/anti-terrorism-fusion-center-comes-together/ [accessed January 18, 2008].

centers" in 37 states and is charged with improving the gathering and dissemination of anti-terrorism intelligence across all jurisdictional lines. The SNCTC is another example of an all-crimes approach focusing on traditional criminals and local emergencies. Eventually the Center will house more that 60 investigators and analysts from Metro Police and other local, state and federal emergency and law enforcement agencies. Contrary to the findings of the congressional report, the Center's management believes their approach to an all-crimes/all-hazards model will increase information sharing, intelligence analysis, and timely distribution of information to the end users.

The Southern Nevada Counter-Terrorism Center is staffed by agents from the United States Homeland Security Department, the FBI, and other federal authorities, which is not always the case with other fusion centers. One of SNCTC's goals is to integrate intelligence and information sharing capabilities with Carson City, Reno, and Las Vegas simultaneously. Like all fusion centers, SNCTC is responsible for collecting and analyzing information from all available sources to produce and disseminate actionable intelligence to its stakeholders and clients in order to disrupt domestic and international terrorism.

The responsibility for the overall policy and direction of the SNCTC rests with the manager who is an experienced law enforcement official. The Center adheres to the Fusion Center Guidelines and the National Criminal Intelligence Sharing Plan and provides the following intelligence products (deliverables): net assessments, situational reports, advisory reports, BOLO alerts, warnings, general alerts, bulletins, threat assessments, executive reports, and tactical liaison reports.

3. Fusion Center Analysis

After reviewing the available literature on fusion centers, it is apparent that the vast majority of the 40 plus centers spread throughout the United States operate under an all-crimes doctrine. It is difficult to locate centers operating exclusively as a counter-terrorist facility; however, based on limited data there are currently two such centers

located in Rhode Island and Kansas.[59] Critics of the fusion center's orientation towards an all-crimes format fear that the move away from the counter-terrorism format has reduced the fusion center's effectiveness.[60]

Criticism of fusion centers has also been expressed by those analysts assigned to the units. There are concerns about future funding, staffing, challenges associated with interoperable communication and how information is shared. Despite the creation of the Fusion Center Guidelines, an intelligence gap still exists between the fusion centers and local law enforcement. Fusion centers are requesting more funding and clearer definition as to when information is or should be shared. The problem of pushing out usable intelligence from the fusion centers to municipal law enforcement is further complicated since some fusion centers are finding it difficult to find qualified analysts, and many have reported that they need federal guidance on what skills the analysts should possess.[61]

Additionally, as reported in the GAO report, fusion centers have found it difficult to obtain security clearances for their personnel and have discovered that even with appropriate clearances, information continues to be withheld. Lastly, the GAO report identified a unique circumstance wherein the FBI and the Homeland Security Department do not accept each others' security clearances even though the law indicates they are supposed to.[62]

Proponents of the all-crimes mission argue that encompassing all sorts of crimes in the intelligence dragnet increases the opportunity to detect, derail, or disrupt terrorist organizations.[63] The original concept of the fusion centers was to coordinate resources,

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[59] United States. Government Accountability Office. *Homeland Security: Federal Efforts are Helping to Alleviate Some Challenges Encountered by State and Local Information Fusion Centers* (Washington, DC: GAO, October 2007) http://www.gao.gov/new.items/d0835.pdf [accessed September 19, 2008].

[60] Eileen Sullivan, "Intel Centers Losing Anti-Terror Focus: Local Counterterrorism Centers No Longer Focus Solely on Terrorism, Government Study Says," (ABC News, November 29, 2007), http://abcnews.go.com/Politics/WireStory?id=3926856&page=1 [accessed December 2007].

[61] United States Government Accountability Office, *Homeland Security: Federal Efforts*.

[62] United States Government Accountability Office, *Homeland Security: Preliminary Information on Federal Actions to Address Challenges Faced by State and Local Information Fusion Centers* (Washington, DC: GAO, October 2007) http://www.gao.gov/new.items/d071241t.pdf [accessed January 30, 2008].

[63] Robert Galameau (Lieutenant, Los Angeles County Sheriff's Department), remarks made during private conversation with the author, Los Angeles 14, 2008.

expertise and information of intelligence agencies in an effort to prevent terrorist activities. To that end, the fusion centers have enjoyed much success.

Since the events of 9/11, more than 40 centers have been established throughout the United States with most operating in an all-crimes format, which has provided some opportunities to disrupt terrorists.[64] However, these types of interventions seem to be few and far between. Many of the centers initially had purely counterterrorism goals; however, for a number of reasons they have increasingly gravitated towards an all-crimes approach and in some cases an even broader all-hazards approach.[65]

Many of the fusion centers have become their own advocates highlighting their successes. For example, the Washington D.C. Regional Fusion Center recently employed a communications expert who is responsible for marketing the Center's mission and successes.[66] Additionally, information taken from the 2008 Los Angeles / Long Beach Urban Area Security Initiative clearly demonstrates an effort to get increased funding (federal grants and local budgets) for their regional fusion center in order to address the challenges associated with interoperability, information sharing, and specifically to increase the center's capacity to distribute intelligence to its clients.[67]

The concept of the fusion center is to provide an intelligence unit that could improve intelligence collection, analysis, and information sharing with its clients at the local, state, and federal levels.[68] The data suggests that the fusion centers are meeting this goal. However, in order to meet the client's intelligence needs (providing usable intelligence to the end user); fusion centers have morphed into all-crimes facilities.

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[64] U.S. Congress, House Committee on Homeland Security's Subcommittee on Intelligence, Information Sharing and Risk Assessment: Testimony of Chief John J. New, Torrance Police Department (Washington, DC: n.p.), April 5, 2007.

[65] John Rollins, *Fusion Centers: Issues and Options for Congress* (Washington, DC: Congressional Research Service, July 6, 2007).

[66] Patrick Miller (Chief of Police, Ventura Police Department), remarks made during private conversation with the author, Monterey, CA, November 28, 2007.

[67] Los Angeles and Long Beach UASI Investment Justification Working Document, as part of the Region's Strategic Plan to increase intelligence processing capacity, January 2008.

[68] Charles Allen. "Keynote Address by Under Secretary Charles Allen at the 2008 IALEIA/LEIU Conference" (Boston, Massachusetts, April 8, 2008) http://www.dhs.gov/xnews/testimony/testimony_1207683448574.shtm [accessed September 5, 2008].

The nation has taken an all-hazards approach towards homeland security. In an effort to meet client's expectations, which are critical for securing future funding, fusion centers are following the lead of the government by attempting to predict everything from terrorism to hurricanes. The available literature, such as the GAO and CRS reports for Congress, suggests that fusion centers are a critical component in the effort to defend the nation against terrorism by providing invaluable intelligence to law enforcement agencies at all levels of government through collaboration and integrating resources with its clients.[69]

The U.S. Department of Justice, Office of Justice Programs cites a number of guidelines that are intended to create standards to assist with challenges associated with interoperability and communication issues with other centers at the state, regional, and federal levels. The need to develop and share information and intelligence across all levels of government is a critical mission for the fusion centers.[70] The need to identify, prevent, monitor, and respond to terrorist and criminal activities remains a significant need for law enforcement, intelligence, public safety, and private sector communities. The fusion centers were designed to overcome these challenges.

As highlighted in the report, merely housing information does not constitute fusion.[71] The data clearly identifies the need for fusion centers to take a leadership role in the coordinating, sharing, and analyzing of intelligence in order to deliver a usable product to its clients. In order to achieve these goals, fusion centers must follow the guideline's recommendations.[72]

The value of the fusion center's role towards disrupting terrorist organizations was again highlighted as part of the U.S. Department of Justice's Global Justice Information Sharing Initiative's (Global) efforts to develop fusion center guidelines. The

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[69] United States Bureau of Justice Assistance, *Fusion Center Guidelines: Developing and Sharing Information and Intelligence in a New Era: Executive Summary* (Washington, DC: Dept of Justice, Office of Justice Programs, Bureau of Justice Assistance, 2006), 1-7, http://www.it.ojp.gov/documents/fusion_center_executive_summary.pdf [accessed September 19, 2008].

[70] Ibid.

[71] Ibid.

[72] Ibid.

Criminal Intelligence Coordinating Council (CICC), in support of the Bureau of Justice Assistance (BJA), Office of Justice Programs (OJP), recommended the creation of the Fusion Center Focus Group.[73] The group created 18 guidelines, which include collaboration, interconnectivity, and communications protocols.

DOJ's report stated that the ultimate goal of a fusion center is to provide a mechanism where law enforcement, public safety, and private partners can come together with a common purpose and improve the ability to safeguard our homeland and prevent criminal activity.[74] It seems that fusion centers are in the best position to accomplish these goals.

The need for a National Criminal Intelligence Sharing Plan[75] was recognized as critical after the events of September 11, 2001. The event initiated a concerted effort by American law enforcement agencies to correct the inadequacies and barriers that impede information and intelligence sharing. The plan represents law enforcement's commitment to ensure that information and intelligence is shared to disrupt crime and terrorism.

Contained within the NCISP are a number of points that could clearly be carried out by the fusion centers. They include developing a mechanism to promote intelligence-led policing, a model for intelligence process principles and policies, and technology architecture to provide secure, seamless sharing of information among systems and clients. However, it is very apparent that NCISP's goals extend beyond the capabilities of a local law enforcement or intelligence unit. In fact, the goals are so demanding it appears that only a fusion center could reach them through collaboration, resource integration, and shared responsibilities.

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[73] United States Bureau of Justice Assistance, *Fusion Center Guidelines: Developing and Sharing Information and Intelligence in a New World: Guidelines for Establishing and Operating Fusion Centers at the Local, State, Tribal, and Federal Level: Law Enforcement Intelligence Component* (Washington, DC: Dept of Justice, Office of Justice Programs, Bureau of Justice Assistance, 2005), http://it.ojp.gov/BJA_cd/pdfs/Global/6fusion_center_guidelines_law_enforcement.pdf [accessed January 16, 2008].

[74] Ibid.

[75] United States Department of Justice, *National Criminal Intelligence Sharing Plan*, Executive Summary, revised June 2005, http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf [accessed January 16, 2008].

The literature listed above is an example of the body of research available illustrating the critical role of the fusion center in the defense of the homeland. In order to increase local, state, and federal agencies' ability to disrupt terrorist organizations, fusion centers will need to continue their role as an instrument to integrate, collaborate; analyze, and share information in a timely manner. As criminal and terrorist groups become more sophisticated, fusion centers will need to continue to reinvent their mission to stay ahead of this particular threat.

Based on the available data and examples provided in the literature section, it is clear that Homeland Security leaders are attempting integrate data sharing resources at all levels of government. To that end, the fusion center concept continues to grow throughout the United States and serves as a critical node in the information sharing cycle. Supporting the fusion center as critical nodes in the information sharing dynamic are a number of data sharing strategies designed to integrate police resources, remove obstacles, and change and reshape the culture of information sharing to ensure information, often in the form of intelligence estimates, reaches all the concerned clients. Lastly, the importance of a common technical platform to enhance information sharing between local police agencies and the fusion center cannot be overlooked. However, for the majority of local police agencies designing, purchasing, or implementing a common technical platform will be challenging without funding assistance**.**

Independent police departments in Los Angeles County continue to reinvent their roles in homeland security. It is easy to assume that the terrorist threat has diminished within the United States as we move further away from the events of 9/11. Further devaluing the homeland security effort is the overall reduction in violent crime across America, which reduces fear and creates a perception of safety among the public.[76] For the most part members of the public feel safe and therefore give little consideration to issues associated with homeland security.

Nevertheless, independent police departments, in general, have remained diligent with respect to detecting criminal and terrorist activity within their communities. For

[76] Department of Justice, Bureau of Justice Statistics, http://www.ojp.usdoj.gov/bjs/glance/viort.htm [accessed January 26, 2008].

example, in July of 2005, officers from the Torrance Police Department (CA) arrested two suspects for robbing a local gas station. As the investigation continued to unfold, the officers realized they were dealing with a domestic terrorist group, "Assembly of Authentic Islam" (JIS), which was based in California. The JIS operated primarily within the state of California prison system without apparent connections or direction from outside the United States.[77] There are numerous other incidents where local police departments across America have detected or otherwise impacted terrorism; however, the point here is to illustrate their effectiveness in the homeland security effort.

The available literature suggests that law enforcement has increased information and intelligence networks since the attacks on September 11, 2001; however, there appears to be significant room to improve. In order to enhance local police department's ability to disrupt terrorist groups, information sharing must be improved and accurate intelligence must be incorporated into every component of municipal policing. Equally important in the effort to share information effectively is the need for independent police departments in Los Angeles County to identify a common technical communication platform capable of enhancing the timely exchange of voice and data information.

As this literature review has demonstrated, it is clear there is insufficient research in practical guidance to aid independent police departments in their attempt to increase information sharing in order to disrupt terrorism organizations through the effective use of intelligence. The fusion center concept seems to help narrow the information sharing and intelligence gaps that currently exist between independent police departments and their contiguous municipal partners. However, in order to ensure information is used to disrupt criminal or terrorist activity, independent police departments must work hard to develop local or regional intelligence needs (standards) with respect to threats and vulnerabilities, and share those requirements with their contiguous municipal partners and other intelligence units.

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[77]Testimony of John J. Neu, Chief of Police, Torrance Police Department, *Hearing on Radicalization, Information Sharing and Community Outreach: Protecting the Homeland from Homegrown Terror*, United States Congress House Committee on Homeland Security's Subcommittee on Intelligence, Information Sharing and Risk Assessment, April 5, 2007, Torrance Council Chambers, Torrance, 1, http://homeland.house.gov/SiteDocuments/20070405120653-23987.pdf [accessed January 26, 2008].

By establishing intelligence requirements and information sharing needs and then sharing those needs with their contiguous municipal partners and their fusion centers, independent police departments in the county may increase their capacity to disrupt terrorist organizations and combat criminal groups.[78]

4. Data Collection Methods

Over the years law enforcement agencies across America have committed resources to the collection of raw information in an effort to thwart, disrupt or eradicate illegal criminal activity. America's first responders have demonstrated exceptional interpersonal communication skills, which have facilitated interaction and built trusting relationships with community members. History has shown us that federal and state law enforcement officials do not typically enjoy this type of relationship building. However, in recent years, police executives have come to realize that relationships between the community and their officers can serve as a powerful counter-terrorism tool.[79]

Assertions that police officers are well equipped to interdict a terrorist plot, disrupt a criminal organization, or act as a critical node within the information sharing framework based in part on their community relationships was further illustrated by Brian Jenkins in his influential work, *Unconquerable Nation.*[80]

Following the events of 9/11, a significant body of research has been collected and analyzed regarding the benefits of including emergency responders, police officers and other first responders in the information sharing dynamic. Much less has been written, however, about how the data is collected or shared. This point was highlighted in the CRS report on *Homeland Security Intelligence* when it stated that the need for

[78] For the purpose of this thesis the assumption is that independent police departments in Los Angeles County could improve or increase their capacity to detect criminal or terrorist activity if they received timely and accurate information/intelligence.

[79] Markle Foundation Task Force, *Protecting America's Freedom in the Information Age: A Report of the Markle Foundation Task Force* (New York, NY: Markle Foundation, October 2002), 10, http://www.markle.org/downloadable_assets/nstf_full.pdf [accessed September 19, 2008].

[80] Brian Jenkins, *An Unconquerable Nation* (Santa Monica, CA: Rand Corporation, 2006), 164.

information standards is critical among federal and local partners. However, information sharing between federal, state, local, tribal, and private sector information collection entities does not appear to currently exist.[81]

Transmitting information from the line level police officer to the interested consumers remains a significant challenge. Information sharing is a complex and often difficult dynamic. In order to examine the information sharing dynamic we must first review how data is collected and shared. Historically, independent police departments in Los Angeles County have been very effective in efforts to protect their communities. Based on the threat, data has been collected by line officers, task forces, or reported to the police by concerned citizens. Regardless of how the information is received, two prominent methods of data collection have stood the test of time. The first is Community Policing as a tool to collect data or information. The critical components of this method are the partnerships between the community and the police, which suggests the public volunteers the information willingly with no expectation of compensation. The second method, forced reporting, suggests that police officers are mandated to collect data or information based on threats or direction from the police department.

a. Community-Oriented Policing (COP)

Community policing carried out by the police officer patrolling the community, by all accounts, seems to be a time tested method of collecting data from the field and offers a low-tech viable option currently available to independent police agencies in Los Angeles County.

Community Oriented Policing (COP) has morphed into a comprehensive and effective communication link with the community over the past three decades. There are many definitions of Community Oriented Policing. However, the foundation is an

[81] National Governor's Association, Center for Best Practices, "2006 State Homeland Security Directors Survey," April 3, 2006, as reported in: Todd Masse, *Homeland Security Intelligence: Perceptions, Statutory Definitions, and Approaches* (Washington, DC: Congressional Research Service, August 18, 2006) 17-18, http://www.fas.org/sgp/crs/intel/RL33616.pdf [accessed September 19, 2008].

organizational philosophy or strategy that promotes relationship building with the public and proactive problem solving to address the cause of crime, fear, and mitigate other social ills.[82]

Authors R. Trojanowica, V E Kappeler; L K Gaines, B Bucqueroux, and R Sluder offer a similar definition in their book, *Community Policing: A Contemporary Perspective* (2nd ed.).[83] The authors suggest that community policing is the first major reform in policing in the last 50 years and that the concept changes the method which police officers use to solve crime, mitigate fear, or address social and physical disorder. Moreover, the community policing model helps police officers form partnerships with community members, encouraging them to provide input into the police process.[84] Trojanowica and his fellow authors' concepts of community policing illustrate the need for community partnerships between the police and the public they serve.

The concept of engaging the public to fight crime, reducing fear and mitigating social ills was applied to combating terrorism as seen in the research presented by Scheider and Chapman.[85] Scheider and Chapman suggest that community policing is a viable tool for combating terrorism or crime. The community policing strategy is based on three interconnected components, "problem-solving, external partnerships, organizational change,"[86] which encourages line level officers to initiate proactive activity toward investigating suspicious behavior. Law enforcement agencies can enhance the officer's observational skills by providing contemporary training. The same training can be shared with civilian employees, who also "patrol" the community, to increase their

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[82] *Community Oriented Policing and Problem Solving, Definitions and Principles* (California Attorney General's Office, 1999) 3.

[83] R Trojanowicz, et al., *Community Policing: A Contemporary Perspective*, 2nd Edition, (Cincinnati, OH: Anderson Publishing Co., 1998).

[84] Ibid.

[85] Matthew C. Scheider and Robert Chapman, "Community Policing and Terrorism," *Journal of Homeland Security* (April 2003) http://www.homelandsecurity.org/journal/articles/Scheider-Chapman.html [accessed June 18, 2008].

[86] Ibid.

awareness. By including civilian employees in the Advanced Officer Training (AOT), police departments increase the number of law enforcement employees capable of reporting suspicious activity.

Based on research, it is clear that the relationships formed between the police and the community establishes the framework for community-policing that can serve as a valuable device to collect data with respect to suspicious activity, which, in turn, may give rise to criminal or terrorist activity.

However, community-policing is heavily dependent upon the officer's ability to determine what data or information is important and what should be disregarded. While experienced patrol officers seem to know what data to collect and when to collect it, less experienced officers seem to struggle with data collection, in part because they truly do not appreciate the value of specific data in the effort to thwart crime or terrorism. Moreover, less experienced officers do not often have well developed interpersonal communication skills, which are critical to developing trusting relationships with the public. As a result, new police officers and community members rarely engage in meaningful conversation, which creates information sharing gaps.

One alternative to the community-policing approach to collect data is the forced reporting method. This section will examine the Los Angeles Police Department's Suspicious Activity Reporting (SAR) program, which is simply a forced reporting tool that eliminates inexperience as an obstacle to data collection and leaves little discretion for the line officer by mandating data is collected.

b. Force Reporting Model (FRM)

The Los Angeles Police Department (LAPD) is the largest independent police department in Los Angeles County. The department is responsible for patrolling approximately 465 square miles and serves over 4,000,000 residences.[87] The LAPD employs more than 9,700 police officers and several hundred civilian support officials.

[87] City of Los Angeles, Sanitation Department of Public Works, *Year at a Glance, 2006-2007* (Los Angeles, CA: Sanitation Department of Public Works, 2007), 2, http://www.lacity.org/san/general_info/pdfs/YAG_SUM_06-07.pdf [accessed June 19, 2008].

The organizational structure of the LAPD is divided into over 22 divisions, plus its Headquarters. Each division is managed by a Commanding Officer and is for the most part a stand alone police department. The LAPD has a tremendous reputation as a professional and aggressive law enforcement organization both in the United States and internationally.

In order to effectively share information throughout the department, the LAPD utilizes a number of technologies, which includes electronic mail, teleconferencing and personal data assistants.[88] Recently, the LAPD implemented a forced reporting tool that requires all police officers patrolling the community to report suspicious activity – the program is called Suspicious Activity Reporting (SAR). SAR is a report mechanism used to document any reported or observed activity or any criminal act or attempted criminal act, which an officer or other non-sworn person believes may reveal a nexus to foreign or domestic terrorism or criminal activity. The data reported may be the result of observations or investigations, or may be reported to them by private parties.[89]

SAR is based, in part, on the assumption that law enforcement is very adept at identifying where the threat is coming from. For example, if an LAPD officer is aware of specific criminal activity, police resources are allocated to eradicate or minimize the threat. The application of police resources has worked very well in protecting the city's critical infrastructure and other assets as there is a qualitative metric that is applied to reduce the threat or manage the risk.[90]

The LAPD worked hard to develop a framework for the data collection and analysis. Data is collected and shared with LAPD's Counter-Terrorism and Intelligence Unit through observations made in the field or by efforts to investigate

[88] Michael Downing (Deputy Chief of Police, Los Angeles Police Department), remarks during a private conversation with the author, Los Angeles, April 10, 2008.

[89] Joan McNamara (Commander, Los Angeles Police Department), remarks during a private telephone conversation with the author, Monterey, CA, June 8, 2007.

[90] Joan McNamara (Commander, Los Angeles Police Department) remarks during a private conversation with the author, Los Angeles, CA April 10, 2008.

suspicious activity. The data is documented on a well-defined collection tool (a form requiring the descriptions of specific activity). Activities are classified under one of the following categories:

- Pre-operational surveillance
- Engaging in counter-surveillance efforts
- Questions asked of security personnel about practices, schedules, etc.
- Initiates building measurements (counts, footsteps, etc)
- Takes pictures or video footage with no apparent aesthetic value
- Persons attempting to make suspicious purchases

There are numerous other reporting criteria on the report tool however; the point here is to demonstrate how comprehensive the reporting tool is constructed. The suspicious incident data is then reviewed at the station level and sent on to intelligence centers, transportation centers, and other consumers.

It appears by most indicators that the SAR network is an effective tool for data collection and sharing information in support of the effort to develop intelligence products and ensuring they are distributed to the consumer in a timely manner. However, the challenges associated with this program include:

- Linking incidents, ensuring consistent efforts to collect data and share information
- Identifying any patterns and finally translating information into intelligence estimates.

Although the SAR program is relatively new (implemented less that 12 months ago), the early indicators are promising. LAPD's effort to define what data needs to be collected and mandating its employees to report the activity can be interpreted as a significant step towards increasing information sharing within Los Angeles County provided the data is then pushed out to other municipal law enforcement partners within the region.

5. Existing Information Sharing Networks

While discussions among law enforcement agencies frequently focus on how technology can be used to integrate network and information sharing systems, which supports collaboration among government agencies, it is important to understand that these systems are more than simply information technology projects. In order words, they represent a specific component of ongoing efforts to improve management, efficiency, and efficacy of government information resources often associated with electronic government or e-government. Such information sharing initiatives are characterized by their programmatic elements as well as their technology elements.[91]

Many of the most common categories of information types being shared through these initiatives include intelligence, homeland security, law enforcement and critical infrastructure information. Information shared and technology used by these initiatives can vary widely. However, an overarching purpose of most of these networks is to facilitate better collaboration and information analysis through the use of improved information technology and the development of common information standards.[92]

Concerns and criticism about coordination and duplication of these networks have been raised since there currently appears to be no centralized inventory of all the information sharing systems being used within and between the federal, state and/or local levels. GAO, however, has reported that efforts to fight terrorism have generated the growth of the number of information sharing networks at all levels of government since the attacks at the World Trade Center. Three existing information sharing networks are discussed below to provide general examples of how information sharing is sometimes facilitated.

[91] Patrick Miller, *How Can We Improve Information Sharing Among Local Law Enforcement Agencies?* (Monterey, CA: Naval Postgraduate School, 2005) 27, http://bosun.nps.edu/uhtbin/hyperion-image.exe/05Sep%5FMiller%5FPatrick.pdf [accessed September 19, 2008].

[92] Ibid.

a. Regional Terrorism Information and Integration System (RIIS)

Although in the final stages of implementation, the Regional Information Sharing System (RTIIS) network, by all indicators, will be a robust regional information sharing network capable of serving law enforcement clients throughout Los Angeles County. RTISS was developed to serve as an integrated law enforcement information repository that will provide seamless access to disparate data sources. This repository provides global access to data for the law enforcement community within the Los Angeles County Region.[93]

The data repository will receive data from multiple independent law enforcement information systems and integrate diverse data into a cohesive data repository based on the Federal Bureau of Investigation's Law Enforcement National Data Exchange (N-DEx) model and Global Justice XML Data Model (GJXDM). The objective of this network is to provide meaningful information to the agencies through online mapping, ad hoc queries, and reports.[94]

Data warehousing of the law enforcement agencies will be a combined effort among agencies to supply source data to the RTIIS data warehouse network. Recognizing that there are advantages gained by the law enforcement community's effort, many of the agencies are eager to participate in the data warehouse network.

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[93] Regional Terrorism Information and Integration System (RTIIS), governed by the Los Angeles County Police Chiefs Association, integrate the crime data from law enforcement agencies throughout Los Angeles County. The RTIIS consists of a Coplink node for the 45 municipal law enforcement agencies (other than the Los Angeles County Sheriff's Department and the Los Angeles Police Department who have their own networks), http://www.lasd.org/divisions/tsdiv/leisp/leisp_ovrview.html#RTIIS [accessed September 28, 2008].

[94] Regional Terrorism Information and Integration System (RTIIS), governed by the Los Angeles County Police Chiefs Association, integrate the crime data from law enforcement agencies throughout Los Angeles County. The RTIIS consists of a Coplink node for the 45 municipal law enforcement agencies (other than the Los Angeles County Sheriff's Department and the Los Angeles Police Department who have their own networks), http://www.lasd.org/divisions/tsdiv/leisp/leisp_ovrview.html#RTIIS [accessed September 28, 2008].

The Los Angeles County Sheriff's Department will serve as the lead agency in conjunction with the Los Angeles Regional Integrated Law and the Justice Governance Committee will manage the network, which intends to meet the following goals:[95]

- Provide a consistent shared data source based on the Law Enforcement National Data Exchange (N-DEx) model and Global Justice XML Data Model (GJXDM) that will enhance crime analysis efforts, strategic decision-making, and tactical planning.

- Provide the technology basis for an effective Departmental Intelligence-Led Policing Program that includes the development of a Deployment Operations Center to present timely regional crime trend analysis and strategic deployment opportunities for executive and command personnel.

- Develop a system architecture, which enables seamless access to disparate data sources to provide global access to law enforcement data.

- Maintain an integrated, computerized global crime incident information repository to facilitate officer/public safety, and to aid in the recovery, apprehension, and identification of people, property, and events.

- Facilitates participation in the BBI's N-DEx which transforms data in XML format for simplified data exchange between agencies.

Currently the vast majority of the independent police departments in Los Angeles County have committed to participating in the RTIIS network. It is clear that this particular system will benefit law enforcement's collective capacity to share information effectively across jurisdictional lines within the county.

b. National Crime Information Center (NCIC)

The National Crime Information Center (NCIC) is a computerized index of criminal justice information (criminal record history information, fugitives, stolen

[95] Regional Terrorism Information and Integration System (RTIIS), governed by the Los Angeles County Police Chiefs Association, integrate the crime data from law enforcement agencies throughout Los Angeles County. The RTIIS consists of a Coplink node for the 45 municipal law enforcement agencies (other than the Los Angeles County Sheriff's Department and the Los Angeles Police Department who have their own networks), http://www.lasd.org/divisions/tsdiv/leisp/leisp_ovrview.html#RTIIS [accessed September 28, 2008].

properties, missing persons). It is available to federal, state and local law enforcement and other criminal justice agencies and is operational 24 hours a day, 365 days a year.

The purpose for maintaining the NCIC system is to provide a computerized database for ready access by a criminal justice agency making an inquiry and for prompt disclosure of information in the system from other criminal justice agencies about crimes and criminals. This information assists authorized agencies in criminal justice and related law enforcement objectives, such as apprehending fugitives, locating missing persons, locating and returning stolen property, as well as in the protection of the law enforcement officers encountering the individuals described in the network.[96]

NCIC is a staple of law enforcement. The data shared and stored in this network has contributed to the apprehension of many criminals over the years. NCIC relies on a collaborative effort to input data into the system. Data contained in NCIC is provided by the FBI, federal, state, local and foreign criminal justice agencies as well as authorized judicial courts. Part of the success of NCIC can be attributed to its governance and regulations. Users of the NCIC system are restricted to only those search privileges necessary to perform an authorized task (data entry, data search or information queries). Agencies operating outside the limits of NCIC or who abuse the data stored in the system can receive stiff reprimands, ranging from restricted use to removal of privileges.

In short, NCIC is a time tested network that is designed to facilitate information sharing between federal, state and local law enforcement. The concerns associated with this network, however, include limited access for non-law enforcement agencies, not allowing information sharing with the private sector or security firms, and specific data can only be entered or retrieved from the network. Lastly, the system operates independent from other information sharing networks.

[96] Federal Bureau of Investigation, "National Crime Information Center (NCIC)," http://www.fas.org/irp/agency/doj/fbi/is/ncic.htm [accessed June 19, 2008].

c. Regional Information Sharing System (RISS)

The Regional Information Sharing System (RISS) Program is an established network consisting of six regional hubs that are used to share intelligence and coordinate efforts against criminal networks that operate in many locations across jurisdictional lines.[97] RISS was created to combat traditional law enforcement targets, including narcotics trafficking and violent crime, but has since been enhanced to include other incidents such as terrorism and technology crimes.

The RISS website has consumers in 50 states, the District of Columbia, U.S. territories, Australia, Canada, and England.[98] RISS incorporates a regional approach, which tailors intelligence resources, thereby focusing on the specific needs of its consumers while still coordinating and sharing information as one body for national-scope threats.[99] The RISS network was implemented in 1974, when the Department of Justice awarded one of its first grants to allow police agencies in the southern U.S. to share and exchange information with each other via computers.[100] The grant award helped create the first of six regional hubs, the Regional Organized Crime Information Center (ROCIC). The other regional hubs include the Rocky Mountain Information Network (RMIN), the New England State Police Information Network (NESPIN), the Mid-States Organized Crime Information Center (MOCIC), the Western States Information Network (WSIN), and the Middle Atlantic-Great Lakes Organized Crime Law Enforcement Network (MAGLOCLEN).[101]

Participation in the network includes federal, state, and local law enforcement agencies for an estimated total of 7,000 law enforcement and criminal

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[97] *Regional Information Sharing Systems (RISS)*, http://www.iir.com/riss/ [accessed June 19, 2008].

[98] Ibid.

[99] *Regional Information Sharing Systems*, http://www.rissinfo.com [accessed June 18, 2008].

[100] Richard, R. Nedelkoff, *Regional Information Sharing Program*, Bureau of Justice Assistance Program Brief (Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance, April 2002) http://www.ncjrs.gov/pdffiles1/bja/192666.pdf [accessed September 12, 2008].

[101] *Regional Information Sharing Systems (RISS)*, http://www.iir.com/riss/ [accessed June 19, 2008].

justice agencies representing over 700,000 sworn personnel.[102] RISS acts as a force multiplier in fighting increased violent activity fostering secure communications and information sharing among all levels of law enforcement. Additionally, RISS delivers over 20,000 analytical products annually and trains over 58,000 officers and agents a year. It has been estimated that the network has more than 2.5 million intelligence files in their databases.[103]

At the center of RISS's ability to share information is a secure intranet, RISSNET, which is capable of sharing electronically what is routinely referred to as sensitive but unclassified information. RISSNET consumers can either connect a single computer to the network or establish a communication/data node connection that enables wider access through the client's network.

The examples above illustrate a few of the information sharing networks available to all law enforcement agencies throughout the United States, including the independent police departments in Los Angeles County.

Information, voice and data, is critical for law enforcement agencies throughout America if they hope to increase their collective capacity to detect, prevent, prepare for and if necessary respond to acts of terror or eradicate crime

In Los Angeles County (CA) information sharing among independent police departments is particularly important. Los Angeles County is one of the largest urban areas in the nation. In terms of land area, Los Angeles County is more than 4, 000 square miles and is home to more than 9,948,081 people. [104] The county is policed by 46 independent municipalities and the County Sheriff who is responsible for providing contract police services to another 41 cities.[105] Each independent police department has a Chief of Police while the Los Angeles County Sheriff's Department is lead by a Sheriff elected by the people.

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[102] *Regional Information Sharing System (RISS)*, http://www.iir.com/Publications/RISS_Program.pdf [accessed June 19, 2008].

[103] The RISS Program, Membership and Service Activity, http://www.iir.com/Publications/RISS_Program.pdf [accessed June 19, 2008].

[104] United States Census Bureau, *State and County QuickFacts, Los Angeles County, California, 2006 Estimate*, http://quickfacts.census.gov/qfd/states/06/06037.html [accessed March 12, 2008].

[105] "Los Angeles Almanac," http://www.laalmanac.com/crime/cr67a.htm [accessed March 25, 2008].

The vast majority of the municipal independent police departments in Los Angeles County have between 50 – 149 sworn police officers, with the exception of the following agencies: Burbank, El Monte, Glendale, Inglewood, Long Beach, Los Angeles, Pasadena, Pomona, Santa Monica, and Torrance.[106] The Los Angeles County Sheriff's Department is comprised of more than 9,000 sworn deputies and is considered by many as the lead law enforcement agency in the county. The nexus linking the greater law enforcement community in Los Angeles County is information, which enhances the collective law enforcement community's ability to protect lives and property, mitigate emergencies, and preserve public order. Without accurate and timely information, the efforts of the independent police departments to maintain public order would be greatly diminished.

6. Analysis

Effective information sharing is difficult to quantify, define, or achieve, in part because the needs, resources, and performance expectations of the 46 independent police departments in Los Angeles County are as different as the communities they serve. The gaps in information and intelligence sharing continue to present challenges for many other law enforcement agencies serving in metropolitan areas across America. Adding to the complexity of sharing information is how it is collected, analyzed, distributed and interpreted by the police departments and the intelligence agencies in the county.

Analyzing the current level of information sharing among independent law enforcement agencies serving in metropolitan areas suggests that there has been a marked improvement since the World Trade Center attacks. For example, the creation and implementation of fusion centers, including the Los Angeles Joint Intelligence Center (LA JRIC), throughout the United States strongly illustrates the progress to date. Fusion centers continue to serve as an effective information node providing both specific and general information bulletins, BOLOS, and warnings, which help police executives, anticipate threats and appropriately deploy resources. Additional programs and data

[106] For the purposes of this thesis, the research has divided the Los Angeles County Independent Police Departments into the following categories: Small agencies 0 – 49 sworn officers, medium agencies 50 – 149 sworn officers, and large agencies 150 or more sworn officers.

networks designed to promote information and intelligence sharing among police agencies includes; The Terrorist Liaison Officer Program,[107] the National Crime Information Center (NCIC),[108] and COPLINK.[109] Similar programs and networks have been adopted by independent police departments in metropolitan areas throughout the United States to facilitate information and intelligence sharing capabilities. However, law enforcement agencies cannot rest in the knowledge that we have increased the level of information and intelligence sharing. They must continue to move forward always seeking new and innovative methods to improve and increase information sharing.

As previously stated, the independent police chiefs in Los Angeles County are perceived as leaders in homeland security and defense and face similar information sharing challenges as their counterparts in other metropolitan areas within the U.S. In order to analyze and measure the level of information and intelligence sharing between the independent chiefs of police and their fusion centers, this thesis will use a general survey technique and quantitative analysis.

Additionally, common technical platforms and financial considerations will be explored.

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[107] The Terrorist Liaison Officer Program (TLO) was designed to facilitate communication between police agencies and their intelligence centers or fusion centers. In Los Angeles County Terrorist Liaison Officers receive formal training to ensure they understand how intelligence is used in law enforcement.

[108] Federal Bureau of Investigation, "National Crime Information Center (NCIC)," http://www.fas.org/irp/agency/doj/fbi/is/ncic/htm [accessed June 19, 2008].

[109] COPLINK helps prevent acts of terrorism by consolidating, sharing, and identifying he most valuable information stored in law enforcement databases and criminal records, http://www.coplink.com/overview.htm [accessed January 18, 2008].

II. LOS ANGELES COUNTY INDEPENDENT CHIEFS' PERSPECTIVE

A. SURVEY AND ANALYSIS

In order to gain an accurate assessment of the current level of information sharing that exists between local law enforcement agencies within Los Angeles County, I employed a general survey technique.[110]

The survey was created in May 2008, placed online and was continuously accessible through the end of June of the same year via a commercial survey tool (SurveyMonkey). The Uniform Resource Location (URL) address was electronically mailed to 46 independent chiefs of police in Los Angeles County. Forty-two (91.30 percent) responded and their assessments were analyzed.

The survey technique is designed to capture data based on four primary categories: Information-sharing, common technical communication platforms, financial considerations, and intelligence in law enforcement. Each section included 6 multiple-choice questions using the Likert Scale to measure their responses.[111] The data was analyzed and represents the opinions of the respondents.

The independent chiefs of police were selected as participants for the survey for two primary reasons**.** First, the 46 chiefs of police represent the vast majority of law enforcement services in the County of Los Angeles. Although their missions are similar (to protect lives, property, and maintain order), their needs and resources are as varied as the communities they serve. Second, police chiefs all possess the authority to make, change or modify policy. They represent the very top echelon of their respective agencies and in one form or another have tremendous political influence over elected officials, community groups, or other stakeholders.

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[110] Sandy Terhune-Bickler, Ph.D., contributed to the development of the survey questions.

[111] A Likert scale is a psychometric response scale often used in questionnaires. A Likert item is simply a statement which the respondent is asked to evaluate according to any kind of subjectivity or objective criteria; generally the level of agreement or disagreement is measured.

It is anticipated that the data collected from this survey will provide insight into the current level of information sharing that exists between independent law enforcement agencies in Los Angeles County. This survey will help determine the need for a common technical communication platform, if it can be funded, and if the network can succeed in increasing information sharing between law enforcement agencies. It will also help determine if there is a need for an analyst (assigned to the regional Fusion Center) to serve as a key component towards increasing the quality of usable intelligence at the local law enforcement level, and finally, the data will explore long-term financing. Additionally, the data will identify if there is an information sharing gap that currently exists between independent law enforcement agencies in Los Angeles County and the gaps that exist between those agencies and their regional Fusion Center.

The advantages of the web based survey tool are (a) no returned E-message would be necessary, (b) no returned surveys would have to be printed and/or saved electronically and given a separate file name for each user, and more importantly, (c) the surveys are tabulated and scored online within the SurveyMonkey service.

B. SURVEY RESPONSES AND ANALYSIS

The distribution and response rates are as follows in Table 1:

Table 1. Surveys

Surveys Distributed and Received	Number	Percent
Surveys Distributed	46	100 Percent
Completed Surveys Returned	42	91.30 Percent

A 91.30 percent survey return is significant statistically in percentage terms and with the large number of returns it is likely that the sample size, while not random can be generalized to all 46 recipients. The survey questions and responses are listed and interpreted from a quantitative analysis (for a visual graphic see the Appendix).

Information Sharing:

Question 1 - ***Currently there is adequate information or intelligence sharing between federal, state, and independent law enforcement agencies in Los Angeles County.***

Nineteen of the 46 responses representing 45.2 percent disagreed with the premise. Another five respondents or 11.9 percent strongly disagreed that information sharing within the county is adequate. Based on the data provided, it is clear that the majority of the independent police chiefs in Los Angeles (57.1 percent or 24 responses) are dissatisfied with the current information flow between federal, state, and local law enforcement.

Question 2 – ***The quality of intelligence estimates (usable intelligence) distributed to independent law enforcement agencies in Los Angeles County could be improved if information sharing was increased.***

45.2 percent or 19 of the 42 independent chiefs of police strongly agreed with the premise, which was supported by 45.2 percent or 19 responses who agreed. The combined percentages represented 90.4 percent or 38 responses.

Question 3 – ***My agency frequently shares information or intelligence with other independent law enforcement agencies in Los Angles County and the Los Angeles Joint Regional Intelligence Center.***

47.6 percent or 20 chiefs agreed, which was supported by 16.7 percent or 7 respondents who strongly agreed with this premise. The combined percentages represented 64.3 percent or a total of 27 responses.

Question 4 – ***My police officers have received adequate training in field intelligence collection and information sharing.***

52.4 percent or 22 respondents disagreed that their officers have received adequate training in field intelligence collection and information sharing, 2.4 percent or 1 chief strongly disagreed with the premise. The combined percentages represented 54.8

percent or 23 responses, which is significant considering most law enforcement agencies are extremely experienced in field investigations and have used data to identify criminals and solve crimes.

Question 5 – ***Independent police departments in Los Angeles County can increase their capacity to detect terrorist or criminal organizations if information sharing is improved between agencies.***

The overwhelming majority of police chiefs, 95.3 percent or 40 of 42 respondents, strongly agreed or agreed with this premise. The data contained in the question suggests that the independent chiefs of police are desperate for usable information to impact crime or terrorism.

Question 6 – ***My department currently shares information with the following organizations, the Los Angeles Joint Regional Intelligence Center (LA JRIC), Joint Terrorist Task Force (JTTF), Terrorist Early Warning Group (TEWG), FBI, ATF, and ICE/Customs.***

76.9 percent or 30 chiefs indicated that they frequently share information with the LA JRIC. However, only 33.3 percent or 13 of 42 chiefs share information with the ATF. This data is somewhat concerning given the ATF's resources and willingness to collaborate with local law enforcement.

Common Technical Platform

Question 7 – ***I am familiar with the following common technical networks (interoperable voice or data) to share information with other independent law enforcement agencies in Los Angeles County***.

Respondents were asked about their knowledge with respect to the Los Angeles Regional Interoperable Community System, Interagency Communications Interoperability System, Los Angeles Regional Tactical Communication System, COP LINK, and the Los Angeles Regional Records Management System. Based on the data the chiefs are most familiar with COP LINK as supported by a 100 percent response. The

Los Angeles Regional Records Management System, however, only received 16 of 42 responses or 39.0 percent. Based on the data, it appears that the independent chiefs are familiar with the more popular information sharing networks.

Question 8 – ***A common technical network would improve information sharing between independent police agencies and/or the Los Angles Joint Regional Intelligence Center if every organization had access to the system***.

51.2 percent or 21 of 42 respondents strongly agreed with the premise, which was further supported by 43.9 percent or 18 chiefs who agreed. The combined total in support of this premise represented 95.1 percent or 39 of 42 responses.

Question 9 – ***My department's budget could absorb the cost (design, purchase, implementation, program hard/software) of an interoperable information sharing system.***

52.4 percent or 22 of the 42 independent chiefs of police disagreed with this premise and they were supported by 33.3 or 14 respondents who strongly disagreed. The combined total represented 85.7 percent or 36 of 42 respondents who rejected this premise. This data suggests that the independent chiefs are currently unable to afford the cost of implementing an interoperable voice or data system without assistance.

Question 10 – ***My department would be interested in applying for federal funding toward the design, purchase, and implementation of a common technical information sharing network.***

48.8 percent or 20 of 42 respondents agreed, which was supported by 34.1 percent or 14 chiefs who strongly agreed. The combined total in support of this premise was 82.5 percent or 33 respondents. Clearly the chiefs of police are seeking federal assistance with respect to implementing a network that operated on a common technical platform.

Question 11 **–** ***My department currently participates in homeland security funding programs toward the purchase of a common technical network.***

76.9 percent or 30 of 42 chiefs participate in the State Homeland Security Grant Program (SHSGP) while 51.3 percent or 20 of 42 respondents participate in the Urban

Area Security Initiative (UASI) program. It should be noted that police departments are eligible for SHSGP or UASI programs based on guidelines established by the federal government. The point here was to illustrate the independent chief's willingness to participate in federal funding programs.

However, many of the respondents indicated that they did not routinely participate in other grant programs that are available to all local law enforcement. For example, only 15.4 percent or 6 of the 42 respondents applied for funding through the Law Enforcement Terrorism Prevention Activities program. 12.8 percent or 5 respondents participate in the Tactical Interoperability Communications Grant Program, while only 8 of the 42 chiefs or 20.5 percent indicated they have applied for funding through the Public Safety Interoperable Communications Grant Program. Additionally, only 7.7 percent or 3 of the 42 respondents participate in the Port Security Grant Program, which can be explained as the majority of independent police departments do not patrol the coastline or are responsible for port security. Lastly, 10.3 percent or 4 chiefs indicated they currently participate in the Emergency Management Performance Grant Program. The data suggests that independent chiefs are interested in participating in federal funding programs; however, it seems that they are not very aware of the full spectrum of available grants.

Question 12 – ***Independent police departments in Los Angeles County has developed a comprehensive long-term plan to achieve interoperable communications.***

Interestingly, only 35.7 percent or 15 of the 42 chiefs disagreed with this premise, which was supported by 9.5 percent or 4 respondents who strongly disagreed. The combined total represented 45.2 percent or 19 respondents who felt that they did not have a clear vision to achieve interoperable communications on a common platform. However, even more significant were the number of respondents (11 of 42 or 26.2 percent) who neither agreed nor disagreed with this premise. It is possible that the respondents did not understand the question or are ambient about information sharing on a common technical platform. The latter observation, however, is disputed by previous data that suggest interoperable communications on a common technical platform is a significant need.

Financial Considerations

Question 13. - ***If federal funding is withdrawn my department should be partially responsible for the operational costs associated with the maintenance of the Los Angeles Joint Regional Intelligence Center.***

47.6 percent or 20 of the 42 respondents disagreed with this premise and were supported by 9.5 percent or 4 independent chiefs who strongly disagreed. The combined total represented 57.1 percent or 24 of 42 responses. Interestingly, 31.0 percent or 13 of the 42 respondents neither agreed nor disagreed with the premise, which is a significant number who clearly are undecided about whether or not their agencies should financially support the LA JRIC as a critical information sharing node should federal funding stop.

Question 14 – ***The federal government (DHS or FBI) or the State of California should be financially responsible for maintaining all operational costs associated with the LA JRIC.***

61.9 percent or 26 of 42 responses agreed with this premise, which was supported by 23.8 percent or 10 responses who strongly agreed. The combined total in support of this premise was 85.7 percent or 36 of 42 responses. As with the previous question, this data suggests that the majority of independent chiefs of police in Los Angeles County are unable or unwilling to absorb the cost of operating the LA JRIC, even though the center serves as a critical information sharing node.

Question 15 – ***The LA JRIC should provide or fully fund interoperable information sharing networks for independent law enforcement agencies in Los Angeles County.***

80.9 percent or 34 of 42 respondents agreed or strongly agreed with this premise. The data here suggest that the independent chiefs value information sharing networks; however, they are unable or unwilling to contribute financially to achieve this goal.

Question 16 – ***The LA JRIC should provide without cost an analyst to assess threats and vulnerabilities in my jurisdiction.***

54.8 percent or 23 of 42 respondents agreed with this premise, which was supported by 19.0 percent or 8 responses who strongly agreed. The combined total 73.8 percent or 31 of 42 responses were in support of this premise. This data suggests that the independent chiefs expect the LA JRIC to absorb the entire cost associated with staffing at the center. This data is significant considering that the LA JRIC is currently operating with minimal staffing and continuously engages the independent chiefs for assistance with staffing.

Question 17 – ***The LA JRIC should be responsible for training my officers about intelligence (use, collection, distribution).***

52.4 percent or 22 of 42 chiefs agreed with this premise, which was supported by 16.7 percent who strongly agreed. The combined total in support of this premise was 68.8 percent or 29 of 42 responses. As with previous financial questions, the data here suggest the chiefs value intelligence training, however, expect that the LA JRIC will absorb the associated cost.

Question 18 – ***My department currently funds (staffs) a Terrorist Liaison Officer (TLO) to interface and collaborate with federal, state, local intelligence centers.***

59.5 percent or 25 of 42 respondents indicated they utilized the TLO program, which suggest the independent chiefs' value intelligence and connectivity to the LA JRIC or other intelligence centers. However, 40.5 percent or 17 of 42 respondents indicated they do not currently utilize the TLO program to facilitate collaboration with intelligence centers or their municipal contiguous partners. The data here suggests that nearly half of the police departments in Los Angeles County are not directly connected to an intelligence center, which creates significant information (and intelligence) gaps in the county. This data is somewhat surprising given that the TLO program is a relativity low cost program to implement and that the LA JRIC and other intelligence centers frequently use the program to facilitate information and intelligence sharing.

Intelligence in Law Enforcement

Question 19 – ***My department has established and shared with other independent law enforcement agencies in Los Angeles County and the LA JRIC, intelligence standards to help identify threats, vulnerabilities, or other concerns in my community.***

45.2 percent or 19 of 42 respondents agreed with this premise, which was supported by 16.7 percent or 7 chiefs who strongly agreed. The combined total in support of this premise is 61.9 percent or 26 of 42 independent chiefs.

However, as with the previous question, the data suggests that there are clear information sharing and intelligence gaps within the county. 16.7 percent or 7 of 42 chiefs disagreed with the premise that they had developed information and intelligence standards. This was supported by another 4.8 percent respondents who strongly disagreed. The combined total who disagreed with this premise represented 21.5 percent or 9 of 42 respondents. In other words, 21.5 percent of the independent police departments in Los Angeles County are not sharing information between themselves and/or the LA JRIC. The information gaps are increased significantly when you consider the chiefs who neither agreed nor disagreed (16.7 percent or another 7 respondents). The combined total (neither agrees nor disagrees, disagrees, or strongly disagrees) represents 38.2 percent or 16 of 42 respondents. This percentage is significant given the urban environment and close proximity between municipalities operating in Los Angeles County.

Question 20 – ***My department currently has a civilian analyst or police officer assigned to the LA JRIC to provide me with intelligence estimates (evaluations and threats).***

88.1 percent or 37 of the 42 of the respondents indicated that they did not assign personnel to the LA JRIC. Much like previous questions in the survey, this data suggests that while the independent chiefs value information sharing to improve intelligence in Los Angeles County they are unable or unwilling to support the LA JRIC with staffing concerns even if it decreases the quality of intelligence received at the local level. Only

11.9 percent or 5 of 42 respondents indicated they assist LA JRIC with staffing. The data here suggests that the vast majority of independent police departments in Los Angeles County are unable or unwilling to support the LA JRIC as a critical information sharing node.

Question 21 – ***My department would receive a more specific intelligence report (threat assessment) from the LA JRIC if I had an analyst or police officer assigned to the center.***

A combined total of 71.4 percent or 30 of 42 respondents agreed or strongly agreed with this premise. The next largest percentage was 10.0 percent or 8 of the 42 chiefs who neither agreed nor disagreed with the premise. Yet it is clear from data provided in previous survey questions that the respondents are unable or unwilling to assist the LA JRIC with staffing needs even at the risk of eroding the quality of intelligence at the local level.

Question 22 – ***My department would be interested in sharing the cost, with other independent police departments, of funding an analyst's position at the LA JRIC towards providing a specific threat estimate concern in my area of jurisdiction.***

Only 28.6 percent or 12 of 42 respondents agreed with this premise. 42.8 percent or 19 of 42 respondents either disagreed or strongly disagreed with this premise while another 28.6 percent or 12 respondents neither agreed nor disagreed, which interestingly equaled the combined input from those chiefs who agreed or strongly agreed. The data here suggests that independent chiefs of police in Los Angeles County are less inclined to collaborate with one another even at the risk of reducing the level of information sharing and/or the quality of intelligence received at the local level. Moreover, the survey data suggests that police departments in Los Angeles County continue to operate independent of one another and are unable or unwilling to truly collaborate or integrate resources.

Question 23 - ***My department currently uses the daily intelligence briefing distributed by LA JRIC to assist with deployment strategies.***

46.3 percent or 19 of 42 respondents disagreed with this premise while only 34.1 percent or 14 of the 42 agreed. 17.1 percent or 7 of the 42 chiefs neither agreed nor disagreed, which is significant given the expressed desire to use intelligence to combat crime or terrorism.

The data here suggests that the respondents were not currently using the daily LA JRIC brief to deploy police resources even though the majority of the police departments utilize the TLO program (question 18, 61.0 percent of the respondents indicated they have a TLO program to liaison with the LA JRIC). This fact was again asserted during a number of personal conversations with independent chiefs of police in Los Angeles over the past 12 months. The conversations were not formal or framed around specific questions; however, the feedback received at the time suggests that the LAR JRIC daily intelligence brief is not generally considered when developing patrol or security strategies.

Questions 24 – ***Do other intelligence organizations, such as the Joint Terrorist Task Force, Terrorist Early Warning Group, or other federal or state intelligence centers provide your department with a high quality intelligence brief (estimate).***

57.1 percent or 24 of the 43 chiefs agreed with this premise. 42.9 percent or 19 respondents indicated they disagreed with the premise. The data here suggests that the independent chiefs of police do not rely on one specific source for intelligence estimates.

Questions 25 and 26 - ***were framed around the size of the department and the tenure of the respondents. Police departments were placed into one of three categories: small (0- 49 sworn personnel), medium (50 – 149 sworn officers) and large (150+ sworn officers).***

11 responses or 26.2 percent were received from small police departments. This number was matched by the chiefs represented by large municipalities. The greatest number of responses was received from chiefs representing the medium police departments (47.6 percent or 20 responses). The independent chiefs of police

participating in this survey represented a total of 359.2 years of serve as chiefs. The average tenure, however, was 8.55 years of service as an independent chief of police.

The survey results are only meant to indicate the current perceptions asserted by the independent chiefs of police in Los Angeles County with regard to homeland security issues and information sharing. In other words, the respondents only provided a "snapshot" of the current effort to share information between their contiguous municipal law enforcement partners and their fusion center.

Based on the analysis of the data collected from the general survey, it is clear that the independent chiefs of police clearly desire to increase information sharing between local law enforcement agencies and their regional fusion centers. It follows logically that local law enforcement agencies throughout America suffer from the same or similar information and intelligence gaps. This point was illustrated in the Government Accounting Office's report, *Homeland Security: Information Sharing Responsibilities, Challenges and Key Management Issues.*[112]

However, financial resources, staffing issues and a lack of a regional template (among other components) to increase information sharing all erode the collective effort. The positive news is that there are low cost programs, systems, and networks that, if implemented, would immediately increase information sharing among America's local independent law enforcement agencies responsible for police services in rural, urban, or metropolitan areas. The following section examines some short-term and long-term options to increase data collection and information sharing.

[112] United States Government Accounting Office, *Homeland Security: Information Sharing Responsibilities, Challenges, and Key Management Issues*, Testimony before the Committee on Government Reform, House of Representatives (Washington, DC: The Office, 2003), http://www.gao.gov/new.items/d03715t.pdf [accessed September 24, 2008].

III. RECOMMENDATIONS FOR DATA COLLECTION

The recurring theme in this thesis has been a need to improve information sharing among independent police departments in Los Angeles County to increase local law enforcement's capacity to combat terrorism and criminals. In order to develop and distribute an actionable intelligence product, independent police departments will have to improve data collection, information analysis and resources integration.

A. COMMUNITY ORIENTED POLICING

Community policing carried out by the police officer patrolling the community, by all accounts, seems to be a time tested method of collecting data from the field and offers a low-tech viable option currently available to independent police agencies in Los Angeles County.

Community Oriented Policing (COP) has morphed into a comprehensive and effective communication link with the community over the past three decades. The State of California, Attorney General's Office defines COP as: "a philosophy, management style, and organizational design that promotes proactive problem-solving and police-community partnerships to address the cause of crime and fear as well as other community issues."[113]

Virtually every independent police department in Los Angeles County operates under some form of community policing. In fact, the majority of independent municipalities who practice community-oriented policing is inculcated into the organization's culture and is often used to develop long-term service or policing strategies. A properly developed community policing program is staffed with experienced and knowledgeable officers who are certainly capable of engaging all community groups. Moreover, officers who form strong relationships built on trust, respect and a comprehensive understanding of unique cultures can later serve as creditable

[113] California Attorney General's Crime and Violence Prevention Center, "Community Oriented Policing Definitions," http://safestate.org/index.cfm?navId=7 [accessed September 12, 2008].

ambassadors serving to educate the community at large and the minority groups. Relationships formed between the community policing officer and community members helps to establish a direct nexus to data collection. As the relationship begins to develop, contacts between the officer and the community member become more frequent. As the relationship continues to deepen over time, the officer may receive sensitive information and an increase in reports of suspicious behaviors that the public may become aware of or actually witness.

As previously suggested community orientated policing can offer independent police departments a low-tech opportunity to improve collect data toward increasing the department's information sharing capacity.

B. FORCE REPORTING MODEL (FRM)

An alternative to the community-policing data collection approach, which is most effective when staffed with experienced mature officers, is the forced reporting method.

In order to effectively collect data, independent chiefs of police should consider mandating its personnel, both sworn and civilian, to collect data when dealing with suspicious behaviors. A Force Reporting Model (FRM) requires that all police officers and civilian employees patrolling the community report suspicious activity FRM mechanisms are used to document and report all suspicious behavior or activity. The data may be reported as the result of personal observations by field personnel, investigators or may be reported to the officer by private parties.

If independent chiefs are interested in implementing a FRM, they must work hard to define the mission and develop the framework for appropriate and usable data. The police administrator should consider what areas should be reported on including: Religious Centers, critical infrastructures, entertainment centers, and sites that have iconic value, for example the Santa Monica Municipal Pier.[114]

[114] Timothy J. Jackman (Chief of Police, Santa Monica Police Department), remarks during a private conversation with the author, Santa Monica, June 23, 2008.

Once the mission has been defined and targets identified, a reporting mechanism must be developed. The document should be easy to use and yet contain enough questions to ensure the appropriate amount of data is collected for each suspicious activity or behavior call for service. For example, the FRM form may include a listing of suspicious activity (i.e. videotaping of ingress and egress of a critical location, or individuals pacing off (measuring) the dimensions of a public building**)**. The concept behind the FRM is to collect enough data to build up a strong base so that the data can be analyzed toward identifying patterns, consistent suspicious behavior or activities. Accurate, timely, and usable data may help police decision-makers better unitize their resources to increase security or detect terrorists.

Lastly, in order for the FRM to work effectively, police executives must create and implement department policies that mandates and governs field reporting. In other words, mandating that all field personnel report suspicious activities or behavior eliminates the likelihood that a less experienced officer will rationalize the alleged suspicious behavior thereby ensuring that all suspicious activities or behaviors will be reported to the appropriate group or person. Additionally, police executives would do well to identify a clear reporting line from the field to the intelligence officer thereby reducing the likelihood reports will be lost or misplaced. Moreover, it is critical that a feedback loop be established to ensure officers are aware of any enforcement actions initiated by the department based on data collected from the field Providing feedback, when possible and appropriate, helps to keep field personnel energized, and engaged as they realize their efforts are a critical component of the homeland security dynamic.

C. TERRORISM LIAISON OFFICER PROGRAM

Lastly, one of the most effective ways to collect data towards the development of a robust intelligence product is the Terrorism Liaison Officer (TLO) program. These programs have been used among independent police departments within Los Angeles County; however, their participation is typically limited to attending regional intelligence

meetings and exchanging dated data with federal organizations such as the FBI.[115] These efforts have historically started with law enforcement agencies at the investigator's level. However, there are some agencies that have or are considering creating a field TLO program, wherein the field officers serve as the primary component to collect data. In the proposed programs, and in some cases they are yet to be developed, the field TLO would push data or information to the department intelligence officer (typically the agency's TLO as well), who would then analyze the data and then send it on to the LA JRIC or other intelligence center.[116]

Regardless of how the TLO program is implemented, chiefs of police or other department executives should contact the Los Angeles County Sheriff's Department to ensure they understand the duties of the TLO, including the necessary resources to support the program, and training/educational requirements for all participants. Another option to secure a comprehensive understanding of the TLO program would be to speak with other independent chiefs of police who have implemented the TLO program at their department. Lastly, small agencies (less than 49 sworn personnel) may consider integrating their resources with other like sized municipal contiguous partners thereby reducing the financial burden while maintaining direct contact with their regional intelligence centers through the TLO program.

Once police chiefs have agreed to implement the program, they should be prepared to recommend which officers will be selected as TLOs. This effort should not be taken lightly, particularly when considering the TLO coordinator's position (smaller agencies may not have a need for a TLO coordinator; however, an appropriate ratio of TLOs to coordinators should be determined if a position is necessary). The TLOs should operate with a great deal of autonomy and their chain-of-command must include access to the management of their individual organizations as well as credibility with and access to the rank-and-file personnel, which should include both sworn and civilian personnel.

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[115] David Thomas (Sergeant, Santa Monica Police Department, Terrorism Liaison Officer), remarks during a private conversation with the author, Santa Monica, June 23, 2008.

[116] This program is currently in the early stages of reform at the Santa Monica Police Department. The department's TLO have attended formal training hosted by the Los Angeles Joint Regional Intelligence Center.

Of course it goes without saying that TLOs should receive any and all required training in basic situational awareness of terrorist methods of operation, radicalization and pre-incident indicators. Lastly, TLOs should understand how to facilitate the program at their own agency to ensure the integrity and mission of the program is not eroded. This component is particularly critical, in part because TLOs operating within the same region must collect, analyze data, and share information within the limits of the established matrix. The mission (roles and responsibilities) for the TLOs must be established and clearly articulated to the program participants to ensure they understand their duties.

Historically, police officers, investigators, or intelligence personnel serve as TLOs. However, limiting the TLO responsibility to just law enforcement officials does not maximize the data collection effort. Once the TLO program within an independent police department is implemented, the chiefs should turn their attention to developing TLO programs among other emergency responder disciplines, for example municipal fire departments.

Regardless of whether the TLO program is implemented by a law enforcement agency or other emergency responders it will be critical to develop and implement a reporting mechanism. The reporting component will be even more critical when implementing the TLO program among other first responders, such as fire or medical personnel, as they are not naturally geared toward investigation, observation and reporting suspicious behavior. The data collected by these responders could prove extremely valuable, and it certainly would be worth the effort to educate all involved in the process of legally and ethically providing this information to independent police departments, fusion centers, or other intelligence centers. However, to ensure there are no violations of civil rights or laws, appropriate governance must be established and enforced to ensure civil liberties and privacy is protected.

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IV. RECOMMENDATIONS FOR INFORMATION SHARING

This body of research suggests that the national homeland security effort is, in part, based on information sharing. Since the attacks on the World Trade Center, the federal government has spent tremendous resources toward the development of comprehensive information sharing guidelines through published documents, such as the United States Department of Justice, National Criminal Intelligence Sharing Plan (NCISP) and the United States Department of Justice, Global Justice Information Sharing Initiative (GJISI).

Based on a critical need for accurate and usable intelligence, local police departments in Los Angeles County have attempted to implement many of the information sharing recommendations highlighted by the federal government. However, independent police departments in Los Angeles County continue to struggle with sharing information consistently between municipal partners and their regional fusion center.

The challenges prohibiting timely information sharing between independent police departments and their fusion center seems to arise from operating disparate data and voice networks. Based on this research, it is clear that the independent chiefs of police must design, purchase, and implement new networks that operate on a common technical platform or enroll and participate in existing systems. Independent chiefs of police could immediately increase their information sharing capabilities on a common technical platform through participation in regional systems currently available and operated by the Los Angeles County Sheriff's Department. For example, independent police departments could subscribe to the Regional Terrorism Information and Integration System (RTIIS), DNA Tracking Data Base (DOTS), or the Jail Information Management Systems (JIMS). These systems do not require significant start-up costs and immediately increase data and information exchange. Moreover, when independent agencies participate is existing programs they automatically become part of a large information sharing network receiving and contributing data.

Voice interoperability is a little more costly and requires that each independent agency assess their needs prior to subscribing to an existing network. The cost varies depending on the needs of the police departments. Agencies could achieve immediate voice interoperability by subscribing to the Interagency Communication Interoperable System (ICIS). The following section will examine options to securing interoperable communications on a common technical platform.

A. STRATEGIC CONSIDERATIONS

Before the independent chiefs of police can truly consider specific alternatives to achieving information sharing on a common technical platform, it is necessary to examine how their departments currently uses radio and data communications to manage daily resources and supervise emergencies. Information sharing needs should be considered before independent agencies can develop and implement a comprehensive strategy towards creating an interoperable system.[117]

The greatest demands for radio and data communications occur during the response phase of a local or regional emergency or when a specialized unit (SWAT, Narcotics Team) is executing a tactical mission. During this phase the need for "free flowing" communication is typically at its greatest level. There are many competing radio and data needs at this acute state of the incident. For example, personnel safety, coordinating emergency resources, protecting lives and property, assisting victims, and assessing the duration of the incident all require the ability for first responders to communicate with one another. The early stages of these missions are demanding, stressful, and emotionally charged, which often creates communication challenges during the initial response phase.

1. Disparate Platforms

A contributing factor to the lack of information sharing on common technical networks is that independent police agencies within Los Angeles County operate on

[117] Eric Uller (Senior System Analyst, City of Santa Monica), remarks during a private conversation with the author, Santa Monica, January 31, 2008.

disparate platforms. Law enforcement agencies and fire agencies throughout the nation operate on a mixture of Ultra High Frequency (UHF), Very High Frequency (VHF) or 800 MHz systems. Within the variety of frequency spectrum that is used, there is a mixture of system types. For example, some agencies operate in a digital mode whereas other agencies operate in an analog mode. Some agencies are using various forms of encryption, and in some cases that encryption is even based upon proprietary forms of technology that are not shared by radio equipment manufacturers. Complicating the problem even further, some agencies have completely unsecured radio networks thereby enabling unauthorized access to radio channels by members of the public. On the opposite end of the spectrum, some agencies are operating their radio systems under such high security that even other departments within their municipality are unable to communicate with each other.

One possible solution to resolve these concerns would be to identify specific areas of the radio spectrum for designated use separately by law enforcement and fire. For example, local law enforcement agencies could be assigned to UHF, while state and federal law enforcement could be assigned to VHF and the fire service could be assigned to 800 MHz. The clear advantage of designating a spectrum to specific public safety sectors is that the end-user equipment assigned to first responders is compatible with other first responders' equipment regardless of geography. For example, a local law enforcement response team from California travels to New York to render mutual aid. The California team's radios would require a simple programming change to communicate on the New York radio system because the radio components and equipment would already operate on the UHF platform.

2. Data Communications

Data communications typically consists of information including call response data, established protocols and policies relating to prevention or preparedness, geographic information and data and potentially video.

There has been dramatic advancement in the area of data communications over the past ten years. For example, in the early 1990s, most public safety agencies relied

upon the use of costly privately owned and operated data networks such as Motorola's Radio Direct Link Access Protocol (RDLAP)[118]. Privately owned and operated radio networks offered opportunities for data communications that were otherwise unavailable. The systems required a substantial initial investment in infrastructure and subscriber equipment, but once in place there were very low or nominal maintenance costs thereby affording a very low overall total cost of ownership. However, these networks had significant limitations. For example, the private radio networks did not support high bandwidth and thus the amount of data that could be transmitted across the network was very small. Further, the networks required the use of proprietary equipment that precluded any interoperability whatsoever.

As the first responders requested and required more data to facilitate their response efforts and capabilities, private radio networks were quickly outgrown. Fortunately, the private sector recognized the limitation of private radio networks and invested in technological improvements that supported improved data communications. Public telephone carriers such as Verizon, AT&T and Sprint have invested billions of dollars in a variety of data communication networks such as the Global Packet Relay Service (GPRS),[119] High Speed Downlink Packet Access (HSDPA),[120] and Evolution Data Optimized (EVDO)[121] systems. These networks support significantly more bandwidth than privately owned radio networks and are regularly upgraded as technology

[118] Private DataTAC operates on 23kHz or 125 channels in the 800 and 900 MHz Private Mobile Radio frequency bands and uses Radio Data Link Access Protocol (RD-LAP) for high-speed communications. From *Harvesting the Power of Your Communications Network* p. 2, http://www.motorola.com/governmentandenterprise/contentdir/en_US/Files/General/Exchange_Utility_Spring2003.pdf [accessed September 13, 2008].

[119] Global Frame Relay connects multiple locations over the public switched network. A fast packet-based technology, it carries data transmissions on an intermittent basis over fiber optic and digital circuits, n.p., http://www22.verizon.com/longdistance/business_east/bld_data_framerelay.jsp [accessed September 13, 2008].

[120] HSDPA is a new protocol for mobile telephone data transmission. It is known as a 3.5G (generation) technology. HSDPA provides download speeds on a mobile phone equivalent to an Asymmetric Digital Subscriber Line (ADSL), http://www.wisegeek.com/what-is-hsdpa.htm [accessed September 13, 2008].

[121] EVDO is a 3G high-speed digital data service provided by cellular carriers worldwide that use the CDMA technology. EVDO operates on EV-DO cell phones as well as laptops and portable devices that have EVDO modems, http://www.answers.com/topic/evolution-data-only [accessed September 13, 2008].

advances. The highly competitive public telecommunications business market has driven these advances while helping to keep the costs affordable for both private and public entities.

While data telecommunication costs for a small or mid-sized agency are affordable, large agencies cannot afford to purchase and install high-speed public carrier telecommunication devices for their mobile workforce. For example, a small agency in Southern California that operates a fleet of 65 vehicles and 10 motorcycles can afford an annual telecommunications lease cost of approximately $50,000, whereas a large agency in the same geographic region that has a fleet of 5,000 vehicles cannot afford an annual telecommunications lease cost of $3,000,000. This dynamic precludes the ability for small and large agencies to have interoperable data communications. Aside from financial considerations, there are significant concerns with the operation of public carrier networks. All of the public carrier networks rely upon communications across the public Internet. State and federal regulations require that law enforcement telecommunication networks utilize high levels of security to ensure the integrity of the data. Therefore, the use of public carrier networks requires agencies to invest in additional network equipment to ensure secure point-to-point communications between the public carrier networks and the agencies.

Given the threat of an attack upon the Internet's infrastructure, domestic and foreign, terrorist organizations highlight the vulnerability of public networks. These same security concerns are not necessarily applicable to private networks because the private networks do not rely upon communications across the public networks. When considering data communications in general, agencies must look at the limitations of private networks balanced against the security risks of relying upon public networks.

B. OPTIONS TO SECURE A COMMON TECHNICAL NETWORK

In the months following the tragic events of September 11, 2001, and after a post incident analysis was completed within all levels of the government, the lack of interoperable radio communications was very evident. Shortly after the release of a number of reports citing the lack of interoperable radio communications, local, state, and

federal agencies all began reevaluating their focus on interoperability. It was readily apparent that there was a great need to enhance radio systems throughout the nation. However, it was also quickly realized that there was insufficient funding available to implement new radio systems that were fully interoperable. With the birth of the Department of Homeland Security (DHS), grant funding sources such as the Urban Area Security Initiative (UASI), provided sorely needed funding for local, state, and federal agencies. This influx of money was welcomed by the agencies and initially was believed to be the solution to the lack of interoperability. However, it quickly became evident that public safety agencies could not agree upon a direction or platform for a fully interoperable radio network. The lack of agreement led to everyone asking one simple question – "What is Interoperability?"

Despite well intentioned efforts to create a unified interoperable system, public safety agencies armed with federal grant funding that would ultimately expire if not used in a timely manner, moved along in different directions with little to no collaboration whatsoever. This resulted in the development and implementation of several independent radio and data networks that were advertised as interoperable. However, these networks were not capable of communicating with each other thus further solidifying a culture of independent communication among public safety agencies.

Interoperability can be defined as the ability to exchange and use information. This definition sets the framework for the development of truly homogenous radio systems. Advantages of interoperable radio systems includes the ability to share and exchange information at the first responder's level. This allows for agencies from multiple disciplines to cohesively manage the assignment and usage of resources at a critical incident.

The disadvantage to interoperable communications, at a critical incident, is that it is counterproductive to the unified command system as any first responder at any level equipped with a radio within any organization possesses the ability to communicate directly with the front line first responder. This type of direct communication circumvents the chain of command which is vital to incident management relating to

resource usage, mitigation efforts and the safety of the first responders. Further, by circumventing the chain of command, there is greater likelihood of confusion, redundancy and underutilized resources.

1. Interagency Communications Interoperability System (ICIS)

In recent years, municipalities have attempted to address the interoperability dilemma by creating smaller communication networks within their geographic area. For example, in Southern California, the City of Glendale constructed a trunked radio communications network known as the Interagency Communications Interoperability System (ICIS) which was marketed to other municipalities in the immediate area.[122] As the lure of enhanced communications for smaller municipalities increased, participation quickly grew and the ICIS network now consists of more than one dozen participating agencies throughout Los Angeles County and many other subscribing agencies that pay fees to utilize the network. However, two of the larger law enforcement agencies in the Southern California area, the Los Angeles County Sheriff's Department and the Los Angeles Police Department, elected to not participate in the regional network. As a result, these two agencies researched and developed their own communication networks, which are independent of the ICIS network, and consequently none of the three major communication networks are integrated.

ICIS does not provide ubiquitous coverage throughout the county, primarily because it is not widely supported or adopted by the larger agencies. Despite the collaborative efforts of the agencies participating in the ICIS network, it remains independent of the communication systems utilized by the Los Angeles County Sheriff's Department and the Los Angeles Police Department. Based on this model, regional networks are not presently an option for true interoperability.

[122] The ICIS radio system is UHF, trunked radio system operating in the UHF (450 – 512 Mhx) band. It is a shared system with components purchased and constructed by individual cities and linked together through a microwave network in order to provide regional coverage. "About ICIS," http://www.icisradio.org/about.asp [accessed September 13, 2008].

2. Los Angeles Regional Interoperable Communications Systems (LA RICS)

The public safety community within the Los Angeles region has begun the process of developing the Los Angeles Regional Interoperable Communications Systems (LA-RICS), a modern integrated wireless voice and data communications system that will support more than 34,000 first responders and local mission-critical personnel within the region.[123] LA-RICS is committed to providing the necessary leadership and securing the needed funding to develop and expeditiously implement LA-RICS.

The Los Angeles region is one of the largest urban areas within the nation with more than 10 million residents living within 4,084 square miles; the area's population is greater than 42 of the 50 states. Over fifty law enforcement and 30 fire service agencies provide public safety services to 88 municipalities as well as unincorporated areas.

It is the view of LA-RICS that interoperable public safety communications within the Los Angeles region can best and most cost effectively be attained by developing a shared voice and data radio system. By pooling frequencies and utilizing existing infrastructure where practical from the City of Los Angeles, the County of Los Angeles, ICIS, Long Beach and other municipalities, LA-RICS will be able to provide unified voice and data communication platforms for all first responders in the region, eliminate the duplication of costs and effort involved in maintaining separate systems, provide instantaneous communications among agencies in the event of a man-made or natural disaster, and support the day-to-day communications needs within individual public safety agencies.[124]

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[123] LA-RICS is an outgrowth of the regional interoperable steering committee (RICS) which was formed to explore the development of a single, shared communication system for all public safety agencies within the Los Angeles region, Los Angeles Regional Interoperable Communications System (LA-RICS) *One Vision – One System*, (May 2007) http://la-rics.org/LARICS_Brochure_Revise.pdf [accessed September 13, 2008].

[124] "The U.S. Department of Homeland Security Announced that More than $844 Million in Grant Awards as Part of its 2008 Infrastructure Protection Activities Program," (May 16, 2008), http://www.dhs.gov/xnews/releases/pr_1210954542145.shtm [accessed September 13, 2008].

3. Budgetary Implications

The vast majority of local funding is inadequate to support large or independent interoperable systems. For example, competing costs such as increased compensation and benefit packages for first responders, infrastructure maintenance, and the general cost of operating a municipal government has significantly, if not completely, wiped out funding for radio communication projects. Thus, most agencies seek local funding for radio communication projects through capital improvement budgets. However, because of decreased revenues, increased expenses and costs associated with civil litigation, the capital improvement funds have dwindled making them less of a viable resource. Compounding the problem even further is that many municipalities have priorities that exceed that of radio communication systems such as water and sewer treatment plants and systems, other infrastructure related projects and replacing aging facilities. Radio communication systems are not often given consideration by committees reviewing capital improvement funding because of the mentality that the current system meets basic communication needs and thus related requests are assigned a low priority.

Municipalities seeking to implement information sharing on a common technical platform have turned to the state and federal governments for grant funding. For example, the Urban Area Security Initiative (UASI) grant program offers funding for a variety of communication needs including mobile command vehicles, telecommunication improvements and regional interoperable radio systems and equipment.[125]

A phased approach is a viable option for a municipality to implement an interoperable network. For example, an agency that receives only small amounts of UASI or other grant funding or is able to secure small amounts of funding in their annual budget could use those funds to purchase end-user equipment compatible with an interoperable network and continue to build upon that inventory when funding became

[125] The U.S. Department of Homeland Security Announced that More than $844 Million in Grant Awards as Part of its 2008 Infrastructure Protection Activities Program, "DHS Awards $844 Million to Secure Nation's Critical Infrastructure" (Washington, DC: The Office, 2003), http://www.dhs.gov/xnews/releases/pr_1210954542145.shtm [accessed September 13, 2008].

available. Concurrent to that process, the agency could seek out and apply for various grants for infrastructure build out over the course of several years.

Without concern given to the network selected, designed or implemented, it is important that independent police agencies establish frequency sharing arrangements and enter into formal Memorandum of Agreements (MOA) to ensure appropriate usage guidelines and protocols are established and maintained.

C. LEADERSHIP – THE KEY TO INFORMATION SHARING

Leadership could be the missing component to increasing information sharing among independent local police departments throughout America. There are numerous definitions of leadership. Moreover, it is used so frequently in the law enforcement community it has become somewhat of a "tagline" that is often dismissed as quickly as it is asserted. Leadership is a complex dynamic and is difficult to describe, as it has taken more of a form of art combining several interpersonal skills such communication, eye contact, and voice tone to name a few.

The United States Coast Guard defines leadership in this manner, "Leaders take people where they haven't been before. If they're not changing, they're not leading."[126] Effective leadership is so powerful it is often the most critical component to achieving a desired goal or completing a specific mission.

What is the role of leadership in the effort to increase information sharing among independent police departments in Los Angeles County and, equally important, police agencies across America? Technology does not, for the most part, seem to be an obstacle to increasing information sharing among independent police departments. Frankly, information sharing technologies have outpaced participation in the available networks. For example, the Los Angeles County Sheriff's Department developed a regional records management system (LA-RTIIS Los Angeles Regional Terrorism Information and Integration System), which is offered to the independent chiefs at minimal expense.

[126] Donald T. Phillips and James M. Loy, *Character in Action: The U.S. Coast Guard on Leadership* (Annapolis, MD: Naval Institute Press, 2003), 77.

Participation in networks like LA-RTIIS would almost certainly increase information and intelligence sharing among the independent police departments and as a result could increase their capacity to detect terrorist or criminal activity. Yet, despite the obvious benefits gained by participating in a regional information and intelligence sharing network, only 13 of 46 chiefs currently use or contribute data to the system.[127]

Another example of information and intelligence sharing among local and state law enforcement agencies can be found in the State of New Jersey. The New Jersey State Police have developed a robust information and intelligence sharing network, which facilitates data exchange among independent police departments throughout the state and their fusion center on a common technical platform. At the center of the network is their Emergency Preparedness Information Network (EPINet). [128] EPINet allows the New Jersey State Police and numerous other law enforcement agencies throughout the state to upload emergency operational, traffic, tactical, and recovery plans into the network, which allows immediate access in the event of a major incident. A more local example of interoperable communications can be found in Orange County (CA) where independent police departments have long benefited from operating on a common technical platform.[129] Voice and data information sharing allows the local law enforcement agencies in Orange County to more effectively coordinate emergency response and integrate resources to combat crime and/or prepare for terrorist attacks.

There are numerous interoperable networks throughout the United States operating on a common technical platform that connect local and state law enforcement with other public agencies. The point here, however, is simply that leadership provides the necessary vision to secure interoperable systems.

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[127] Rick Adams (Commander, Los Angeles County Sheriff's Department – LA RICS Law Enforcement Liaison Officer), remarks during a private conversation with the author, Los Angeles, January 22, 2008.

[128] Center for Policing Terrorism. *New Jersey State Police A Practical Guide to Intelligence Led-Policing* (New York, NY: Manhattan Institute for Policy Research, 2006), 1-37, http://www.cpt-mi.org/pdf/NJPoliceGuide.pdf [accessed February 5, 2008].

[129] Personal observations of the author during a civilian ride-a-long with the Laguna Police Beach Department 1980, Laguna Beach, California.

The independent chiefs in Los Angeles County, as well as other law enforcement leaders across America, can learn from their counterparts in New Jersey and Orange County (CA) in order to increase information and intelligence sharing among independent police departments operating in rural, urban and metropolitan areas. The federal government has also contributed to the effort to increasing information sharing at the local level by recommending steps for governance, implementation, and/or system participation. Examples are embedded in documents such as the United States Department of Justice, *National Criminal Intelligence Sharing Plan*;[130] the U.S. Department of Homeland Security, *Interoperability Continuum*;[131] and the Government Accountability, Report to Congressional Committees, *Federal Efforts are Helping to Alleviate Some Challenges Encountered by State and Local Information Fusion Centers.*[132]

As demonstrated by the research in this thesis, financial resources can often restrict development and implementation of the "high-end" elaborate information sharing networks. Yet, there are "low-tech" information and intelligence programs, such as the Terrorist Liaison Officer (TLO) program, that provide the independent police departments the opportunity to increase information and intelligence sharing with their municipal or urban law enforcement counterparts. Budgets and staffing notwithstanding, independent police chief are encouraged to consider assigning an analyst (civilian or sworn) to their regional fusion center to ensure information and intelligence sharing are promoted. Additionally, independent police chiefs are more likely to receive a "tailored" intelligence estimate (report) when they assign an analyst to the fusion center, in part because the analysts would be familiar with the agency's intelligence needs (requirements).

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130 National Criminal Intelligence Sharing Plan (NCISP), 1 – 40, http://wwwiir.com/global/products/NCISP_Plan.pdf [accessed January 5, 2008].

131 U.S. Department of Homeland Security, *Interoperability Continuum: A Tool for Improving Emergency Response Communications and Interoperability* (Washington, DC: DHS, n.d.), http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability_Continuum_Brochure_2.pdf [accessed September 17, 2008].

132 United States Government Accountability Office, *Homeland Security: Federal Efforts are Helping to Alleviate Some Challenges Encountered by State and Local Information Fusion Centers* (Washington, DC: The Office, 2007), http://www.gao.gov/new.items/d0835.pdf [accessed September 18, 2008].

V. RECOMMENDATIONS

Based on the research conducted in this thesis, the independent chiefs of police in Los Angeles County and throughout the United States do not lack in technical solutions to increase information and intelligence sharing. Rather it is the collective leadership, influence and willingness to commit to share information and intelligence with other law enforcement organizations that appears to be the missing component.

A. SUMMARY OF DATA COLLECTION RECOMMENDATIONS

- Independent chiefs of police should consider establishing a community policing program within Muslim communities or other cultures of interest within their jurisdiction in order to establish positive police relationships with the public.

- Independent police departments should consider implementing a force reporting model (FRM) to ensure data is collected above and beyond incident reports. The FRM should be mandated and supported by policies that require all field personnel to report suspicious activity or behavior.

- Independent chiefs should consider formalizing and sharing their information needs with their contiguous municipal partners and their local fusion centers. This process should also include a feedback component to ensure agencies are kept informed.

- Each independent police department must establish accurate intelligence needs (standards) and share those needs with their contiguous municipal partners and their regional fusion center. This process should also include a feedback component to ensure agencies are kept informed.

- Independent chiefs of police should consider implementing a TLO program in their jurisdiction. Police administrators should be actively involved in the selection of the TLOs.

- Each independent chief should seek assistance from their regional fusion center to ensure the TLOs are trained to the same standards with respect to data collection and information sharing.

B. SUMMARY OF INFORMATION SHARING RECOMMENDATIONS

- Independent chiefs of police should consider designing, purchasing, or participating in common technical network that is accessible, affordable and robust enough to support timely information sharing.

- Independent chiefs of police should consider participating in established information sharing and communication networks already in existence, such as:

    - Regional Terrorism Information and Integration Systems (RTIIS)

    - DNA Tracking Database (DOTS)

    - Jail Information Management System (JIMS)

    - Automated License Plate Recognitions System (ALPR)

    - COP LINK

- Utilize executive meetings to reaffirm a commitment to information sharing, collaboration, and resource integration.

- Reaffirm professional relationships with other independent chiefs of police to ensure communication lines remain open and trust is reaffirmed.

- Establish short-, mid- and long-term information sharing goals, which includes developing measurable outcomes.

- Independent chiefs of police should consider combining financial resources to support staffing their local fusion centers.

- Consider formalizing many of the monthly interagency ad hoc meetings that are used to combat local crime such as robberies, property crimes, street gangs and narcotics.

- Consider creating a regional information sharing committee among the independent police departments to provide governance to the agencies and/or the fusion centers.

- Independents chiefs of police should seriously consider making every effort to staff their local fusion center with full-time employees, civilian or sworn analysts.

- Consider implementing best practices extracted from information sharing guidelines established by the federal government.

C. SUMMARY OF INTEROPERABLE COMMUNICATIONS RECOMMENDATIONS

Unfortunately, there are fewer options for the independent chiefs to consider in the area of interoperable communications towards increasing information sharing. However, the networks are designed to operate on a common technical platform.

- Independent chiefs should consider subscribing to an existing network that provides immediate interoperable voice communications. The Interagency Communication Interoperable System (ICIS) is currently operational and is extremely viable for agencies seeking interoperability.

- If independent chiefs are not in need of immediate interoperable voice communications on a common technical platform, they may wish to consider waiting for the implementation of the Los Angeles Regional Interoperable System (LA RICS). However, LA RICS is several years away from becoming operational.

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V1. CONCLUSIONS

The independent chiefs of police in Los Angeles County represent 46 different law enforcement agencies. When combined together, the independent chiefs are responsible for providing law enforcement services to a large part of the county. Each of the independent chiefs' effects policy, influences the political arena, and serves as the final authority within their communities. Understanding a chief's ability to effect change within their department and community provides the reader some context as to the level of responsibility and authority bestowed upon a chief of police. Police executives who make it to the rank of Chief of Police must have advanced management and leadership skills and a proven record for solving problems. The attributes are critical to becoming and remaining a successful chief of police. However, depending on the chief's philosophy and the culture of the department, the attributes listed above can create obstacles to collaboration, integration and information sharing.

The survey provided a glimpse of the current information sharing state in Los Angles County. We can assume that the information sharing dynamic changes frequently, increasing or decreasing as needs are identified and impacts independent police departments throughout the United States**.** It can logically be assumed that the independent chiefs of police across America possess the same drive, character, and skills necessary to ascend to the highest levels of their organizations as their counterparts in Los Angeles County. It follows that although the survey group was limited to just the independent chiefs of police in Los Angeles County, their responses have application and speak to the greater law enforcement community across America.

The vast majority of the independents chiefs of police in the county believe that information is a critical component to protecting their jurisdiction including defending the home front. However, it is clear that the current chiefs do not feel there is adequate information sharing between contiguous municipalities and/or the LA JRIC, which has

lead to a poor intelligence product received at the local level. The independent chiefs agreed that information sharing and intelligence could be significantly improved, which could increase their capacity to detect terrorist or criminals.

Based on the research presented, the independent chiefs of police believe that they are making significant efforts to share information or intelligence with their contiguous municipal partners. Nevertheless, it is clear that there are information gaps between the contiguous municipal partners and the LA JRIC. Yet, sharing intelligence assumes independent police departments are skilled at data collection and fusing information to create intelligence products. The majority of the chiefs reported their officers have not been adequately trained in field intelligence collection and information sharing. This fact is interesting, in part because in order to share information, a police department must first collect and analyze the data.

Most independent chiefs assert that they currently share information with the LA JRIC and other federal intelligence task forces or centers. However, it appears from the research that the independent chiefs are selective as to which center receives information. For example, the LA JRIC, according to the research, receives a great deal of information while the ATF receives very little. This insight is somewhat troubling as many of the federal governmental agencies in Los Angeles County have encouraged resource integration and collaboration. In fact, there are many examples of joint regional efforts involving federal and local law enforcement. For example, the Joint Terrorist Task Force (JTTF) has established themselves as an aggressive unit defending the home front against terrorism.

Identifying the need to share information is one of many components. Based on the research there is no premier platform to share information between independent municipal partners and/or the LA JRIC. Historically, the Los Angeles County Sheriff's Department has attempted to create interoperable voice and data networks. However, the Sheriff's Department has discovered that designing and implementing large and complex interoperable networks takes a lot of time and money. As a result, independent chiefs are searching for networks that operate on a common technical platform and are immediately available. For example, the Interagency Communications Interoperability System (ICIS)

is a trunked radio and data communication network, which operates on a common technical platform. However, ICIS does not provide ubiquitous coverage throughout the county, primarily because it is not widely supported or adopted by the larger agencies including the Los Angeles County Sheriff's Department and the Los Angeles Police Department.

Based on the body of this research it is apparent that the independent chiefs of police in Los Angeles County value information and moreover believe information sharing can be increased if the independent municipalities all operated on a reliable, affordable common technical platform. However, it is clear that the chiefs of police do not believe they have formed comprehensive strategies for securing interoperable information sharing or communications systems. This point was reaffirmed in my conversations with a number of independent chiefs over the past 12 months. Many would like to participate in the ICIS system; however, they are concerned that if a larger more robust network such as the Los Angeles Regional Interoperable Communication System (which is supported by the Los Angeles County Sheriff's Department and the Los Angeles Police Department) were implemented, their financial investment in ICIS could be lost if the larger system did not support it. Cost is clearly a concern for the independent chiefs of police. The research suggests that they are unable, or in some cases unwilling, to implement a network that operates on a common technical platform. This observation was further supported in the research when chiefs asserted that the federal government or the LA JRIC should be responsible for implementing interoperable information sharing systems.

The data from the survey suggests that the independent chiefs of police value intelligence and information sharing. This point was reaffirmed in my conversations with several of the independent chiefs of police. Furthermore, the independent chiefs recognize that providing an analyst at the LA JRIC or other intelligence organization would significantly improve intelligence at the local level. However, very few chiefs were willing to assist the LA JRIC with staffing by assigning an analyst or police officer to the center on a long-term basis.

It is apparent that chiefs prefer to retain control of their resources to address policing concerns within their own communities rather than assigning an analyst or police officer to an intelligence center. This observation is reached, in part because chiefs of police are not currently or directly accountable for homeland security efforts. In other words, chiefs are typically just responsible for addressing protecting lives, property and resolving community concerns. Issues that are generated outside the community are considered less concerning if they do not have a direct connection to their jurisdiction. Police resources are expensive and used prudently first and foremost to safeguard the chief's community. Other police matters, including homeland security, remain on the outskirt and are given less consideration unless there is a perceived threat or an immediate emergent need.

Moreover, it appears that the independent chiefs of police are less willing to integrate their resources with their contiguous municipal partners and/or the LA JRIC even if it decreases the quality of intelligence received at the local level.

Based on the research the independent police departments continue to operate independent of one another and the LA JRIC for the most part. There is evidence that some ground has been gained since the attacks on 9/11; however, the efforts are inconsistent and ineffective.

To effect this important change, it is essential, beyond data collection efforts, common technical platforms or interoperable communications, the chiefs of police have to further commit to information sharing between their contiguous municipal partners and the LA JRIC if they want to improve information sharing on a consistent basis within Los Angeles County.

Information needs are consistently changing within the law enforcement arena. As a result, no one independent police department or LA JRIC can know for certain what our threat potential is in the current environment. As law enforcement professionals charged with safeguarding the public, we need to remain ever diligent and prepared to complete our mission. Operating independent of one another, withholding information, or pursuing singular professional interests are no longer acceptable, and they stand as obstacles to

integration, collaboration and teamwork. Information sharing networks have the capacity to remove barriers and maintain open and effective communication between contiguous municipal partners and the LA JRIC. The networks also have the capability to fail if independent police departments do not participate in earnest. It is a collective responsibility among the independent chiefs to ensure current information sharing networks within the County of Los Angeles are utilized while seeking to develop and implement newer, more progressive systems that will meet future data exchange needs. Success can and should be defined at the local level. Outcomes for success need to be clearly identified and agreed upon by the independent chiefs with respect to information sharing goals.

This thesis started by asking the following questions: Could information sharing be improved among independent law enforcement agencies and their fusion center to increase the capacity to detect terrorism and criminal activity? Is information valued among independent police departments?

The evidence in this body of research has demonstrated that there is a need to increase information sharing between independent police departments, their contiguous municipal partners and the LA JRIC and that doing so will increase local law enforcement's capacity to combat crime and detect terrorist activity. The mission is clear, and the need is urgent. In order to achieve the goals, however, independent chiefs must make a firm commitment to integrate resources, establish information and intelligence needs, and be willing to collaborate with other cities toward the great good of defending the home front through local proactive enforcement.

In many regards Los Angeles County is leading the nation in information sharing technologies. The systems available within the county are numerous, complex and are designed to facilitate secure information exchange between and among the clients. However, the networks stand as empty cylinders – wasted efforts to facilitate information sharing unless the independent police departments are willing to contribute data toward the development of a strong integrated data network. The Regional Terrorism Information and Integration Systems (RTIIS) show tremendous promise in this area.

The role of leadership in the effort to share information cannot be underestimated. It is clear that if independent chiefs of police intend to increase their ability to share information with their contiguous municipal partners and the LA JRIC, they will have to use their authority and influence to change departmental culture and make information sharing a priority.

Each of the independent chiefs of police has the authority to effect culture change. However, in order to do so there must be a clear mission and the rank and file officers must understand it. By their very nature, chiefs of police are leaders. Each brings a different level of skills; however, it is safe to say that, for the most part, they are accomplished executives. To carry out the mission of information sharing, the chiefs are encouraged to participate in existing information sharing networks or resources notwithstanding consider designing new systems to collect data, analyze information, and share the final intelligence product.

In the emergent and ever changing international world of terrorism, protecting the home front is becoming increasingly more difficult for local law enforcement agencies. Top-down, industrial, or hierarchal management and leadership models are not only ineffective but possibly counterproductive. In order to provide consistent and effective efforts to protect the homeland, share information, and attempt to increase the capacity to detect terrorist or criminals, independent chiefs of police will have to be willing to relinquish some level of control while retaining the overall responsibility and accountability for safeguarding their communities.

There will be concerns, especially among less experienced chiefs who do not want to forfeit their authority and influence towards the development of long-term solutions to combat terrorism by improving information sharing. However, as a collective body, the independents chiefs of police must overcome those concerns if they wish to maximize their efforts.

By implementing the key recommendations of this thesis, independent police departments will progress into becoming a significant component toward combating terrorists and criminals. On the other hand, if independent police departments remain at

their current level of information sharing then they are destined, for the most part, to remain as isolated operators – desperate for information but unwilling or unable to integrate resources and share information.

This thesis has also left many unanswered questions that future efforts could research: Are the information sharing challenges specific to independent police departments in Los Angeles County or do other local agencies beyond the State of California experience similar frustrations? Can the development of regional information sharing or intelligence standards increase information sharing among independent police departments? What are the sociological impacts on information sharing? And finally, should homeland security or defense be considered by municipal government as a critical factor when considering the overall performance of its police force?

This thesis has examined a number of information sharing systems; however, there are so many more available networks focused toward increasing information and intelligence sharing that are capable of increasing data exchange among independent police departments, their contiguous municipal and the LA JRIC. The overriding factor, however, is the willingness to participate in the systems that are currently available and/or future networks that have yet to be developed.

In many respects, information sharing and resource integration are philosophies that must be introduced by the chiefs of police to their organizations, in earnest, if they hope to effectively collaborate to increase data exchange. The alternative to not increasing information sharing is bleak. Without accurate and timely information, independent police departments cannot fully respond to a terrorist attack should one occur or preferably derail or detect terrorists or criminals before they act.

Efforts to increase information sharing should be organized and managed on a geographic basis and scalable so adjustments can be made based on changes in the operating and/or threat environment. National standards and guidelines to promote information sharing should be considered when developing local data sharing strategies.

If the benchmarks for information sharing were established on September 11, 2001, then it is clear that independent police departments in Los Angeles County have

made tremendous strides toward improving information sharing. However, the information gaps currently existing among the independent police departments and the LA JRIC are well defined. We invariably return to the essential question: How can we improve information and intelligence sharing among independent police departments in Los Angeles County?

The research in this thesis argues that there are possibilities and options to improve information and intelligence sharing among America's local law enforcement agencies. As a collective group, America's police chiefs have the capacity, authority, and leadership potential to achieve this goal. The challenges associated with improving information and intelligence sharing among America's law enforcement agencies will only be overcome if the collective leadership moves forward incrementally toward the ultimate goal of sharing information and intelligence effectively to protect the homeland**.**

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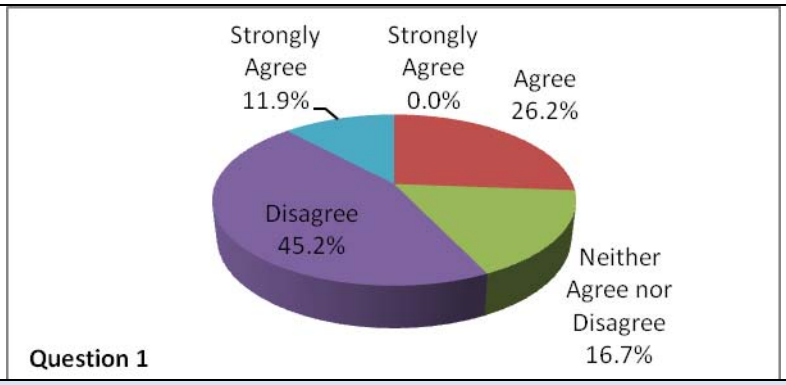
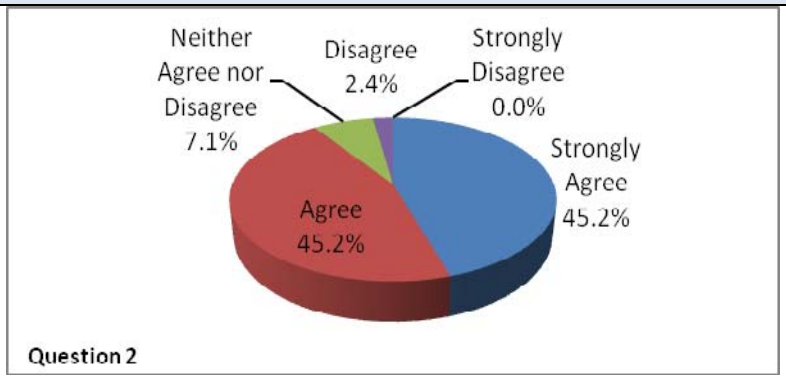
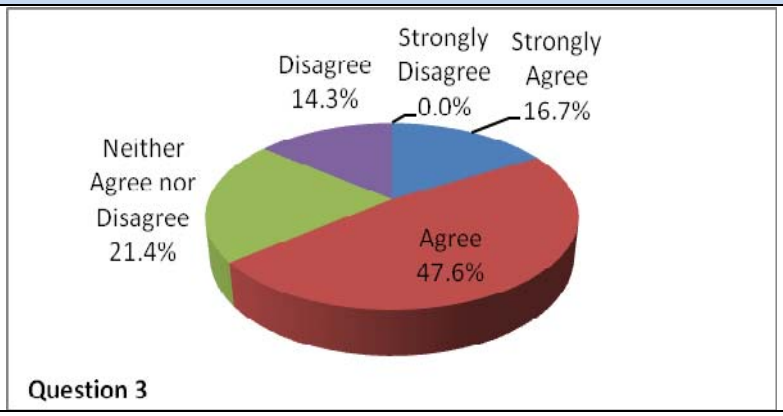
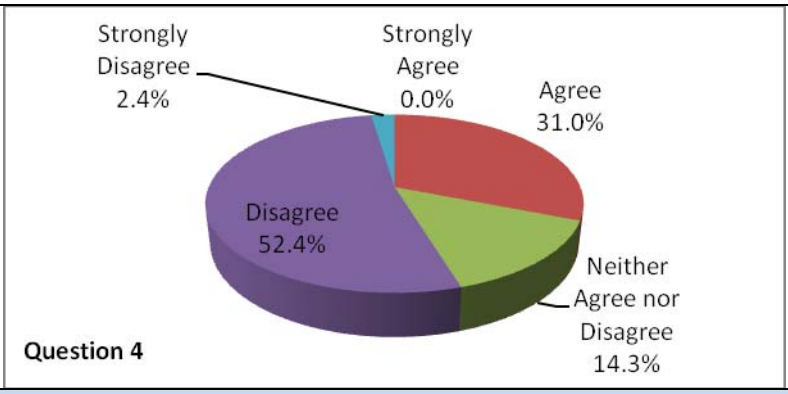
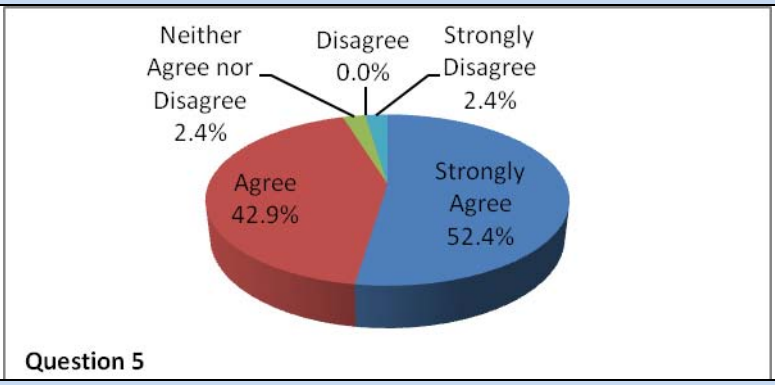
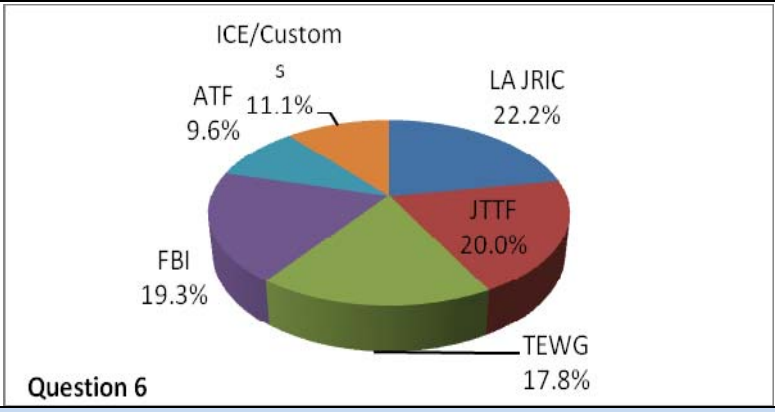
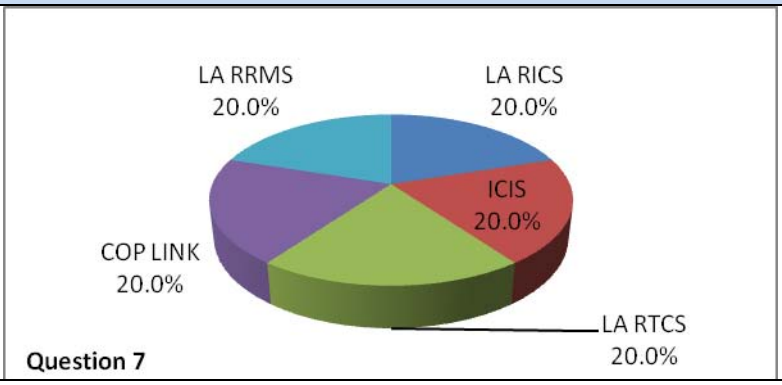
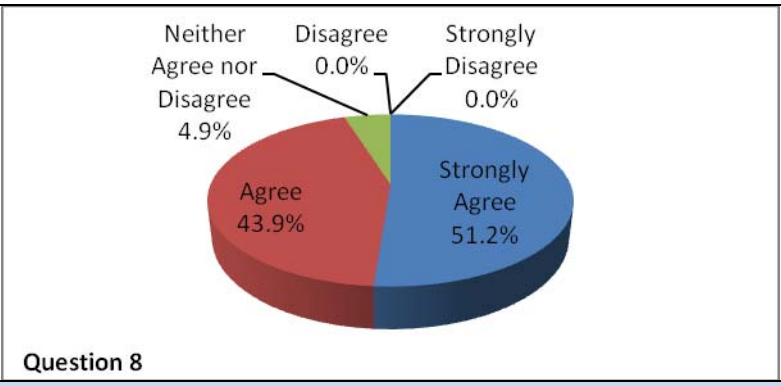
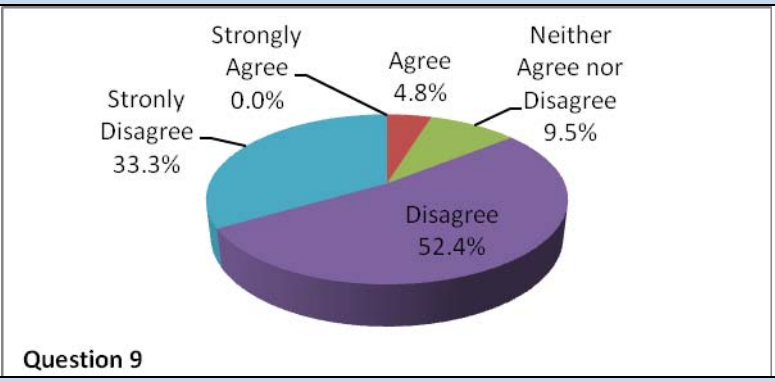
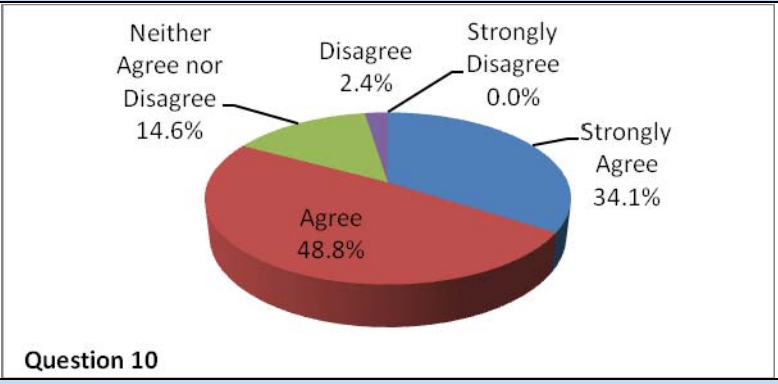
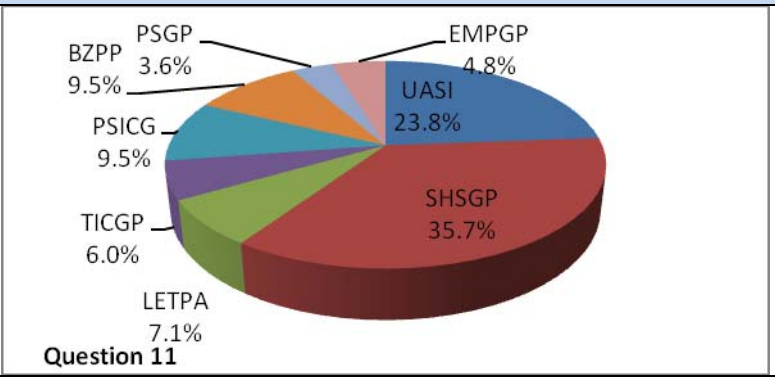
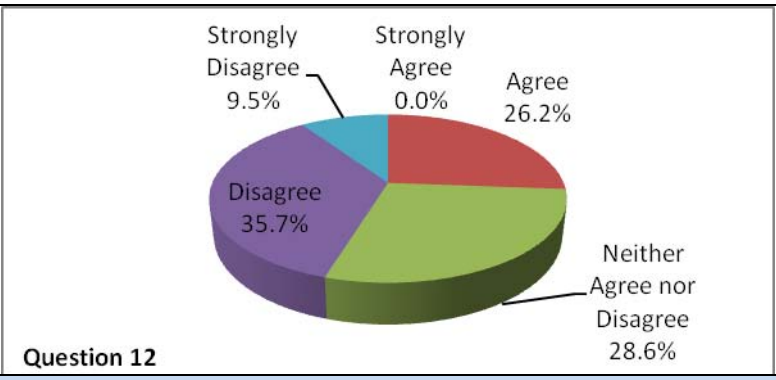
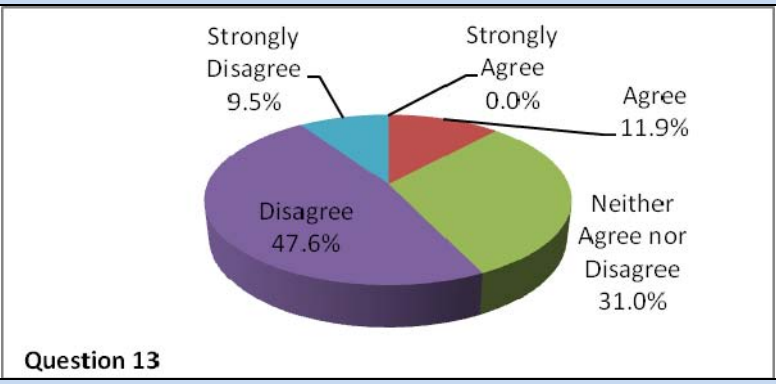
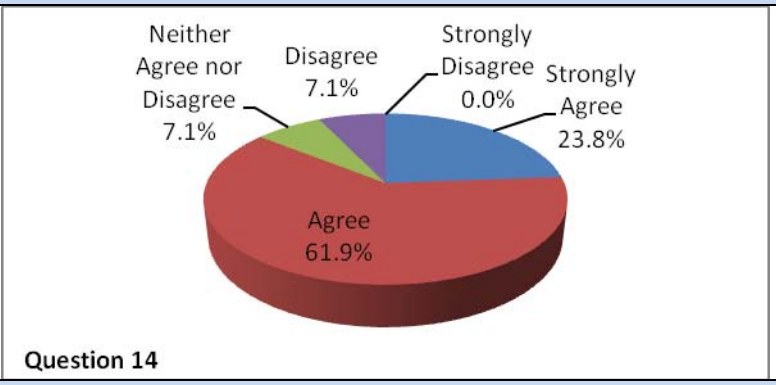
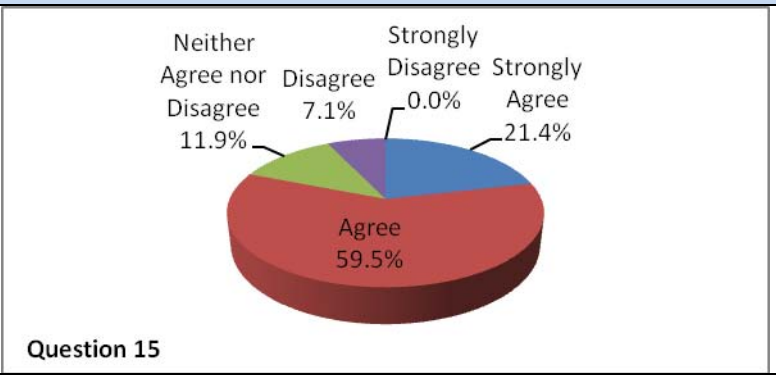
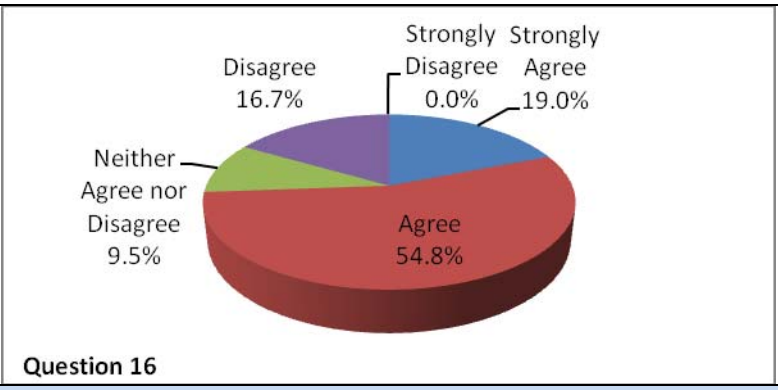
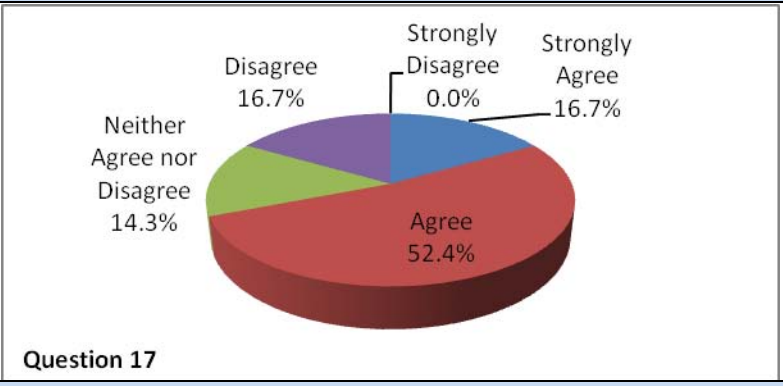
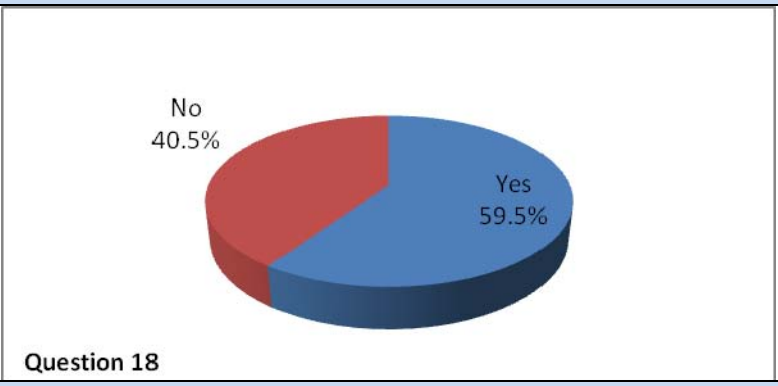
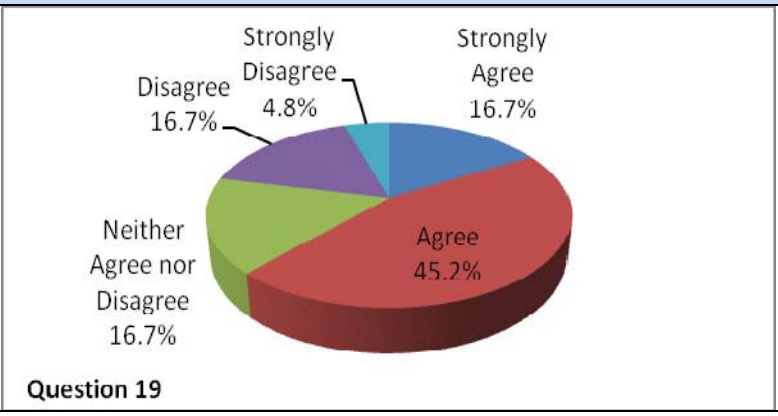
APPENDIX: SURVEY QUESTIONS 1 – 25

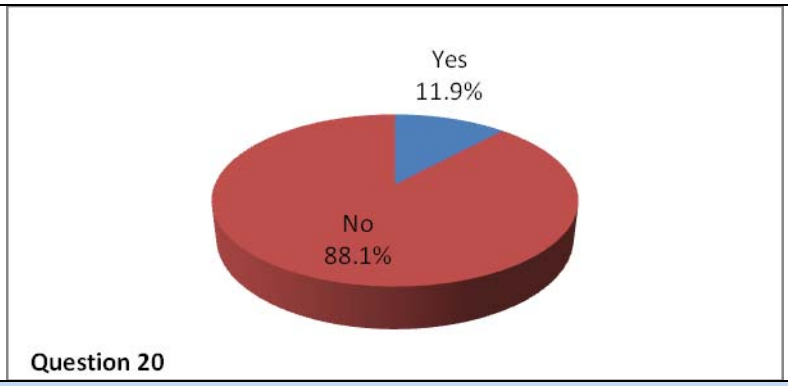
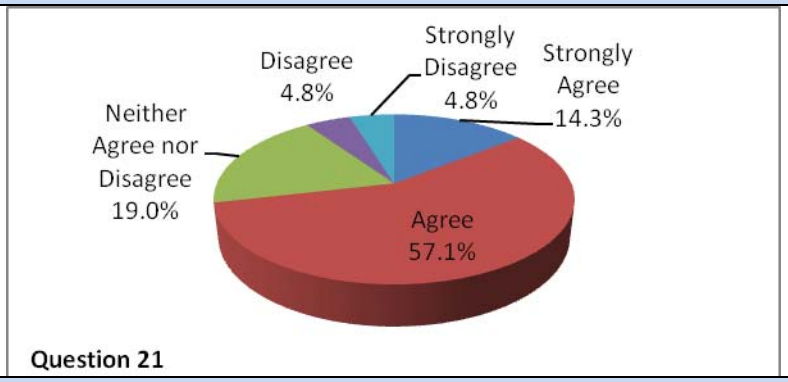
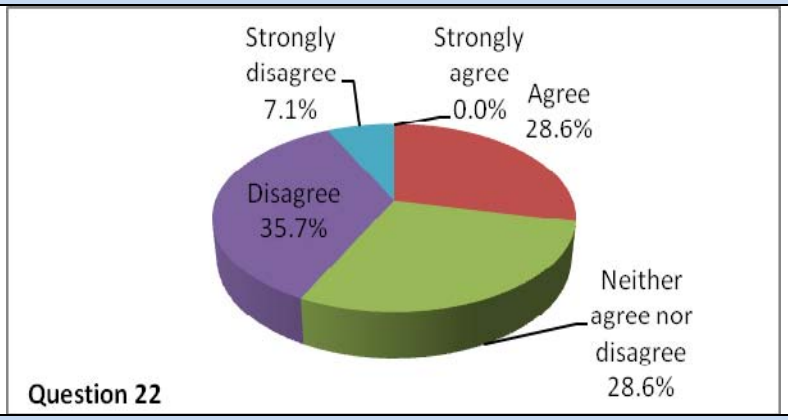
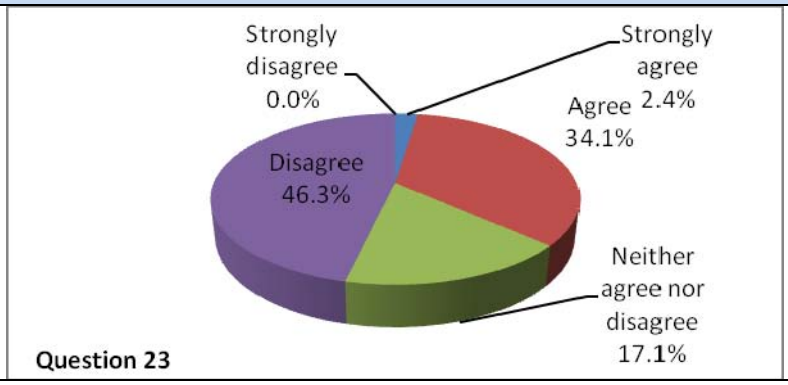
Currently there is adequate information or intelligence sharing between federal, state, and independent law enforcement agencies in Los Angeles County.	
The quality of intelligence estimates (usable intelligence) distributed to independent law enforcement agencies in Los Angeles County could be improved if information sharing was increased.	
My agency frequently shares information or intelligence with other independent law enforcement agencies in Los Angeles County and the Los Angeles Joint Regional Intelligence Center.	

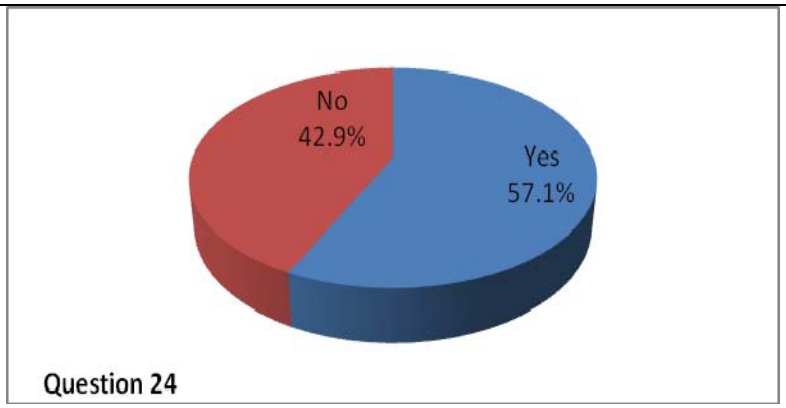
My police officers have received adequate training in field intelligence collection and information sharing.	
Independent police departments in Los Angeles County can increase their capacity to detect terrorist or criminal organizations if information sharing is improved between agencies.	
My department currently shares information with the following organizations, the Los Angeles Joint Regional Intelligence Center (LA JRIC), Joint Terrorist Task Force (JTTF), Terrorist Early Warning Group (TEWG), FBI, ATF, and ICE/Customs.	
I am familiar with the following common technical networks (interoperable voice or data) to share information with other independent law enforcement agencies in Los Angeles County.	

A common technical network would improve information sharing between independent police agencies and/or the Los Angles Joint Regional Intelligence Center if every organization had access to the system.	
My department's budget could absorb the cost (design, purchase, implementation, program hard/software) of an interoperable information sharing system.	
My department would be interested in applying for federal funding toward the design, purchase, and implementation of a common technical information sharing network.	
My department currently participates in homeland security funding programs toward the purchase of a common technical network.	

Independent police departments in Los Angeles County have developed a comprehensive long-term plan to achieve interoperable communications.	
If federal funding is withdrawn my department should be partially responsible for the operational costs associated with the maintenance of the Los Angeles Joint Regional Intelligence Center.	
The federal government (DHS or FBI) or the State of California should be financially responsible for maintaining all operational costs associated with the LA JRIC.	
The LA JRIC should provide or fully fund interoperable information sharing networks for independent law enforcement agencies in Los Angeles County.	

The LA JRIC should provide without cost an analyst to assess threats and vulnerabilities in my jurisdiction.	
The LA JRIC should be responsible for training my officers about intelligence (use, collection, distribution).	
My department currently funds (staffs) a Terrorist Liaison Officer (TLO) to interface and collaborate with federal, state, local intelligence centers.	
My department has established and shared with other independent law enforcement agencies in Los Angeles County and the LA JRIC, intelligence standards to help identify threats, vulnerabilities, or other concerns in my community.	

My department currently has a civilian analyst or police officer assigned to the LA JRIC to provide me with intelligence estimates (evaluations and threats).	
My department would receive a more specific intelligence report (threat assessment) from the LA JRIC if I had an analyst or police officer assigned to the center.	
My department would be interested in sharing the cost, with other independent police departments, of funding an analyst's position at the LA JRIC towards providing a specific threat estimate concern in my area of jurisdiction.	
My department currently uses the daily intelligence briefing distributed by LA JRIC to assist with deployment strategies.	

Do other intelligence organizations, such as the Joint Terrorist Task Force, Terrorist Early Warning Group, or other federal or state intelligence centers provide your department with a high quality intelligence brief (estimate).	

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