INTELLIGENCE ANALYSTS AT STATE AND MAJOR URBAN AREA
FUSION CENTERS: AN EVALUATION OF EDUCATION
AND TRAINING REQUIREMENTS

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Strategic Intelligence

by

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Fusion Centers have grown in importance and capability since the attacks on September 11th, 2001. The primary roles fusion centers provide are to exchange information and provide intelligence to other agencies at the state, local, federal and tribal entities, as well as private sector. This research paper originally sought to determine the optimal education and training necessary for intelligence analysts at the fusion centers, however no programmed curriculum could be established due to the discovery of more fundamental questions involving the role analysts play within fusion centers. Specifically, several unanticipated questions arose during the research: how can a fusion center or its intelligence analysts be assessed without clearly established performance standards, should fusion centers even produce finished intelligence products, and do fusion centers have the capability to produce finished intelligence? These questions must all be answered prior to developing and implementing a structured education and training program for fusion center intelligence analysts.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

INTELLIGENCE ANALYSTS AT STATE AND MAJOR URBAN AREA FUSION CENTERS: AN EVALUATION OF EDUCATION AND TRAINING REQUIREMENTS, by Major Brian Dietzman, 103 pages.

Fusion Centers have grown in importance and capability since the attacks on September 11th, 2001. The primary roles fusion centers provide are to exchange information and provide intelligence to other agencies at the state, local, federal and tribal entities, as well as private sector.

This research paper originally sought to determine the optimal education and training necessary for intelligence analysts at the fusion centers, however no programmed curriculum could be established due to the discovery of more fundamental questions involving the role analysts play within fusion centers.

Specifically, several unanticipated questions arose during the research: how can a fusion center or its intelligence analysts be assessed without clearly established performance standards, should fusion centers even produce finished intelligence products, and do fusion centers have the capability to produce finished intelligence?

These questions must all be answered prior to developing and implementing a structured education and training program for fusion center intelligence analysts.

ACKNOWLEDGMENTS

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ACRONYMS

DHS   Department of Homeland Security

FIAT   Foundations of Intelligence Analysis Training

IALEIA   International Association of Law Enforcement Intelligence Analysts

IC   Intelligence Community

IFCAT   Intermediate Fusion Center Analyst Training

ITACG   Interagency Threat Assessment and Coordination Group

LEIU   Association of Law Enforcement Intelligence Units

NSS   National Security Strategy

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CHAPTER 1

BACKGROUND

The best analytic tool remains a really good analyst
— Mark Lowenthal, *Critical Thinking*

<u>Introduction</u>

To prevent acts of terrorism on American soil, we must enlist all of our intelligence, law enforcement, and homeland security capabilities. We will continue to integrate and leverage state and major urban area fusion centers that have the capability to share classified information; establish a nationwide framework for reporting suspicious activity; and implement an integrated approach to our counterterrorism information systems to ensure that the analysts, agents, and officers who protect us have access to all relevant intelligence throughout the government.[1]

This paragraph is from President Obama's National Security Strategy. It clearly

states the intention of the federal government to create a capacity with the fusion centers

at the state and local level to contribute effectively towards our national homeland

security.

State and major urban area fusion centers grew out of the tragic events of

September 11th, 2001. The events that day forever changed the demand for information

and intelligence at every level of government. The fatal results of numerous failures in

information sharing, whether it was systematic (lack of access to databases) or policy

related (perception of need to know below the national level) required all levels of

government to evaluate the current mechanisms in place in order to prevent another

disaster. Officials at lower levels of government began to explore mechanisms to increase

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[1]The White House, *National Security Strategy* (Washington, DC: Government Printing Office, May 2010), 20.

information sharing between themselves while clamoring to access available intelligence from national agencies to protect citizens from terrorist attacks. Though numerous initiatives were put forth, the primary method put in place concerned fusion centers. "A fusion center is an effective and efficient mechanism to exchange information and intelligence, maximize resources, streamline operations, and improve the ability to fight crime and terrorism by analyzing data from a variety of sources."[2] The critical word in this definition is "analyzing."

Without the ability to analyze, fusion centers are merely organizations that have access to databases and provide connectivity. The ability to analyze means a fusion center is able to identify the threat, to "connect the dots" and hopefully prevent another terrorist attack. In short, the ability to analyze allows a fusion center to produce "intelligence," not just regurgitate other agencies' "information."

<u>Background</u>

The concept of fusion centers, the consolidation of numerous agencies focused on a single problem to leverage resources, is not new and has been going on for years. The High Intensity Drug Trafficking Areas (HIDTAs) are the most cited example of these types of pre-September 11th fusion centers. However, the expansion of fusion centers arguably grew out of September 11th. After September 11th, numerous officials below the national level decided to put a mechanism in place to prevent another attack in case

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[2]Department of Justice's Global Justice, Information Sharing Initiative (Global), *Fusion Center Guidelines—Developing and Sharing Information in a New Era* (Washington, DC: Government Printing Office, August 2005), 3.

the federal government was not able to provide sufficient warning for the state and local first responders to react.

There are three primary reasons why fusion centers at the state and major urban areas are critical for our nation: the threat of terrorism will continue, domestic threats to all levels of government are increasing and fusion centers serve as the central hub for information and intelligence exchange below the national level.

<u>Terrorism</u>

The threat of terrorism has not diminished since the attacks on September 11th. In fact, the number of attacks may be increasing, although the success rate may be decreasing. The Times Square Bomber and the Christmas Day Bomber are indicative of the continued threat assaulting our nation. Fusion centers are providing, and will continue to provide, a mechanism for all interested parties to collaborate on the issue of terrorism. Terrorism will continue to be in the forefront of politicians' minds because terrorists are still attempting to acquire weapons of mass destruction. The Director of National Intelligence testified that ―Terrorism will remain at the forefront of our national security threats over the coming year."[3] He further testified, ―some terror groups remain interested in acquiring CBRN (chemical, biological, radiological, nuclear) materials and threaten to use them."[4]

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[3]James R. Clapper, Statement for the Record on the Worldwide Threat Assessment of the U.S. Intelligence Community for the Senate Select Committee on Intelligence, February 16, 2011, http://www.dni.gov/testimonies/20110216_ testimony_sfr.pdf (accessed June 6, 2011).

[4]Ibid

Michael E. Leiter, Director of the National Counterterrorism Center testified in February 2011 that, ―We assess Al-Qa‗ida in the Arabian Peninsula (AQAP) remains intent on conducting additional attacks targeting the Homeland . . . AQAP has orchestrated many attacks . . . on the Homeland, including the attempted airliner attack during December 2009, and its follow-on effort to down two US-bound cargo planes in October 2010 using explosives-laden printer cartridges.‖[5]

Leiter continued by saying, ―AQAP‗s use of a single operative using a prefabricated explosive device in their first attempted Homeland attack, and the lack of operatives associated with their second attempted attack, minimized its resource requirements and reduced visible signatures that often enable us to detect and disrupt plotting efforts.‖[6]

Although the two attacks articulated in the testimony took place overseas, the potential for cells to utilize local personnel is growing. Fusion centers can be the catalyst that begins a terrorism investigation by the Federal Bureau of Investigation (FBI) by ―connecting the dots‖ with analysis of the precursor events that would not be on the federal system radar. This focus on terrorism is not limited to international terrorism, but domestic terrorism as well.

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[5]Michael E. Leiter, Director National Counterterrorism Center Hearing before the House Committee on Homeland Security ‖Understanding the Homeland Threat Landscape–Considerations for the 112th Congress,‖ February 9, 2011, http://www.dni. gov/testimonies/20110209_testimony_leiter.pdf (accessed June 6, 2011).

[6]Ibid.

<u>Domestic Threat</u>

Domestic threats continue to expand in their nature and scope. The fusion centers are concerned with a broad spectrum of threats from self radicalized individuals to the aforementioned domestic terrorist groups. Fusion centers provide information and intelligence concerning these threats both laterally to other fusion centers, as well as up to the federal system and down to the towns, municipalities and tribes.

As articulated by the National Commission on Terrorist Attacks Upon the United States (the 9-11 Commission), the old way of doing business is not sufficient. The fusion centers are filling the gap between the law enforcement crime solving and the federal government's fixation with international terrorism from overseas. The fusion centers serve as the central hub of information and intelligence exchange between and among the various levels of government within our country.

<u>Information and Intelligence Exchange</u>

Fusion centers are critical for information exchange between and amongst law enforcement organizations because of their access to numerous databases, law enforcement networks, the Homeland Secure Data Network, etc. Fusion centers also serve as the focal point for receipt of intelligence from the Intelligence Community, and should also serve as the central node for intelligence analysis at the state level.

Fusion centers are the best way to effectively and efficiently leverage the available assets at every level of government to reduce the threat of terrorism and

effectively reduce the spectrum of threats. Fusion centers have already received over

$420 million[7] from the federal government to increase their capacity and capabilities.

The fusion concept is not new; it grew out of the concept of intelligence-led policing and criminal intelligence units—their importance and visibility continue to grow since September 11th. The fusion center concept continues to evolve, and now includes a closer relationship between the Department of Homeland Security and the fusion centers.

The purpose of the study is to identify the optimal education and training methodologies and opportunities for intelligence analysts at the state and major urban area fusion centers. The intent is to identify the best practices for the education and training of intelligence analysts to achieve the common competencies as articulated in the Global Initiative, a joint Department of Justice and Department of Homeland Security publication titled ―Common Competencies for State, Local, and Tribal Intelligence Analysts.‖ The five core competencies identified within the publication are: (1) thinking critically within the intelligence cycle; (2) sharing information and collaborating; (3) fusing intelligence and law enforcement tradecraft in a homeland security environment; (4) communicating analytic observations and judgments or generating analytic products, and (5) turning concepts and principles into action.[8]

Although these outcomes may be useful to fusion centers with already established programs and policies in place, they are less than optimal for fusion centers with a less

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[7]PBS, ―Are We Safer,‖ http://www.pbs.org/wgbh/pages/frontline/are-we-safer/fusion-centers/ (accessed May 31, 2011).

[8]Department of Justice‘s Global Justice, Information Sharing Initiative (Global), *Common Competencies for State, Local and Tribal Intelligence Analysts* (Washington, DC: Government Printing Office, June 2010), 5-7.

mature analytic capability. The primary shortcoming of the publication is the lack of a recommendation on how to achieve these competencies; there is no ―roadmap‖ for leaders or analysts to follow to achieve the desired outcomes. The majority of fusion center leaders are not familiar with many of the required tasks an analyst must be proficient in to attain the stated competencies.

Another challenge fusion centers face regards the lack of a standardized or uniform job description for intelligence analysts across the national fusion center framework. This is a colossal problem for two reasons: (1) the lack of understanding of how fusion center leaders should utilize intelligence analysts, and (2) the expectations of intelligence analysts themselves when facing low job satisfaction based on an absence of analytic tasks, instead being relegated to the most basic job of data entry or database manipulation—a job void of analysis—as their primary duties.

Beyond the two overarching issues of core competencies and job descriptions, there exist subordinate challenges associated with the education and training of intelligence analysts at the state and major urban area fusion centers: the lack of organic assets available to educate and train the new intelligence analysts at the local/state level, access to training offered by outside agencies, and the limited amount of grants available for intelligence analyst training. Failure to address these issues seriously will result in a ―same old, same old‖ attitude at our Nation‗s expense.

Even with the myriad challenges stated above, the primary issue at the heart of the discussion concerns the lack of structured education and training for intelligence analysts at the fusion centers. This lack of structured, organized education and training prevents the fusion center analyst from attaining the desired core competencies which precludes

the ability to produce original, thorough analysis. In turn, this deficiency raises questions regarding the credibility of any intelligence products sent from one fusion center to another, or to the Intelligence Community writ large.

The education and training of intelligence analysts is woefully behind the demand based on the explosion of state and major urban area fusion centers since September 11th. There are currently 72 recognized fusion centers[9]–one in each state and twenty two major urban area centers based on the local threat vulnerability and risk assessments. Each fusion center is currently located at different places along the operational capability continuum, especially when discussing analytic capacity or the capability of the assigned intelligence analysts, the focus of this paper.

The Department of Homeland Security (DHS) is the executive agent for federal-fusion center interaction. The Office of Intelligence and Analysis (I&A) within the Department is the office with primary responsibility for fusion center interaction, including the education and training of intelligence analysts. DHS has several initiatives underway to improve the intelligence analysis capacity in fusion centers.

In fact, DHS is focused on improving fusion center analyst capability by assigning intelligence analysts from the Office of Intelligence and Analysis to each fusion center. Within I&A, the state and local program office is the agency responsible for the hiring and assigning of the DHS representatives currently residing in the fusion centers. Currently, there are 61 I&A intelligence analysts and nine regional intelligence

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[9]Information Sharing Environment, ―Report from the 2011 National Fusion Center Conference," http://www.ise.gov/news/report-2011-national-fusion-center-conference (accessed May 31, 2011).

supervisors who are responsible for the program within their region, with the DHS stated goal of having an intelligence analyst at each of the 72 fusion centers.[10]

DHS also offers numerous programs, courses, and training to improve the analytic capability of fusion center intelligence analysts such as the Basic Intelligence Threat Analysis Course (BITAC), to accompany the afore mentioned human capital investment.

<u>Research Question</u>

The primary research question is: What are the optimal education and training opportunities necessary for intelligence analysts to achieve the Common Competencies at the state and major urban area fusion centers?

To effectively arrive at the answer to the primary research question, several secondary research questions must be answered. Several of the secondary questions are:

1. What education and training is currently offered by the Intelligence Community to new intelligence analysts?

2. What education and training is currently offered by the state and major urban area fusion centers?

3. What outreach programs are currently offered to fusion center analysts from members of the Intelligence Community?

4. What mechanisms do the fusion centers use to assess analytic competencies?

5. How do the consumers of the fusion center products view the products? (Useful, regurgitation, insightful, relevant, etc.)

6. What education and training is valued by intelligence analysts? Why?

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[10]Ibid.

7. What education and training is valued by the supervisors of intelligence analysts? Why?

Although this list of secondary questions appears lengthy, it is not exhaustive nor is it a survey. These types of questions were discussed during the interviews rather than administered via a survey mechanism. The interview methodology will be further discussed in chapter 3.

<u>Assumptions</u>

To ensure the relevancy of this research paper and to focus its topic, several assumptions were made. These assumptions formed the basis to anticipate the continued role of fusion centers.

The first assumption is that the role of state and major urban area fusion centers will continue to grow in importance. The need for information and intelligence, one of the primary goals for fusion centers, is identified in the *National Security Strategy* (*NSS*) as a mechanism to assist the country in counterterrorism efforts.

The second assumption is both a local and a national concern, the issue of self radicalization. It is of such concern, the House of Representatives recently held hearings on the topic. The self radicalization of US Persons will continue to rise, as articulated in the National Security Strategy. This radicalization includes both radical Islamic groups and other extremist groups (white supremacists, anarchists, etc.). The rise in self-radicalization raises the importance of the fusion center's role because of the fusion center's ability to access law enforcement databases and receive intelligence from members of the Intelligence Community.

The next assumption is that crime serves as a precursor for, or support to, terrorism. One of the primary functions of all-source fusion centers is to facilitate intelligence-led policing. This methodology may assist with identifying and interdicting criminal activities that are precursor crimes to terrorism or direct financial support, such as the Hezbollah cigarette ring in North Carolina.[11]

Government budgets at every level will shrink over the next few years, as legislators attempt to reduce budget deficits. The potential direct result of these budget cuts is the reduction of funding for education and training, potentially for the federal technical assistance grant program managed through FEMA. Federal perspective is that states and major urban areas should develop independent funding mechanisms to support fusion center operations.

Another assumption specifically focused on education and training is the assertion that the members of the Intelligence Community (IC) have a thoroughly developed education and training infrastructure.

<u>Definitions</u>

<u>Analysis</u>. The in-depth examination of the meaning and essential features of available information. Analysis highlights information gaps, strengths, weaknesses and

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[11]Sari Harowitz, "Cigarette Smuggling Linked to Terrorism," *Washington Post*, June 8, 2004, http://www.washingtonpost.com/wp-dyn/articles/A23384-2004Jun7.html (accessed June 8, 2011).

suggests ways forward. In other words, it is the careful examination of information to discover its meaning and essential features.[12]

Education. Gaining knowledge in preparation for application to a future situation. Education is normally associated with academic courses or programs geared to provide more conceptual or theoretical frameworks having less immediate effect on performance but laying the foundation for improved performance over the longer term.[13]

Field Intelligence Group (FIG). The centralized intelligence component in a Federal Bureau of Investigation (FBI) field office responsible for the management, execution, and coordination of intelligence functions within the field office region.[14]

Fusion Center. The collaborative effort of two or more agencies that provide resources, expertise, and information to the center with the goal of maximizing the ability to detect, prevent, investigate, and respond to criminal and terrorism activity.[15]

Fusion Process. The overarching process of managing the flow of information and intelligence across levels and sectors of government and private industry. It goes beyond establishing an information intelligence center or creating a computer network. The Fusion Process supports the implementation of risk-based, information-driven prevention,

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[12]United Nations Office on Drugs and Crime, *Criminal Intelligence Training: Manual for Front Line Officers*, http://www.ialeia.org/files/docs/UN%20Analyst% 20Manual-cert%20study%20guide.pdf (accessed June 6, 2011), 12.

[13]Stephen Marrin, ―Training and Educating U.S. Intelligence Analysts," *International Journal Of Intelligence And Counterintelligence* 22, no. 1 (2009): 131.

[14]U.S. Department of Justice's Global Justice, Information Sharing Initiative (Global). *Baseline Capabilities for State and Major Urban Area Fusion Centers: A Supplement to the Fusion Center Guidelines* (Washington, DC: Government Printing Office, September 2008), 47.

[15]Department of Justice's Global Justice, *Fusion Center Guidelines.*

response, and consequence management programs. The Fusion Process turns information and intelligence into actionable knowledge.[16]

Intelligence. The simplified definition is information that undergoes analysis results in intelligence.

Intelligence. Is the specialized form of knowledge, an activity and an organization. As knowledge, intelligence informs leaders, uniquely aiding their judgment and decision making. As an activity, it is the means by which data and information are collected, their relevance to an issue established, interpreted to determine likely outcomes and disseminated to individuals and organizations who can make use of it. An intelligence organization directs and manages these activities to create such knowledge as effectively as possible.[17]

Intelligence Process. Is an organized process by which information is gathered, assessed, and distributed in order to fulfill the goals of the intelligence function—it is a method of performing analytic activities and placing the analysis in a useable form.[18]

Intelligence Cycle. See intelligence process planning and direction, information gathering, processing and collation, analysis and production, dissemination and reevaluation (feedback).[19]

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[16]Ibid.

[17]David T. Moore, *Critical Thinking and Intelligence Analysis* (Washington, DC: NDIC Press, 2006).

[18]Department of Justice's Global Justice, *Baseline Capabilities*, 50.

[19]Federal Emergency Management Agency, DHS/DOJ Fusion Process Technical Assistance Program and Services, *Considerations for Fusion Center and Emergency Operations Center Coordination Comprehensive Preparedness Guide (CPG) 502* (Washington, DC: Government Printing Office, May 2010).

Intelligence Analysts. Apply in-depth substantive expertise, all-source information, and tough-minded tradecraft to produce assessments that provide distinctive value-added to policy clients' efforts to protect and advance U.S. security interests.[20]

Training. Instruction designed to aid in learning or developing a new or existing skill. Training is normally associated with internal programs intended to provide specific instruction for the implementation of job-related tasks.[21]

U.S. Person. A citizen of the United States; an alien lawfully admitted for permanent residence (as defined in section 1101 (a)(20) of title 8); an unincorporated association of a substantial number of members of which are citizens of the United States or aliens lawfully admitted for permanent residence; or a corporation that is incorporated in the United States, but does not include a corporation or an association which is a foreign power, as defined in subsection (a)(1), (2), or (3) of this section.[22]

Information sharing. Is more than just connectivity or technological means. It is an act that requires human involvement and decision making.[23]

Information. Defined as ―pieces of raw, unanalyzed data that identify persons, organizations, evidence, events or illustrates processes that indicate the incidence of a criminal event or witnesses or evidence of a criminal event.‖[24]

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[20]Roger Z. George and James B. Bruce, eds., *Analyzing Intelligence* (Washington, DC: Georgetown Press, 2008).

[21]Marrin, ―Training and Educating U.S. Intelligence Analysts," 131.

[22]U.S.Code, Title 50, Chapter 36, Subchapter1, §1801.

[23]Intelligence Community, *Information Sharing Strategy* (Washington, DC: Government Printing Office, February 22, 2008).

There are two primary limitations affecting this study, time and access. The timeline for field interviews and research was approximately six weeks. This time constraint prohibited the researcher from visiting a wide variety of members of the Intelligence Community. The researcher made an assessment of which members of the IC to visit in person based on background readings and telephonic interviews. This time constraint also limited the number of fusion centers the researcher could visit and the duration of each fusion center visit resulting in a small sample size. This sample will be further discussed in chapter 3.

The second limitation affecting the research paper was the availability of information and access to the fusion centers. Due to the required security precautions, there is limited information available to the general public concerning the operations of individual fusion centers. The researcher's access to the fusion centers was limited as a result. The natural tendency for law enforcement and intelligence organizations is to be hesitant regarding ―outside‖ people asking questions. This cultural mindset likely restricted the amount of unfiltered information some agencies provided to the researcher, especially concerning sensitive topics such as the ability, education and training of intelligence analysts.

The fusion center site visits were meant to be a representative sample and therefore may be incomplete because the researcher was not able to visit all of the fusion centers, nor all of the education and training locales of the IC.

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[24]David L. Carter, *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, 2nd ed. (Washington, DC: Government Printing Office, 2009), 11.

Scope and Delimitations

The study assesses the feasibility of developing a generic education and training model applicable, yet modifiable, to the state and major urban area fusion centers. This potential model does not rigidly state the curriculum, but rather highlights elements of training and education programs across the IC and from fusion centers across the country that should be included in any intelligence analyst curriculum.

The potential implications for the Department of Homeland Security Office of Intelligence and Analysis, the DHS state and local program office, and the DHS grant program is high. The results of this research may place additional emphasis for programs within DHS.

The potential exists for this research to impact members of the IC due to the increased demand for seats at IC funded education and training opportunities across the IC training/education community. This impact could affect the budgetary aspect of the development of the agency's organic analysts, especially the all-source intelligence analysts.

Although it appears this paper may focus on many aspects of intelligence analysts at fusion centers writ large, there are several areas the paper does not address even though the issues directly impact the intelligence analyst.

The first area this research does not address is the issue of classified information architectures. One of the most widely stated issues with fusion centers, and the information sharing environment overall, is the problems associated with the information technology architecture. There are numerous initiatives underway concerning the deployment of information and intelligence architectures, along with the associated

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hardware, to the state and major urban area fusion centers to address or resolve this issue. Although the lack of access to information systems impacts intelligence analysts, this constraint does not impact the desired core competencies that fusion center analysts should possess.

The second area this research does not address is the necessity or institutional challenges of fusion center employees, especially intelligence analysts, being granted Top Secret clearances with caveat access. The security clearance controversy affects several of the challenges currently being discussed with fusion centers: the storage of classified information and the information architecture question. Again, however, whether or not fusion center analysts are granted Top Secret clearances does not impact the desired core competencies.

The final area this research will not address in detail is the feasibility or suitability of the state and major urban area fusion centers having access to raw intelligence reports or data from the IC. While access to IC data clearly impacts the effectiveness of fusion center analysts, the question of optimal training to meet core competencies is still relevant in isolation.

Significance of Study

The primary goal of this research is to facilitate, or begin, the conversation of intelligence analyst education and training among the stakeholders in the homeland security arena who are not intelligence professionals. The results of this study may encourage a dialogue regarding how fusion centers could be utilized, how true ―all source‖ analysis derived from IC data, not just law enforcement or criminal data, is possible at a higher level.

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This study may also provide options to address the education and training disparity within the 72 state and major urban area fusion centers. This disparity creates perceptions of ―better than‖ when allocating resources through the federal grant process.

The potential for military intelligence officers to interact with state and major urban area fusion centers in time of crisis is high. There are numerous examples in recent history to illustrate this—Hurricane Katrina, wildfires in Texas, and potential earthquakes across the country. The recent failure of nuclear reactors because of the earthquakes in Japan highlights the sort of event where the IC, the DoD (primarily through NORTHCOM) and the fusion centers could be forced to work congruently with one another. This study may also provide the military intelligence professional an assessment of the capabilities and limitations they might expect from an intelligence analyst at the fusion centers, in times of crisis. This study will provide officers a snap shot of the capabilities and resources available to fusion centers in the event there should be a reason to collaborate, thereby allowing commanders and intelligence officers sound expectation management regarding access and capabilities.

Lastly, the research for this paper provided several fusion centers an opportunity to establish a relationship with a member of the US military outside of their state National Guard. This relationship may extend beyond the duration of this research and serve as a bridge between the military members of the IC and the analysts, supervisors and educators interviewed for this paper.

<u>Summary</u>

There are numerous challenges associated with the still evolving fusion center concept. This research paper will provide some insights and add to the discussion of the

proper education and training fusion center intelligence analysts should receive to effectively perform their jobs.

The intelligence analyst is the hub from which everything in the fusion center flows. If the analysis of the information is incorrect, something of importance might be missed and an event might occur. Education and training of the intelligence analysts is paramount to the success of the fusion center itself, as well as the health of the program and its value to the United States. The investment required can not be wished away or taken for granted.

This research resulted in several unanticipated questions, observations and recommendations: How to assess fusion center analytic capability, should fusion centers even produce finished intelligence, what are finished intelligence products in the fusion center context, what limitations and constraints are preventing the fusion centers from developing a robust analytic capability with their intelligence analysts?

Although the sample for this research paper was seven state designated fusion centers, a little under 10 percent of the 72 state and major urban area fusion centers currently recognized, the trends exhibited across the seven indicate some strong commonalities in terms of similar challenges with education and training, personnel management and leadership of the fusion centers.

Although each fusion center is autonomous, the lack of uniform structure or analytic requirement makes assessing the fusion centers a very difficult task. The intent of the autonomy and uniqueness is to allow the fusion centers to focus on its local issues and partners, but it prohibits the federal level from making an accurate assessment of fusion center capability for planning purposes.

Chapter 2 of this paper will provide an overview of the literature related to education and training of intelligence analysts along with a brief overview of the documents currently guiding the establishment and employment of fusion centers. Chapter 3 will provide the reader background on the research questions and methodology employed. Chapter 4 constitutes the findings of the site visits and interviews. It is broken down into two primary sections, one focusing on the unanticipated questions of (1) how can fusion center analysts be assessed without an established standard, (2) should fusion centers be producing finished intelligence products, and (3) can fusion centers produce finished intelligence. The second section of chapter 4 will focus on the observations made during the site visits. The observations are broken down into three subsections (1) education and training, (2) personnel issues, and (3) leadership aspects.

Chapter 5 will summarize the overall research and provide several recommendations categorized into immediate, near term, and long term suggestions.

CHAPTER 2

LITERATURE REVIEW

Education and training are low priority activities throughout the IC. If there is one cultural attitude that is uniform across the IC, it is a bias against allowing analysts to take time away from their jobs for training. Essentially the IC is stressing questionable short-term gains over the long-term benefits of a better-educated analytic workforce.

— William J. Lahneman, PhD.
The Future of Intelligence Analysis

The purpose of this thesis is to assess the optimal education and training for an intelligence analyst working at a state or major urban area fusion center to achieve the common competencies as articulated in the ―Common Competencies for State, Local and Tribal Intelligence Analysts.‖[25]

Literature concerning the topic of education and training of intelligence analysts did not really appear in the public domain until the mid-1990s. This new emphasis emerged from two questions: how does the United States prepare analysts for the 21st century and how does the Intelligence Community (IC) gain efficiencies from the collapse of the Soviet Union and the resulting ―peace dividend?‖ The discourse among professionals and academics has continued into the 21st century.

This literature review is broken down into two focus areas: Intelligence Analysts and Fusion Centers. The Intelligence Analyst section will look at the competencies analysts should possess, Intelligence Community guidance concerning analysts and analytic products and the differences between intelligence analysts at the national level agencies and intelligence analysts at the state and major urban area fusion centers.

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[25]Department of Justice‗s Global Justice, Information *Common Competencies.*

The Fusion Center section will provide a historical perspective of fusion centers as well as the documents currently in place that guide the fusion centers, the baseline capabilities that fusion centers should possess and the common capabilities of intelligence analysts within the state and major urban area fusion centers.

Intelligence Analysts

To effectively discuss what education and training intelligence analysts should receive, it is imperative to ascertain what intelligence analysts do and how they do it. Although there is no taxonomy of intelligence analysts, the targeted literature clearly indicates there are two major subgroups of intelligence analysts—national security intelligence analysts (or national foreign intelligence analysts) and criminal intelligence analysts, with a third, emerging homeland security intelligence analyst discipline.

National security intelligence analysts typically work within the member agencies of the Intelligence Community at the national or federal level. The majority of intelligence analysts work at the Defense Intelligence Agency (DIA), the National Security Agency (NSA), the Central Intelligence Agency (CIA), the State Department's Office of Intelligence and Research (INR), and the military services.

Criminal intelligence analysts work primarily in law enforcement agencies. They are an integral part of police agencies at the state and local level, but may be incorporated into federal law enforcement agencies as well. They have traditionally focused on gangs, drugs or organized crime but after September 11th, a significant number of criminal intelligence analysts moved from their intelligence units to fusion centers at the local level. The job title of an analyst within the fusion center is intelligence analyst, not

criminal intelligence analyst, which leads to differences in perceptions and understanding of capabilities.

Although the location of the analysts is different, both categories of intelligence analysts deal with the different levels of intelligence and the categories of finished intelligence. Within the Intelligence Community, there are three commonly accepted levels of intelligence: tactical, operational, and strategic. Each level places different requirements on the analyst, primarily based on the demands of the consumer at each level. These short definitions are provided for a quick refresher. Tactical intelligence refers to intelligence required for the planning and conduct of tactical operations.[26] The next echelon is operational intelligence, which refers to intelligence required for planning and conducting campaigns and major operations to accomplish strategic objectives within theaters or operational areas.[27] The highest level of intelligence is strategic intelligence, which refers to intelligence required for the formation of policy and military plans at national and international levels.[28]

As stated earlier, the primary difference between the levels of intelligence is consumer driven, with the two variables being time constraints placed upon the analyst and the scope or depth of the analysis. As the world has become more connected, it has become more difficult to clearly delineate the levels of intelligence because there are

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[26]Joint Chiefs of Staff, Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Joint Chiefs of Staff, November 2010 (as amended through 15 May 2011)), 359.

[27]Ibid., 271.

[28]Ibid., 348.

instances where tactical intelligence has strategic implications and can shape national policy.

Having a good appreciation for the levels of intelligence is not by itself sufficient; the reader must also understand the different types of intelligence products. According to the Interagency Threat Assessment and Coordination Group (ITACG), there are five categories of finished intelligence: current intelligence, estimative intelligence, warning intelligence, research, and science and technical intelligence.[29] The ITACG provides this information in its *Intelligence Guide for First Responders*. Current intelligence addresses day-to-day events and details new developments and related background to assess their significance, warn of their near-term consequences, and signal potentially dangerous situations in the near future.[30]

Closely connected to current intelligence is warning intelligence. Warning intelligence sounds an alarm or gives notice to policymakers, suggests urgency and implies the potential need to respond with policy action. Warning intelligence includes identifying or forecasting events that could cause the engagement of U.S. military forces or that would have a sudden and detrimental effect on U.S. foreign policy concerns such as coups, third-party wars, or refugee situations. Warning analysis involves exploring alternative futures and low probability/high impact scenarios.[31]

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[29]Interagency Threat Assessment and Coordination Group (ITACG), *Intelligence Guide for First Responders*, 2nd ed. (Washington, DC: Government Printing Office, March 2011), 24-25.

[30]Ibid.

[31]Ibid.

While current intelligence and sometimes warning intelligence focus on the immediate issue, estimative intelligence looks forward to assess potential developments that could affect U.S. national security by discussing the implications of a range of possible outcomes and alternative scenarios. Estimative intelligence helps policymakers think strategically about long-term threats.[32]

The last two categories of intelligence tend to be longer in duration and tend to be more a niche capability or requirement. The first longer term intelligence is research intelligence, which consists of deeper analytical studies that support both current and estimative intelligence. The final category is scientific and technical intelligence. This type of intelligence includes an examination of the technical development, characteristics, performance, and capabilities of foreign technologies, including weapon systems or subsystems. This category covers a complete spectrum of sciences, technologies, weapon systems, and integrated operations.

The most ―in demand‖ of all finished intelligence categories is current intelligence. Whether it is a politician in Washington, DC or a police chief of a major metropolitan area, policy makers and decision makers possess an almost insatiable appetite for current intelligence.

Although the descriptors of the various types of intelligence may appear to be irrelevant to fusion centers because they identify threats to the nation, almost every category of finished intelligence can be directly connected to an entity at the state or local level. The governor of a state has the same executive responsibilities within the state as

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[32]Ibid.

the president has for the nation and a good fusion center will (or should) provide the different types of finished intelligence to the relevant entity or agency.

There is another niche category of intelligence that intelligence analysts supporting law enforcement agencies, including some fusion centers, may address. It is criminal intelligence. This type of intelligence is found within the Field Intelligence Groups (FIGs) of the Federal Bureau of Investigation (FBI), the field offices of the Drug Enforcement Agency (DEA), as well as some state and major urban area fusion centers. This type of intelligence requires the analyst to also conduct criminal analysis.

The definition of criminal intelligence is the creation of an intelligence knowledge product that supports decision making in the areas of law enforcement, crime reduction and crime prevention.[33] It is also information compiled, analyzed, and/or disseminated in an effort to anticipate, prevent, or monitor criminal activity. Criminal analysis is the application of analytical methods and products to raw data that produces intelligence within the criminal justice field.[34]

Informed with a better understanding of the different levels of intelligence, tactical, operational and strategic, as well as the different types of intelligence products, including the niche area of criminal intelligence, the paper will now provide an overview of the education and training intelligence analysts receive.

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[33]Jerry H. Ratcliffe, *Integrated Intelligence and Crime Analysis: Enhanced Information Management for Law Enforcement Leaders*, July 8, 2009, http://www.cops.usdoj.gov/ric/ResourceDetail.aspx?RID=433 (accessed June 5, 2011), 8.

[34]Department of Justice's Global Justice, Information Sharing Initiative (Global), *Law Enforcement Analytic Standards* (Washington, DC: Government Printing Office, November 2004), 31.

<u>Education and Training</u>

One of the first articles attempting to articulate the requirements for intelligence analysts, at least in the open domain, was ―On Becoming An Intelligence Analyst,‖ written by Ronald Garst and Max Gross.

Garst and Gross identify several key areas germane to the discussion of intelligence analyst education and training: the analyst must have a strong knowledge base, the analyst must have access to voluminous information, the analyst must possess analytic skills, and the analyst must have good presentation skills.[35] Every one of these areas can be directly embedded into an education and training curriculum for new analysts.

Garst and Gross go on to mention some specific venues for education, most notably the National Defense Intelligence College (NDIC), and illustrate the value of training. Both education and training, according to the article, are not sufficient only at the beginning but must be sustained throughout the analyst‘s career.

Most of the items mentioned in the Garst and Gross article are relevant and constructive to this research topic, but they are just not thorough enough. Where and how do we educate and train our intelligence analysts? What are the core competencies an intelligence analyst should attain? These questions are left unanswered.

The best place to begin to address these questions is with the assessment of the core competencies in the national security analysts‘ arena. This is discussed and articulated by David Moore and Lisa Krizan in their paper titled ―Core Competencies for

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[35]Ronald D. Garst and Max L. Gross, ―On Becoming an Intelligence Analyst,‖ in *Learning with Professionals,* edited by Joint Military Intelligence College (Washington DC: JMIC, 2005).

Intelligence Analysts at the NSA." This paper specifically refers to the National Security

Agency (NSA) because both of the authors were employees of the NSA when they wrote

the piece, however, the core competencies for intelligence analysts they refer to are

applicable across the Intelligence Community.

The premise behind the Moore and Krizan paper is there are certain Knowledge,

Skills, and Abilities (KSAs), as well as Characteristics, which are conducive to analytic

work, and which should be sought out during the hiring process as well as refined during

the analyst's career.

Figure 1 is an overview of their pyramid model.
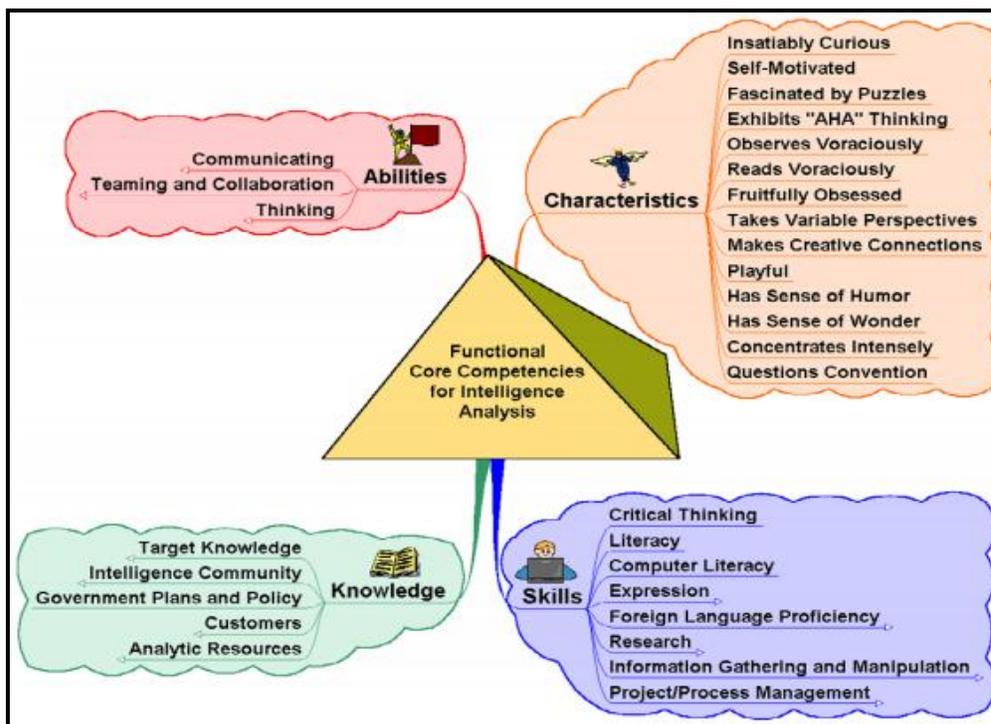
Figure 1.   Core Competencies for Intelligence Analysis at the National Security Agency

Source: Russel G. Swenson, ed., *Bringing Intelligence About, Practitioners Reflect on Best Practices* (Washington, DC: Joint Military Intelligence College, May 2003), 96.

There are numerous elements within this pyramid model that are directly relevant to the central theme of this paper. The three areas this paper will highlight are Knowledge, Skills, and Abilities.

Knowledge

Moore and Krizan identify five knowledge areas critical for intelligence analysts, at least at the NSA. The areas are target knowledge, Intelligence Community, government plans and policy, customer needs and analytic resources. These knowledge areas would have to be incorporated into the education and training programs but many items would have to be specially tailored for the individual analyst because of the uniqueness of the portfolios, who the customers are, what governmental policies affect the portfolio, etc. The knowledge aspect is necessary but potentially very difficult to incorporate into a large scale education and training program.

Skills

Moore and Krizan identify eight skills that are critical for intelligence analysts: critical thinking, literacy, computer literacy, expression, foreign language proficiency, research, information gathering and manipulation and project/process management. Obviously not all of these attributes are necessary for inclusion into a entry level education and training program, but the majority are, especially critical thinking, expression, research and information gathering and manipulation. Most of the other skills identified should be sought during the interview and hiring process based on the position specific skill requirements. Formal training on the methodologies of critical thinking should most definitely be incorporated into an educational curriculum, as well as

methodologies of how to conduct research, software for data manipulation and methodologies for analysis and synthesis.

Abilities

The final area addressed by Moore and Krizan is the abilities arena. They identify three main abilities: communicating, teaming and collaborating and thinking. The communicating aspects most definitely would be included into any new intelligence analyst training program to ingrain the corporate mindset into the analyst. The inclusion of active listening theories and practical exercises along with mandatory communicating requirements (e.g., briefings) would increase the analysts' communication ability. The education and training program should also include methodologies on structured thinking, as well as the theories behind it. The inclusion of coursework on the different reasoning approaches and incorporation in other KSA learning areas would be synergistic. The teaming and collaboration aspect would be more appropriate to on the job training and assimilation rather than a structured learning environment.

David Moore takes this pyramid model with its Characteristics, Skills, Knowledge and Abilities and further refines it in his article ―Species of Competencies for Intelligence Analysts.‖ Moore refines the requirements of analysts at different levels of analysis. He defines the four levels of intelligence analysis as descriptive, explanatory, interpretive, and estimative.

―Descriptive analysis is a process that reports an event, person, place, or thing. Descriptive intelligence is a reactive, event-driven process closely linked to a particular

information source. Based on measurable facts, or the characteristics of facts, it reports evidence by describing specific events or characteristics."[36]

―Explanatory analysis reveals why something is so. Explanatory intelligence is the result of a rationalized analytic process that employs methods of reasoning to reveal contexts for facts and inferences, ―including observations about patterns or changes in observed behavior." Analysts performing this type of analysis draw on catalogued best analytic practices in a collaborative environment that reduces or minimizes redundant efforts. Well-developed communicating, thinking, and collaborative abilities as well as knowledge of who plays with whom in the Intelligence Community enhances this collaboration."[37]

―Interpretive intelligence analysis is an adaptive process that uses both structured methods of analysis and analysts' intuition to interpret information. Analysts apply structured methods such as evidentiary inference, analysis of competing hypotheses, and scenario development. They employ techniques such as opportunity analysis, linchpin analysis, and matrix analysis to make sense out of events and their associated evidence."[38]

―Estimative analysis is a proactive process that predicts based on analysts' experience, knowledge, and modeling of evidence.[39] The anticipatory products created

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[36]David T. Moore, ―Species of Competencies for Intelligence Analysis," http://scip.cms-plus.com/files/Resources/Moore-Species-of-Competencies.pdf (accessed June 8, 2011), 14.

[37]Ibid., 15.

[38]Ibid., 21.

[39]Ibid., 22-23.

from this type of analysis are the results of applying such methods as Bayesian analysis, evidentiary inference, trend analysis, and various forms of systems analysis."[40]

According to Moore, these different levels of analysis and associated skills illustrate the natural progression of an analyst's ability to undertake more complex analysis. These types of analysis, and his associated characteristic charts, can provide the manager or supervisor of intelligence analysts a good starting point to better maximize the intelligence analyst's skill set as well as remaining cognizant of limitations when assigning tasks.

<div align="center">Intelligence Community Directives</div>

The potential for a difference of opinion between supervisors and agencies as to what constitutes ―good analysis‖ at different levels is problematic. To alleviate some of these challenges, the Intelligence Community is beginning to accept universal standards in many areas. This standardization began in earnest with the creation of the Director of National Intelligence (DNI) in 2004.

The Office of the Director of National Intelligence (ODNI) has published several Intelligence Community Directives (ICDs) to bring the seventeen members of the Intelligence Community to a universal lexicon on a broad range of topics. There are two ICDs that directly address the topic of education and training of intelligence analysts: ICD 203, Analytic Standards, and ICD 610, Competency Directories for the Intelligence Community Workforce.

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[40]Ibid.

ICD 203 states the analytic standards are: objectivity, independent of political considerations, timeliness, based on all available sources of intelligence, and exhibits proper standards of analytic tradecraft. Objectivity requires that analysts and managers perform their analytic and informational functions from an unbiased perspective, which ties in with the second standard of independent of political considerations. This standard states analysts and managers should provide objective assessments informed by available information that are not distorted or altered with the intent of supporting or advocating a particular policy, particular viewpoint or audience.

Analytic products that arrive too late to support the work of consumers weaken utility and impact. According to ICD 203, analysts will strive to deliver their products in time for them to be actionable by customers, in other words analysts must adhere to the timeliness standard.

The fourth standard put forth in ICD 203 is intelligence should be based upon all available sources of data. This means analysis should be informed by all relevant information available to the analytic element. This standard prevents analysts from merely selecting intelligence that supports their hypothesis, without considering all of the intelligence available.

The last standard articulated in ICD 203 is exhibiting proper standards of analytic tradecraft, specifically:

1. Properly describes the quality and reliability of underlying sources
2. Properly caveats and expresses uncertainties or confidence in analytic judgments
3. Properly distinguishes between underlying intelligence and analysts assumptions and judgments
4. Incorporate alternative analysis where appropriate
5. Demonstrates relevance to U.S. national security

6. Uses logical argumentation
7. Exhibits consistency of analysis over time, or highlights changes and explains rationale
8. Makes accurate judgments and assessments.[41]

Although these analytic standards were recently codified, they are not new to the Intelligence Community.

The ODNI also attempted to codify the competencies intelligence analysts should possess. ICD 610 created a taxonomy to ensure universal understanding of key descriptors and definitions across the Intelligence Community. ICD 610 further distilled the competencies based on pay grade, non-supervisor vs supervisor, and senior officer. The two broad categories of the taxonomy are core competencies and technical expertise, with the technical expertise further delineated as professional tradecraft and subject matter expertise.

Here are the key definitions of the Intelligence Community taxonomy that are applicable to the topic of education and training of intelligence analysts. Competencies are the measurable or observable knowledge, skills, abilities, behaviors, and other characteristics needed to perform a type of work or function.[42] There are numerous competencies that are considered core competencies, and that apply universally to all Intelligence Community employees regardless of agency or element, mission category, occupational group, or work category.

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[41]Director of National Intelligence, ―Intelligence Community Directive (ICD) 203, Analytic Standards," June 21, 2007, http://www.fas.org/irp/dni/icd/index.html, (accessed June 1, 2011).

[42]National Intelligence, Intelligence Community Directive (ICD) 610, *Competency Directories for the Intelligence Community Workforce*, September 1, 2008, http://www.fas.org/irp/dni/icd/index.html (accessed June 1, 2011).

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Within the Intelligence Community there are two additional competency areas,

the first area is professional tradecraft. Professional tradecraft consists of competencies

required for employees in one or more occupations within a particular mission category.

These competencies can extend beyond a certain agency or entity. The second

Intelligence Community specific area is subject matter expertise or specialty.[43] These

types of competencies are required for employees in one or more occupations within a

mission category, depending on a particular specialty or assignment. These competencies

include substantive knowledge areas, such as intelligence topics and target countries,

certifications, and intelligence disciplines (e.g., GEOINT, HUMINT, and SIGINT).[44]

Figure 2, is the graphical representation of the IC Taxonomy from ICD 610.

Core
Competencies that apply universally to all IC employees regardless of agency or element, mission category, occupational group, or work category. Clusters of competencies provide the foundation for the performance elements as established for non-supervisory, supervisory, and managerial IC employees at GS-15 and below in ICD 651 and for senior civilian officers in ICD 656.

Technical Expertise	**Professional Tradecraft**
	Competencies required for employees in one or more occupations within a particular mission category (e.g., Collection and Operations).
	Subject Matter Expertise
	Competencies required for employees in one or more occupations within a mission category, depending on a particular specialty or assignment. These competencies include substantive knowledge areas, such as intelligence topics and target countries, certifications, and intelligence source disciplines (e.g., GEOINT, HUMINT, and SIGINT).

Figure 2.   Core Competencies Taxonomy, ICD 610

Source: National Intelligence, Intelligence Community Directive (ICD) 610, *Competency Directories for the Intelligence Community Workforce*, September 1, 2008, http://www.fas.org/irp/dni/icd/index.html (accessed June 1, 2011).

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[43]Ibid.

[44]Ibid.

This taxonomy is directly relevant to the discussion of intelligence analyst education and training because it articulates the performance outcomes for intelligence analysts. These attributes, skills, and characteristics are how supervisors will be assessing the intelligence analysts in the Intelligence Community. These are the baseline capabilities the Director of National Intelligence wants all intelligence analysts within the Intelligence Community to maintain. The most applicable sub-category from the ICD 610 document is the Analysis and Production mission area, graphically depicted in figure 3. There are several of the critical competencies identified in the Moore and Krizan article highlighted in the ICD taxonomy, most notably researching, tools and methods as well as critical thinking.

Core		
GS-15 and Below Non-supervisory	**GS-15 and Below Supervisory and Managerial**	**Senior Officer**
• Engagement and Collaboration • Critical Thinking • Personal Leadership and Integrity • Accountability for Results • Technical Expertise • Communication *See Annex B*	• Engagement and Collaboration • Critical Thinking • Leadership and Integrity • Accountability for Results • Management Proficiency • Communication *See Annex C*	• Collaboration and Integration • Enterprise Focus • Values-Centered Leadership • Executive Leadership • Management Tradecraft • Domain Knowledge *See Annex D*
Technical Expertise		
Professional Tradecraft	**Subject Matter Expertise (SME)**	
• Collection Systems Capabilities • Customer Operations and Requirements • Processing and Exploitation Capabilities • Researching • Tools and Methods	• Academic/Professional Disciplines • Counterintelligence • Counterproliferation • Counterterrorism • Cultural Expertise • Cyber • Intelligence Disciplines (INTs) • Intelligence Topics • Languages • Scientific and Technical Intelligence (S&TI) • Targets	

Figure 3.   Annex G, Competency Directory Summary for Analysis and Production

Critical Thinking and Reasoning

According to the ODNI, the core competencies listed in figure 3 should be adopted by every intelligence analyst, regardless of work place, national agency or fusion center. Almost every document concerning intelligence analyst education or analysis states the need for critical thinking. The founders of the website Criticalthinking.org believe critical thinking is that mode of thinking— about any subject, content, or problem—in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it.[45]

This self awareness and critical thinking is crucial for another important trait of intelligence analysts, the ability to reason. There are three types of reasoning: inductive, deductive and abductive reasoning. Inductive reasoning is the type of logic moving from the specific to the general. While this method provides many possible outcomes, however, inductive reasoning lacks a means to distinguish among each outcome–all are possible. An analyst has no way of knowing whether an inductively determined solution is correct.[46]

Deductive reasoning is the opposite of inductive. It is moving from the general to the specific, which is what most people refer to as logic. It addresses questions about adversarial behavior and intentions. Deductive reasoning becomes essential for warning

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[45]CriticalThinking.org, ―About Critical Thinking,‖ http://www.critical thinking.org/aboutCT/ourConceptCT.cfm (accessed May 20, 2011).

[46]Moore, *Critical Thinking*, 4.

intelligence production because based on past perceptions (or actions), certain facts may indicate specific outcomes.[47]

The third type of reasoning is abductive reasoning. It reveals plausible outcomes to the intelligence analyst, primarily through pattern recognition. When an adversary's actions defy accurate interpretation through existing paradigms, abductive reasoning generates novel means of explanation. In the case of intelligence warning, an abductive process presents policy–making intelligence consumers with an assessment of probabilities. Although abduction provides no guarantee that the analyst has chosen the correct hypothesis, the probative force of the accompanying argument indicates that the most likely hypothesis is known and that elusive, actionable intelligence is on tap.[48]

These different types of reasoning allow the intelligence analyst to successfully accomplish his job. The need for intelligence analysts to be exposed to and understand the different types of reasoning is vital for the intelligence analyst to successfully integrate various structured methodologies.

<div align="center">Analytic Tradecraft</div>

Another significant area the literature emphasizes is the need for analytic tradecraft. It is also mentioned in both ICD 203 and ICD 610. Although mentioned as important, there is very little literature dedicated to the study of analytic tradecraft and its value. The majority of analytic tradecraft can be characterized as structured analytic methodologies. There are numerous examples of these methodologies in the literature but

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[47]Ibid.

[48]Ibid.

the most common are: Red Teaming, Team A/Team B, Alternate Competing Hypotheses, and Key Assumptions Check.

Structured analytic techniques are incorporated into every education and training program for intelligence analysts. Each program dedicates a different amount of time to the topic of analytic tradecraft. Structured analytic techniques are important for the intelligence analyst to overcome cognitive bias and deliver intelligence products to the consumer that comply with the analytic standards framework. These techniques must be included in the education of new intelligence analysts.

Fusion Center Overview

The second area of emphasis of this literature review is to ascertain what fusion centers do and how they do it. Fusion centers have grown considerably since September 11th. There are currently 72 state and major urban area fusion centers across the country. Originally fusion centers were a local and state initiative until the Department of Homeland Security saw the utility of using fusion centers as a mechanism to share and distribute information to state, local, tribal and private sector stakeholders.

The fusion center concept is not new. Fusion centers grew out of the regional center model with very specific mandates. The High Intensity Drug Trafficking Areas (HIDTAs), sponsored by the DEA, are the most cited example of a pre-September 11th center. Many state, local and regional leaders saw the fusion centers as a mechanism to fill the void of the ―correct information and intelligence" from the federal government to potentially prevent a future attack or respond effectively to one.[49]

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[49]Todd Masse, Siobhan O'Neil, and John Rollins, *Information and Intelligence (Including Terrorism) Fusion Centers* (New York: Nova Science Publishers, 2008), 17.

As the concept of the fusion centers evolved and matured, documents from the President and federal agencies began to be developed and published. The first document to specifically target fusion centers was the Fusion Center Guidelines published in July, 2005.

<div align="center">Fusion Center Guidelines</div>

This manual was prepared with funding from the Bureau of Justice Assistance (BJA) in collaboration with the Global Justice Information Sharing Initiative, U.S. Department of Justice, along with the Department of Homeland Security.[50] The guidelines attempt to cover the entire range of issues a fusion center might face, from governance to civil liberties. This document serves as the foundational document for fusion center guidance.

There are eighteen specific guidelines mentioned in the document. Of those eighteen, there are three recommendations with direct application to this research paper. The three are: Guideline 1–The National Criminal Intelligence Sharing Plan and the Intelligence and Fusion Process, Guideline 12–Training of Center Personnel, and Guideline 14–Intelligence Services and Products.

Guideline 1 states the fusion center should adhere to the tenets of the National Criminal Intelligence Sharing Plan (NCISP) and perform all steps of the intelligence and fusion process. The intelligence analyst is intimately involved with all the steps of the intelligence cycle and should therefore, be well trained in its utilization.[51]

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[50]Department of Justice's Global Justice, *Fusion Center Guidelines*.

[51]Ibid.

The training aspect of the first guideline ties nicely with Guideline 12, which states fusion center personnel should adhere to the training objectives in the NCISP and meet the minimum Criminal Intelligence Training Standards for U.S. Law Enforcement and Other Criminal Justice Agencies.[52] This is one of the first mentions of training requirements but is more of a recommendation versus directive with the use of the word "should" instead of "must."

Guideline 14 deals specifically with the variety of intelligence services fusion centers should provide and produce. The fusion centers should produce strategic and tactical products to support the mission and priorities of the center and consult with the Law Enforcement Analytic Standards to ensure the development of professional quality analytic products.[53]

These guidelines form the baseline for what an intelligence analyst should do within the fusion center, from being an integral member of the fusion center process to producing analytic products.

Baseline Capabilities

The "Baseline Capabilities for State and Major Urban Area Fusion Centers" was the first supplement to the Fusion Center Guidelines. It attempts to refine the outcomes of the fusion center guidelines in order to establish the baseline capabilities and the operational standards necessary to achieve each one.[54] The document was published in

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[52]Ibid.

[53]Ibid.

[54]Department of Justice's Global Justice, *Baseline Capabilities*, 1.

September 2008, by the Global Initiative, the same organization that wrote the Fusion Center Guidelines previously.

The baseline capabilities document is broken down into two sections: Section I: Fusion Center Capability Areas: Fusion Center Process Capabilities and Section II: Fusion Center Capability Areas: Management and Administrative Capabilities.

The Fusion Center Process Capabilities are actually an expansion and refinement of the steps within the intelligence process and its applicability for the fusion center. Almost every subsection impacts intelligence analysts, but there are two subsections with the greatest impact concerning the education and training of intelligence analysts, section C, Processing and Collation of Information, and section D, Intelligence and Analysis.

Section C, Processing and Collation of Information, articulates two subordinate steps to ensure the accurate processing and collation of information. The processing aspect directly impacts the training requirements for intelligence analysts as the Baseline document references both the International Association of Law Enforcement Intelligence Analysts and the Law Enforcement Analytic Standard as well as encouraging the utilization of tools. Both of these items require incorporation into a training program. The collation aspect references 28 CFR 23 as a requirement which must also be included into a training program along with confidence levels of sources which requires an educational base to accurately assess the sources.

Section D, Intelligence and Analysis, specifically states eight subordinate steps. Two of the steps would affect a training program, the analytic products plan and the analytic tool development. Both of these items are skill based, repetitive tasks so a training vice education program would be appropriate. Four of the eight steps would

impact the development of an educational program. These focus on the ―tools for the brain" aspect, analysis (both open and restricted access), terrorist linkage with crime patterns, and strategic analytic services. One of the sections, analyst specialization, would require both education and training to allow the analyst to become proficient in the assigned portfolio.

During the National Fusion Center Conference in 2009, the membership distilled the Baseline Capabilities document into four Critical Operational Capabilities (COC). The four COC's are Receive, Analyze, Disseminate and Gather. Receive is the ability to receive classified and unclassified information from federal partners. Analyze is the ability to assess the local implications of threat information through a formal risk assessment process. Disseminate is the ability to further disseminate threat information to other state, local, tribal and territorial and private sector entities. Gather is the ability to gather locally generated information, aggregate it, analyze it, and share it with federal partners as appropriate.[55]

These four Critical Operational Capabilities are more accurately a synthesis of the intelligence cycle or process. The intelligence process, according to the Baseline Capabilities document, is comprised of the following six steps: Planning and Direction, Collection, Processing/Collation, Analysis, Dissemination and Reevaluation. The chart below cross references the Critical Operational Capabilities with the different steps of the intelligence process.

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[55]Department of Homeland Security, ―2010 Baseline Capabilities Assessment of Fusion Centers and Critical Operational Capabilities Gap Mitigation Strategy," http://www.dhs.gov/files/programs/gc_1296491960442.shtm (accessed May 25, 2011).

Table 1.   Critical Operational Capabilities vs Intelligence Cycle

Intel Process ➡ COC ⬇	Planning and Direction	Collection	Processing / Collation	Analysis	Disseminate	Reevaluation
Receive	X					X
Analyze				X		
Gather		X	X			
Disseminate	X				X	

Source: Created by author, using information from Department of Homeland Security, ―2010 Baseline Capabilities Assessment of Fusion Centers and Critical Operational Capabilities Gap Mitigation Strategy," http://www.dhs.gov/files/programs/ gc_1296491960442.shtm (accessed May 25, 2011).

Since the four COCs overlap with the intelligence process, intelligence analysts are involved and participate with every COC in some fashion. In 2010 a Baseline Capabilities Assessment (BCA) was conducted by the Office of the Program Manager for the Information Sharing Environment, in coordination with Fusion Center Directors, the Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), and other federal interagency partners based on these four COC's.[56] The intent of this assessment was to find the current operational capability of the 72 fusion centers across the country.

The outcome of this assessment is not available to the public but it resulted in the Short Term Gap Mitigation Strategy[57] and the publishing of the Short Term Critical

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[56]Ibid.

[57]Ibid.

Operational Capability (COC) Gap Mitigation Guidebook[58] to improve the identified

shortcomings and develop a plan to improve the capabilities over the coming years.

<u>Common Competencies for Intelligence Analysts</u>

Since intelligence analysis within the fusion centers is a growing discipline, the

DOJ/DHS working group published the ―Common Competencies for State, Local and

Tribal Intelligence Analysts" in June 2010. This document is a joint Department of

Justice and Department of Homeland Security effort designed to highlight competencies

analysts should strive for and managers should demand in order to facilitate the

development of intelligence analysts, not criminal analysts, within the state and major

urban area fusion centers. The document also provides a cross-walk to other types of

analysts, especially the different words used to describe the same competency in the

different communities.

The five common competencies addressed are: thinking critically within the

intelligence cycle, sharing information and collaborating, fusing intelligence and law

enforcement tradecraft in a homeland security environment, communicating analytic

observations and judgments or generating analytic products, and turning concepts and

principles into action. The document does not provide a definition of these competencies,

but rather provides a visual aid with the competency on the left and analytic skill

behavior indicators on the right. Below are selected summaries of each competency.[59]

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[58]Bart R. Johnson, ―Fusion Centers: Strenghtening the Nation's Homeland
Security Enterprise," *The Police Chief* 78 (February 2011): 62-68.

[59]For the complete common competency charts see the *Common Competencies
for State, Local and Tribal Intelligence Analysts*.

Thinking critically within the intelligence cycle

Several of the more significant displayed attributes are the ability to frame critical issues and difficult questions, design analytic approaches, systematically challenge key assumptions, overcome mental mind-sets, avoid common fallacies and evaluate the quality of thinking and analytic process through comparisons with established standards. This ability to think critically is a critical skill of an intelligence analyst.[60]

Sharing information and collaborating

A few of the more important attributes indicated in the document are the ability to establish trusted networks for collaboration, apply legal, privacy and security guidelines to the collection and storage of data, operationalize the ODNI's ―responsibility to provide" within applicable laws and regulations, collaborate across organizational and functional boundaries and deconflict analytic positions.[61]

Fusing intelligence and law enforcement tradecraft

The Common Competencies document subdivides this competency into three subcategories. The Methods, Techniques and Tools section includes analysis such as crime and demographic analysis, the utilization of structured analytic techniques like hypothesis generation and decision support techniques while leveraging various tools such as flow charts and link analysis tools.[62]

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[60]Department of Justice's Global Justice, *Common Competencies*.

[61]Ibid., 6.

[62]Ibid., 6.

The second subcategory is titled Threat and Risk Assessments and focuses on the analyst's ability to produce threat and vulnerability assessments, communicating risk as well as anticipating the risk and threat and offering recommendations to mitigate the identified risks.[63]

The final subcategory is Suspicious Activity Reports (SARs). SARs are a homeland security specific raw reporting mechanism being incorporated across the fusion center structure and into the law enforcement arena. The intelligence analyst must be able to exploit SARs utilizing analytic techniques to identify trends and patterns while assessing and disseminating the SARs in accordance with the information sharing environment.[64]

Communicating analytic observations and judgments

The communicating category focuses on the analyst's ability to transform customer needs into intelligence requirements, proposing the product type to meet the demand, writing the product with collaboration and coordination, marking the product for appropriate distribution and delivering the product to the consumer, either via briefings or a stand alone written product.[65]

Turning concepts and principles into action

The turning concepts aspect of the intelligence analyst competency focuses on the subject matter expertise or portfolio requirements of the analyst. The analyst should be

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[63]Ibid., 7.

[64]Ibid.

[65]Ibid.

able to analyze and identify items within their portfolio, its nexus with terrorism or homeland security, assess the legal, privacy, civil rights and regulatory implications of the information and how to proceed. The analyst should share best practices with the community and assess analytic products against established standards.[66]

These common competencies align with the core competencies addressed in section one of the literature review. Each emphasis area has specific education and training requirements the supervisors and leadership within the fusion centers must address.

<center>Additional training</center>

Beyond the common competencies listed in this document, there are other training requirements intelligence analysts at the fusion center require that the national level analysts do not. The two biggest requirements are a grounded knowledge of intelligence-led policing and certified training and knowledge of 28 CFR 23.

Intelligence-led policing is the collection and analysis of information to produce an intelligence end product, designed to inform police decision making at both the tactical and strategic levels. Since this paper is not law enforcement focused, there will be no further discussion of intelligence-led policing herein.

The 28 CFR 23 is a Code of Federal Regulations that ensures criminal intelligence systems are utilized in conformance with the privacy and constitutional rights of individuals. It is a guideline for law enforcement agencies. It contains implementing standards for operating federally funded, multijurisdictional criminal intelligence

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[66]Ibid.

systems.[67] In essence, this regulation requires everyone who inputs data into the record management system to be trained on the requirements and restrictions of what is allowed and forbidden from being collected and retained on individuals.

These two training and education requirements are viewed as paramount from the fusion center leadership in the education and training curriculum for newly hired intelligence analysts at fusion centers, primarily due to the onus placed on the fusion centers concerning information systems for access and funding.

These guiding documents from the federal government provide the fusion centers a strong base to build from while establishing a framework for fusion centers across the country which are standardized yet customizable for the state and major urban area mission requirements.

<u>Summary and Conclusion</u>

The literature on the education and training of intelligence analysts is rather sparse, with no academic discussions of the unique requirements for intelligence analysts at the state and major urban area fusion centers. This research paper hopes to provide the bridge between the current literature and the emerging requirements of the fusion centers.

Intelligence analysts are the critical elements within the state and major urban area fusion centers; they must be properly educated and trained to provide the United States the first line of defense for our homeland security.

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[67]Institute for Intergovernmental Research, ‒Criminal Intelligence Systems Operating Policies (28 CFR Part 23)," http://www.iir.com/Justice_Training/ 28cfr/default.aspx (accessed May 28, 2011).

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

To briefly readdress the focus of the paper, the purpose of this thesis is to describe the optimal education and training a new intelligence analyst should receive when hired to work in a state or major urban area fusion center.

Research Approach

There are two main research methodologies: qualitative and quantitative. Quantitative research is focused on numerical interpretation and analysis of the data, regardless of how it is collected or coded. The potential for quantitative research into the education and training of intelligence analysts exists. There are many areas where a survey would be useful to quantify the amount or type of training an analyst receives. However, this research paper will not administer any surveys or provide any statistical analysis or results.

This research paper will exclusively utilize qualitative methodology. The central characteristic of qualitative research is that individuals construct reality in interaction with their social worlds[68]. Every person is shaped by their experiences and those experiences affect how the individual views every interaction or experience after it. There are numerous life experiences that significantly influence how people view reality. One of the primary experiences is education.

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[68]Sharan B. Merriam, *Qualitative Research: A Guide to Design and Implementation* (San Francisco, CA: Jossey-Bass, 2009), 22.

According to Sharan Merriam, there are six standard approaches to qualitative

research: phenomenology, grounded theory, ethnography, narrative analysis, critical

qualitative research and basic qualitative research.[69] To better understand the

methodology selected, a brief summary of each type of approach is provided with an

emphasis as to why the approach was, or was not, selected.

Phenomenology is basically the experiences one has. It is not the observations of

the experiences, but rather the feelings of the individual while doing or living through the

experience. Although the researcher has been through a single iteration of intelligence

training from the military, it was not feasible for the researcher to experience all aspects

of fusion center analytic training for this paper.

Grounded theory is an inductive methodology, meaning it goes from the specific

to the general, to find an explanation of the phenomenon. Further, this approach describes

the generation of theory from systematic research. It is a set of rigorous research

procedures leading to the emergence of conceptual categories.[70] For this project, the

theory explaining education and training cultures is already established so there is no

need to develop or discover one.

Ethnography refers to the study of an entire culture.[71] A study of this type

concerning the Intelligence Community was written by Dr. Rob Johnston. Its title is

Analytic Culture in the US Intelligence Community: An Ethnographic Study. However,

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[69]Merriam, *Qualitative Research,* 21-22.

[70]Grounded Theory Institute, ―What is Grounded Theory,‖ http://www.grounded
theory.com/what-is-gt.aspx (accessed June 6, 2011).

[71]Research Methods Knowledge Base, ―Qualitative Approaches,‖
http://www.socialresearchmethods.net/kb/qualapp.php (accessed June 8, 2011).

Johnston's study was conducted within national level agencies, not at the state and local fusion centers, so its applicability is not direct. A follow up research paper using ethnographic methodology would be interesting to determine if a certain culture exists within the intelligence analyst ―society‖ in the fusion centers and what that culture says about the effectiveness of the analysis taking place there.

Narrative analysis refers to the approach in which the data collected is from stories or narratives provided by the interviewees. The information is then analyzed for the meaning it has for its author (the interviewee). Although numerous interviewees for this research paper conveyed stories during the course of the interviews, the outcome will not be individually focused or analyzed. The interviews will be synthesized and analyzed looking for trends across the fusion centers rather than analyzing individual experiences.

Critical qualitative research is designed to critique and challenge, to transform and empower.[72] The technique ―seeks not just to study and understand society, but rather to critique and change society.‖[73] The intent of this research was not to change but rather to have the participants and interested parties discuss the findings of this research project to improve the fusion center concept.

Basic qualitative research intends to understand the meaning a phenomenon has for those involved.[74] The intent for this research paper was to gather what those involved with intelligence analysts believe to be the best education and training, from their

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[72]Merriam, 34.

[73]Ibid.

[74]Ibid.

perspective as an analyst, supervisor or consumer. This paper will utilize the basic qualitative research methodology.

Basic Qualitative Research Approach

Constructivism underlies basic qualitative studies.[75] The individuals interviewed for this paper construct their ‑reality" based on their interaction with their social world, whether it is at their present job, their social network, their educational opportunities or other previous experiences. As stated earlier, their experiences shape the way they view future experiences.

To acquire a broader perspective of the education and training of intelligence analysts over all, the research included interviews and conversations with several members of the Intelligence Community in order to gain insight into the education and training the Intelligence Community affords and requires of its newly hired analysts. The research also included conversations and interviews with experts on intelligence matters as well as fusion center personnel.

Research Questions

To reiterate, the primary research question was: what is the optimal education and training that intelligence analysts at state and major urban area fusion centers should receive? To effectively ascertain the answer to the primary question, several secondary questions were posed to assist in the data collection through oral history interviews.

The secondary questions for this research question were: What education and training is provided to intelligence analysts in the Intelligence Community? What

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[75]Merriam, 22.

education and training is currently offered by the state and major urban area fusion centers? What outreach programs are currently offered to fusion center analysts from members of the Intelligence Community? What mechanisms do the fusion centers use to assess competencies? How do the consumers of the fusion center products view the products? What education and training is valued by the intelligence analysts and why? What education and training is valued by the supervisors of intelligence analysts and why?

<u>Sampling Plan</u>

Although it is theoretically possible for an individual or organization to interview every intelligence analyst at every fusion center, that approach was not practical for this research paper. To overcome the inability to interview every intelligence analyst at every fusion center, the research methodology incorporated sampling instead. The purpose of a sample is to gain insight to explain a phenomenon without assessing or engaging the entire population.

There are two main types of sampling methodologies: probability sampling and non-probability sampling. Probability sampling is any process which ensures a random process, meaning every element in the group has an equal probability of selection.[76] This methodology was not viable for this research paper for two primary reasons: the researcher did not have access to a database of every intelligence analyst currently operating in state or major urban area fusion centers from which to select a random

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[76]Research Methods Knowledge Base, ―Probability Sampling,‖ http://www.social researchmethods.net/kb/sampprob.php (accessed June 8, 2011).

sample and it would not provide insight into where the individual fusion centers are along the operational continuum of capabilities.

Based on the researcher's requirement to interview personnel in fusion centers along numerous places on the operational continuum, the non-probability sampling method was utilized. More specifically, this paper utilized purposeful sampling to ensure the interviewees were directly involved with the research topic of intelligence analysts. The three samples selected for the research were fusion centers, the Intelligence Community and intelligence subject matter experts.

The first sample group selection was the fusion centers. The researcher selected fusion centers based on their various stages of development, different regions of the country, different state/local/regional threats, varying local concerns, and willingness to engage with the researcher. The researcher interviewed and visited the current and previous ―Fusion Center of the Year‖ recipients, an award presented by the Department of Homeland Security to the ―best‖ fusion center for the previous calendar year.

The methodology further divided the sample into three additional subgroups: intelligence analysts, supervisors, and education and training personnel. The theme of these interviews focused on the education, training and professional development of the intelligence analysts. The interviews and conversations attempted to tease out the interviewees' perception of education and training, thoughts and opinions on the federal IC education and training opportunities, relationships between federal agencies and the fusion center, perception of initiatives from the federal agencies, assessment in relation to the core competencies guidelines, how assessments are made concerning intelligence products and overall job satisfaction.

Based on the particular subgroup being interviewed, certain secondary questions were asked throughout the interview. Examples of the questions are: What education and training is currently offered by the state and major urban area fusion centers? What outreach programs are currently offered to fusion center analysts? What education and training is valued by the intelligence analysts and why? What education and training is valued by the supervisors of intelligence analysts and why?

The second sample of interviewees selected was from the Intelligence Community. The researcher spoke and met with representatives of the IC directly involved with the education and training of intelligence analysts. The researcher met with the Central Intelligence Agency (CIA), Defense Intelligence Agency (DIA), State Department's Bureau of Intelligence and Research (INR), Department of Homeland Security (DHS), Drug Enforcement Agency (DEA), Army, Marine Corps and the Coast Guard.

The theme of the questions directed toward the Intelligence Community education and training personnel was intended to gain insight in many areas: what education and training the members of the IC are providing to their new analysts, how the agency training programs incorporate the requirements of Analysis 101 (the Office of the Director of National Intelligence's attempt to conduct ―joint" intelligence analyst training), how many members have attended the Analysis 101 course, perception of the fusion centers' analytic capability, opinion of the fusion center education and training programs, collaboration with fusion centers, and incorporation of Intelligence Community Directive (ICD) 203, Analytic Standards, and their perception of ICD 610, Core Competencies for the Intelligence Community workforce.

There were numerous secondary questions specifically directed towards this sample. Examples of the guiding questions were: What education and training is currently offered by the Intelligence Community to new intelligence analysts? What outreach programs are currently offered to fusion center analysts from members of the Intelligence Community? What education and training is valued by the intelligence analysts and why? What education and training is valued by the supervisors of intelligence analysts and why?

The third sample group was selected based on their expertise involving intelligence. This group is the subject matter experts including retired intelligence analysts, intelligence scholars and educators. The objective of the subject matter expert group questions was to gather a broad, non agency perspective on the education and training requirements for intelligence analysts, how policy makers viewed and incorporated intelligence and what analysis meant. Examples of the secondary questions are: What education and training do you believe is best and why? How do consumers of intelligence products assess utility? What mechanisms do the fusion centers use to assess competencies? How do the consumers of the fusion center products view the products?

<center>Bias</center>

The outcomes of these samples should be representative, but the potential exists for them to not be. The primary reason this sample could be skewed is individual bias of any given interviewee. This bias may come from a perception of loyalty (lack of willingness to talk candidly about the organization or its capabilities) or lack of experience (the interviewee may not know anything different, meaning this may be the

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interviewee's only job). The researcher will maintain awareness of any potential ―outliers‖ as the data is collected and analyzed.

Summary

This chapter provides context as to the available methods of research, qualitative and quantitative, and why the qualitative methodology was selected. It also provided the reader a brief overview of the different methodologies associated with qualitative research and the decision to use basic qualitative research design for the research project.

This chapter provided an explanation as to the sampling method and the desired outcomes from each sample group and the associated subgroups, including a few representative questions, along with the potential concern of individual bias affecting the data collection.

The next chapter will provide the results and analysis of this research design.

CHAPTER 4

ANALYSIS

Findings

This chapter is broken into two primary sections. The first section will discuss the unanticipated questions that arose during the course of research. This section addresses those questions of ―how,‖ ―should‖ and ―can.‖ The first unanticipated question was how can someone assess an entity, and in this case recommend education and training, without an established standard. The second question that arose was should fusion centers even produce finished intelligence products. The final question posed was can fusion centers produce finished intelligence. The first section will address these questions and provide some perspective.

The second section will detail the observations made during the fusion center site visits and interviews. Based on the seven site visits to a geographically diverse set of fusion centers, along with numerous interviews, three broad themes emerged concerning the education and training of intelligence analysts at state and major urban area fusion centers, and by extension the ability of intelligence analysts to produce intelligence. Broadly categorized, the three themes were education and training challenges, personnel issues and leadership aspects.

To effectively set the stage for the discussion of these topics, a brief snapshot of some actual fusion centers provides some context rather than an abstract theoretical discussion. There is an adage that says, ―when you've seen one fusion center, you've seen one fusion center.‖ The uniqueness of fusion centers is displayed in both the physical layout of the facility and the missions of the facilities. These differences create

challenges for researchers when assessing and comparing the fusion centers because there is no standard for the different communication, operation or intelligence functions within the fusion centers. For example, the New Jersey Regional Operations and Intelligence Center has its analysis unit separated between the crime section and the threat section. This separation is typical in fusion centers where both criminal and intelligence analysts are present and was observed in several of the fusion centers. On the other end of the spectrum, the Connecticut Fusion Center does not even have criminal analysts in the center because the decision was made to separate the two missions completely.

Conceptually, the autonomy and uniqueness of each fusion center makes sense because it allows the leadership of the centers to organize based on the problems and organizational construct of the participating agencies. Compare for example, the mission statements below for two state fusion centers.

The mission of the Colorado Information Analysis Center (CIAC) is to provide an integrated, multi-disciplined, information sharing network to collect, analyze, and disseminate information to stakeholders in a timely manner in order to protect the citizens and the critical infrastructure of Colorado.[77]

The mission of the Arizona Counter Terrorism Information Center (ACTIC) is to protect the citizens and critical infrastructures of Arizona by enhancing and coordinating counter terrorism intelligence and other investigative support efforts among local, state and federal law enforcement agencies.[78]

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[77]Colorado Office of Preparedness and Security, ―Colorado Information Analysis Center,‖ http://csp.state.co.us/ciac.html (accessed May 25, 2011).

[78]Arizona Counter Terrorism Information Center, ―Mission/Vision,‖ http://www.azactic.gov/About/Mission_Vision/ (accessed May 25, 2011).

The CIAC does not even mention intelligence in its mission statement, although it does say it will analyze, while the ACTIC mentions intelligence but does not articulate its ability to pass information. A more thorough analysis of the actual missions of each fusion center, as perceived by the fusion center leadership and governing body is necessary to correctly ascertain what the true mission of each fusion center is. The mission drives the functions and outputs of each organization; whether they view themselves as a law enforcement support agency or an analysis entity.

The challenge, therefore, may not be the concept of fusion centers, but what the federal government is asking them to do- be an information conduit or conduct intelligence analysis. Historically criminal intelligence units, the precursors to fusion centers, primarily focused on criminal analysis and case support for prosecution. The anticipatory, generalized analysis currently in demand was not a staple of the previous model of fusion centers. Federal leadership wants the fusion centers to ―connect the dots"[79] by sifting through the reams of paper and terabytes of data at their disposal. Regardless of how the fusion center views its mission, it is supposed to be focused on two broad areas: information sharing and intelligence.

One of the focuses of fusion centers has been information sharing, but the concept of fusion goes beyond information repositories. Dr. Dave McIntyre, a homeland security expert who has researched and taught homeland security since the mid-1990s, has stated that fusion centers without analysis are just digital libraries and the information sharing

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[79]Director Robert Riegle, State and Local Program Office, Office of Intelligence and Analysis, before the Committee on Homeland Security, Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment, ―The Future of Fusion Centers: Potential Promise and Dangers," April 9, 2009, http://www.dhs.gov/ ynews/testimony/testimony_1238597287040.shtm (accessed June 6, 2011).

environment creates ―interlibrary loan" where the fusion center can access other databases.[80] The current role the majority of fusion center intelligence analyst's play is that of a ―reference librarian," meaning they know where and how to get the information but not what it means. They can not provide an informed ―so what."

Fusion centers have shifted from an anti-terrorism or counter-terrorism focus to a more broad ―all crimes, all hazards" approach. As with any management model, there are tradeoffs with this decision. Thankfully, there is not enough terrorism to keep all of the fusion centers engaged with the terrorism mission. This can result, however, in unengaged and underprepared analysts. The tradeoff for broadening the focus to the all crimes, all hazards approach may be that the focus of the fusion center is becoming too crime centric—meaning the focus is back on case support and request for information (RFI) response to officers and away from the four Critical Operational Capabilities (COC's) of the fusion centers–Receive, Analyze, Gather, Disseminate.

<u>Explanation of Research Question</u>

The research question for this paper was: What are the optimal education and training opportunities for intelligence analysts at the state and major urban area fusion centers to attain the competencies as outlined in the ―Common Competencies for State, Local and Tribal Intelligence Analysts" document?

To refresh the reader, the working definition of education is gaining knowledge in preparation for application to a future situation. Stephen Marrin defines education as normally associated with academic courses or programs geared to provide more

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[80]Telephone Conversation, Notes on file with author.

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conceptual or theoretical frameworks having less immediate effect on performance but laying the foundation for improved performance over the longer term.[81]

The definition of training is instruction designed to aid in learning or developing a new or existing skill. Marrin defines training as associated with internal programs intended to provide specific instruction for the implementation of job-related tasks. [82]

Although the original question concerned the optimal education and training for fusion center intelligence analysts, several other, more fundamental questions began to appear during the course of research.

<u>Unanticipated Questions</u>

When this research project began the researcher felt one of the primary purposes of the state and major urban area fusion centers was to produce intelligence. Every entity that is identified and labeled as an intelligence facility, produces intelligence, it does not merely serve as a conduit for information. The researcher also anticipated the site visits would provide insight as to how the fusion centers assessed both their intelligence and their analysts, similar to the Intelligence Community. Both of these assertions were questioned by many experts and members of the Intelligence Community. The three unanticipated questions were: how do you assess a program with no established standards, should fusion centers even produce intelligence, and can fusion centers produce finished intelligence products? These three questions will be addressed in the first section of this chapter.

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[81]Marrin, ─Training and Educating U.S. Intelligence Analysts," 131.

[82]Ibid.

Lack of Established Standards

The first unexpected question that arose during the research was, how can an optimal education and training program be developed if there is no established standard for what an intelligence analyst should do within a fusion center? Although there are common competencies, the job description of the majority of the intelligence analysts is more closely aligned to criminal analysis or case support rather than intelligence analysis. All fusion centers have intelligence analysts; however, not all of the fusion centers utilize the analysts in the same manner or for the same outputs. This disparity of requirements and outputs results in a very diverse skill set, further limiting the ability to ascertain optimal education and training requirements.

Should Fusion Centers Produce Intelligence

The second question that arose is ―should‖ fusion centers produce finished intelligence? This is an interesting question because it brings into play the actual role of fusion centers. As discussed previously, the mission of the fusion centers is defined by its leadership and should be articulated clearly in its mission statement. If the role of the fusion center is to be a repository and conduit for information, then fusion centers should not produce intelligence. Based on the comments and testimony by senior DHS officials, however, along with the continued allocation of resources to fusion centers by DHS, it appears the intent behind the National Network of Fusion Centers is for the fusion centers to increase their analytic capacity.

Secretary Napolitano stated in her State of Homeland Security address, ―Our most fundamental responsibility remains preventing terrorist attacks on the homeland. And to support this critical mission we have worked very hard to strengthen and build our

domestic information-sharing architecture by increasing the capacity of state and major-area fusion centers to serve as centers of analytic excellence."[83] What exactly a center of analytic excellence looks like or should provide is still being developed, but the intent is clearly articulated -- fusion centers must do analysis.

A second perspective on the topic of whether or not fusion centers should produce finished intelligence is gained by looking at the allocation of intelligence products and whom they support. The criminal intel unit (CIU) analyst would primarily support the officer with RFI's. The CIU would also provide law enforcement leadership some perspective regarding longer term, i.e., operational level, analysis for deployment of resources for a specific task. The FBI and its FIG would support terrorism threats and feed intelligence information reports back into the Intelligence Community. Figure 4 below illustrates this intelligence support construct.

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[83]Janet Napolitano, ―State of America's Homeland Security Address," January 27, 2011, http://www.dhs.gov/ynews/speeches/sp_1296152572413.shtm (accessed May 25, 2011).

Intelligence Support To Decision Makers

Operations

Policy / Resource

Chief of Police

Strategic

Governor
Homeland Security Advisor
Chief of Police

Fusion Center

Fusion Center?

FBI FIG
/ JTTF
(Terrorism Only)

Operational

Criminal
Intelligence
Units

Tactical
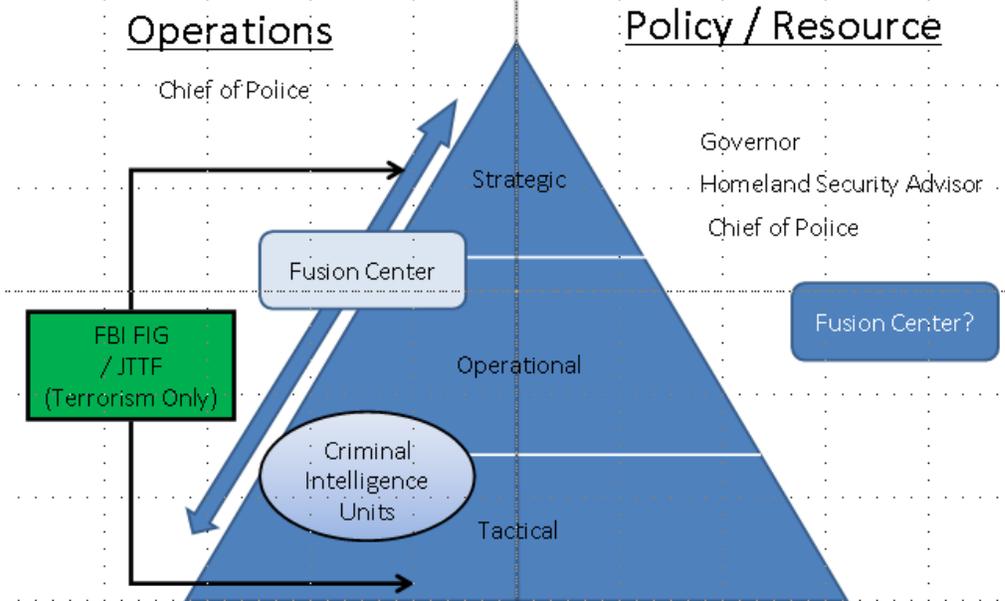
Figure 4.   Intelligence Support to Decision Makers
Source: Created by author.

Based on the diagram, there is significant support for the operations side of the spectrum, but very little support provided to the policy or resource allocation aspect. No one in this construct is supporting or providing intelligence for the governor or homeland security advisor on the long term threats and trends for intelligent allocation of resources. Although this construct may not be applicable to every fusion center, or there may be other entities that provide this long term policy analysis, the author's observations in the course of this research indicate this framework is the prevalent model currently being employed across the country.

Intelligence supports policymakers and decision makers. It is the researcher's position that fusion centers ―must‖ produce finished intelligence products because no one

else has the access to federal, state, local and tribal information and intelligence to develop a comprehensive assessment, nor is any other entity servicing the senior leaders in the executive branch within the states. Fusion centers should be the premier all-source analysis center in the state, much like the CIA is at the federal level.

Can Fusion Centers Produce Intelligence

The third question that arose during interviews and conversations is *can* fusion centers do analysis. If one accepts the premise that fusion centers must produce the finished intelligence, the natural question is can they. There is little evidence that the majority of the fusion centers are able to produce quality, finished, all source intelligence products; however, the fusion centers are proficient at developing descriptive analysis at the tactical level. In the interest of full disclosure, the researcher was not granted access to any classified or non-releasable fusion center products. These assertions are based on conversations, interviews and research.

There are three primary reasons for the current lack of capacity to produce finished intelligence: minimal education and training programs for intelligence analysts at the fusion centers, personnel issues, and leadership perspectives. All three of these topics will be expanded upon in the next section.

Observations from the Research

This section will discuss the observations made during the site visits and interviews. Table 2 is a consolidation of the reoccurring themes found across the fusion centers visited. The chart is color coded to correspond to the three overarching themes of education and training, personnel issues and leadership aspects.

Table 2.   Fusion Center Observations

Fusion Center	Analyst Training			Personnel Issues			Leadership Aspects		
	Base Skill Requirements Write, Brief, Analyze	Organized Training Plan	Analytic Training Required Beyond FIAT	Analyst progression- IA, Senior IA, Supervisor	Funding	Retention	Host Agency	Primary Consumer	Types of Analysts Criminal & Intel
1	Yes	No	No	No	Grant	High Turnover	State Police	First Responder	Both
2	Yes	No	Developing	Potential – pending $	Grant	New Hires < 6 months	Emergency Management and Homeland Security	Decision Maker	Intel
3	Yes	Yes	No	No	Grant	High Turnover	State Police	First Responder	Both
4	Yes	Developing	Developing	Yes	State	High Turnover	State Police	First Responder	Both
5	Yes	Yes	Yes	Yes	State	High Turnover	State Police	First Responder	Both
6	Yes	Yes	No	Yes	State	High Turnover	Co-Managed	Decision Maker	Both
7	Yes	Yes	Yes	Yes	State	High Turnover	State Police	First Responder	Both

Source: Created by author.

The first theme of the observation section is very broad, that of the education and training of intelligence analysts, which encompasses the second, third and fourth columns of table 2. Based on the interviews and observations made during the research period, the two categories intelligence analysts need proficiency or expertise in are communication and analysis.

As stated earlier, the two broad focus areas for fusion centers are information exchange and intelligence. According to the distillation of the Baseline Capabilities document to effectively execute the Critical Operational Capabilities (COC's) of Receive, Analyze, Disseminate and Gather, intelligence analysts must be proficient in the two identified broad critical skills for intelligence analysts, the ability to communicate and the ability to analyze. The ability to communicate effectively is further broken down

into written and oral communication skills. Intelligence analysts must be able to communicate effectively across the spectrum of written medium, whether it is a short point paper, an announcement to the sergeant conducting a shift change briefing or a strategic assessment to the leaders of a state.

The training programs of the Intelligence Community devote a significant amount of time developing this skill via practical application of each primary type of written product the agency produces from writing for the Presidential Daily Brief to writing a Defense Intelligence Note. These written products' structure, length and format are agency specific and are tailored to the target audience or primary consumer. This practical instruction during training provides IC intelligence analysts an opportunity to practice and receive feedback from both their peers and their instructors.

Intelligence analysts at fusion centers must also possess the ability to communicate effectively orally with law enforcement officers, other intelligence analysts, and senior decision makers, whether it is via telephone in response to a RFI or in a formal briefing to the governor. The ability to effectively convey the analysis in clear, concise terms is vital.

Although the intelligence analyst may be able to communicate, it is secondary because the most crucial asset for an intelligence analyst is the ability to conduct analysis. The analytic requirements differ greatly amongst the fusion centers. Some fusion centers are primarily call centers responding to requests from officers while others create strategic intelligence products. Thus, the ability of the intelligence analysts varies greatly as well. Every person interviewed stated the critical skills for intelligence analysts are the ability to write, brief and conduct analysis.

Referencing table 2, the observation chart, not every fusion center has a structured training program established. The majority of fusion centers require the Foundations of Intelligence Analysis Training (FIAT) as the primary requirement for their intelligence analysts. FIAT is a survey course (that meets the IALEIA standards for analysts) designed to introduce the analyst to a broad spectrum of ideas and concepts. It is very much based on the lower levels of Bloom's taxonomy, that of remembering and possibly understanding. Although the students do prepare and deliver a briefing at the end of the course, the potential for the students to apply more than one analytic technique, beyond a very rudimentary level, is doubtful. Based on the FIAT training schedule, the intelligence analysts are introduced to several analytic methodologies, but with almost no application.

Analytic personnel funded via grants are required to attend courses that meet or exceed competencies identified in the ―Common Competencies for State, Local, and Tribal Intelligence Analysts,‖ which outlines the minimum categories of training needed for intelligence analysts. These include subject-matter expertise, analytic methodologies, customer-service ethics, information handling and processing skills, critical thinking skills, computer literacy, and objectivity and intellectual honesty.[84]

Below is a cross referenced chart highlighting the common competencies as articulated in the ―Common Competencies for State, Local, and Tribal Intelligence Analysts‖ compared to the training available to fusion center analysts and intelligence analysts hired within the Intelligence Community.

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[84]Kevin Saupp, email correspondence.

Table 3.   Common Competencies vs Training Programs

Common Comptencies \ Courses	Foundations of Intelligence Analysis Training (IALEIA)	Intermediate Fusion Center Analyst Training (PBA)	Analysis 101 (ODNI)	Fundamentals of Intelligence Analysis (DIA)	Basic Intelligence and Threat Analysis Course (DHS)	Intelligence Basic Course (FBI)	Basic Intelligence and Research Course (DEA)	Career Analyst Program (CIA)
Duration	40 hours	125 hours	80 hours	4 weeks	5 weeks	10 weeks	11 weeks	16 weeks
Critical Thinking	X	X	X	X	X	X	X	X
Collaborating		X		X	X	X	X	X
Tradecraft	X	X	X	X	X	X	X	X
Communicating		X		X	X	X	X	X
Concepts and Principles into Action		X		X	X	X	X	X
	Fusion Center Specific		Joint Course	Intelligence Community Spcific				

Source: Author created with information from Common Competencies, course curricula, and interviews.

Table 3 clearly indicates the FIAT program is not sufficient to fulfill the DHS grant requirements. The course may be necessary, and even advantageous because of the shared experience of the analysts and the ability to network, but it can not stand by itself as the base of training for intelligence analysts.

As a method of comparison, the contact time for the entire FIAT course is forty hours. Within that timeframe the new intelligence analyst is presented a short overview of the history of intelligence, the purpose of intelligence and the intelligence cycle which totals approximately one hour and fifteen minutes. In contrast, BITAC devotes five and one half hours just to the Intelligence Community outside of DHS. BITAC commits another seven and a half hours to the components of DHS that are members of the Intelligence Community, so the total number of academic hours committed to just

providing an overview and the missions of the Intelligence Community is thirteen hours, one third of the entire FIAT course.

The FIAT course provides approximately twenty one hours of exposure to analytic techniques, along with two and a half hours of creative and critical thinking, while the BITAC course devotes an entire week, forty hours, to the topic of critical thinking and analytic methodologies.

As table 3 indicates, the FIAT course trains only two of the five common competencies, while potentially providing opportunism to collaborate with peers in an informal basis. BITAC, on the other hand, provides education and training in all five common competencies in a more robust manner.

The third column of table 2 clearly indicates an anemic approach towards advanced analysis among the fusion centers visited. This lack of concern for advanced theoretical education versus immediate training is evident throughout each of the themes. During interviews and conversations with fusion center personnel, very few identified a desire to commit resources for advanced analytic technique training. California is the only state with an accepted three year development plan for their analysts that includes advanced analytic coursework.

<u>Personnel Issues</u>

The second overarching theme discovered during the research phase is broadly categorized as personnel issues, columns five through seven in table 2. The personnel issues identified were hiring aspects, career progression, funding sources, and retention rates. These personnel issues each contribute to the inability to create an optimal education and training program for intelligence analysts at the fusion centers and directly

impact the fusion centers' ability to produce quality, finished intelligence products as well. At the core of this personnel issue is the discussion of quality. A quality analyst is experienced and equipped with the appropriate skill sets.

<div align="center">Hiring</div>

Beyond the training of intelligence analysts are the hiring practices of the two primary employers of intelligence analysts, the Intelligence Community and the fusion centers. Each of these entities has different minimum qualifications to be eligible to be hired.

One of the primary differences in the hiring criteria is the education level of the analyst candidate. While the Intelligence Community may value experience, it will not allow that factor to usurp educational requirements. For example, to be hired as an intelligence analyst with the Central Intelligence Agency the applicant must possess a bachelor's degree at a minimum. Generally applicants have a high grade point average and often times the applicants already have an advanced degree.

The fusion center arena is generally governed by the Law Enforcement Analytic Standards, one of which is the education standard for analysts.[85] The Law Enforcement Analytic Standards provides a scale of experience versus education. For new analysts with no experience, a minimum education of a bachelor's degree is required. For an analyst with at least five years of law enforcement experience the minimum education is

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[85]Department of Justice's Global Justice, Information Sharing Initiative (Global), *Law Enforcement Analytic Standards* (Washington, DC: Government Printing Office, November 2004), 5.

an associate's degree, while for someone with ten or more years of experience, either in law enforcement or the military, there is no educational level requirement.

This difference in educational baseline requirement is significant for three reasons. The first reason is that a college education teaches an individual how to conduct research, regardless of one's major field of study. The second reason a college degree is critical is that it provides the individual a baseline of critical thinking and problem solving skills. The third reason an educational base is important is it provides a basis for quality writing. All three of these reasons directly support and impact the intelligence analysts' critical skills of writing, briefing and analyzing.

This difference in educational entry requirements also indicates the value each type of organization places on education and training. The Intelligence Community clearly values education, not only because it requires education for entry, but because it has numerous programs in place for intelligence analysts to pursue advanced degrees once they are hired. It appears the Law Enforcement community places a higher value on experience and training over education. This value is evident during its hiring process for intelligence analysts because it allows law enforcement personnel with ―street‖ experience to laterally enter the analytic workforce without the requisite educational base. The emphasis on certification hours each year to retain law enforcement specific certifications rather than analytic skill sets suggests the fusion center approach is a time based versus skill based method. This observation further illustrates the law enforcement propensity to favor experience and training over education.

<u>Funding</u>

Funding is always a critical aspect of an organization. Table 2 indicates three of the seven fusion centers visited rely upon grant money from the federal government to pay for the intelligence analysts, either in their entirety or a large percentage. This outside source of funding allows the fusion center leadership to hire personnel they may not normally have had allocations for, but there are some tradeoffs to receive the grant money.

One requirement for the money already mentioned is the initial training requirement to ensure the intelligence analyst is at a sufficient level of capability. The other major issue with grant money is it is not guaranteed. The current grant system allocates the funds in two year cycles. However, because the money is based on a two year cycle, the analyst hired already understands from the first day on the job that their job is not guaranteed and is dependent on two significant hurdles in the future: the federal budget will support future grants through FEMA and DHS, and the intelligence position is prioritized for funding within the state, meaning the allocation of funds to a state then becomes a state decision on how to further allocate the funds. The impact on intelligence analysts knowing they are on term employment drives many analysts to seek more assured employment opportunities.

<u>Career Progression</u>

Directly tied to the DHS grant conundrum is the lack of positions that intelligence analysts can progress into. Table 2 indicates that four of the seven fusion centers had positions within its personnel documents authorizing either senior or supervisory intelligence analysts. Although the percentage for this sample is over 50 percent across

the fusion centers visited, the number of senior analyst positions compared to intelligence analyst positions is very small within the fusion centers -- generally one senior analyst to six intelligence analysts. This allocation and authorizations for senior intelligence analysts or supervisory analysts is very small compared to what the Intelligence Community enjoys. Most fusion center analyst applicants are aware of the lack of progression opportunities either during the hiring process or upon being hired. This lack of upward mobility, especially in today's culture, almost assures that the fusion center will have to hire a new intelligence analyst within two years to replace the one who left.

<div align="center">Retention</div>

The final, and potentially the most important, personnel issue affecting the development of an education and training program is the issue of retention. As indicated in table 2, six of the seven fusion centers indicated they have a high turnover rate. The seventh fusion center's intelligence analysts have only been in the fusion center for about six months so their experience is an outlier and should be discounted on the issue of retention.

All three of the previous personnel issues directly impact the retention issue. Who the fusion centers hire contributes because if they hire young college graduates per the Law Enforcement Analytic Standards, after a short period gaining experience, other agencies tend to hire the intelligence analysts away with increased salary. Not only do the salaries tend to be higher, the salaries usually are not tied to grant funding, meaning the permanency of the job is significantly higher. The intelligence analyst does not have to worry about the end of the grant term approaching and whether or not the position will be validated. The third challenge of career progression also inhibits retention. The lack of, or

perceived lack of, career progression affects whether or not intelligence analysts choose to remain with the fusion centers or seek other employment.

These interconnected issues of hiring, funding, progression and retention of intelligence analysts play a crucial role in the ability to develop an optimal education and training program. If the fusion centers are constantly hiring new personnel because of the grant funding versus state general funds, or analysts depart the fusion center due to the lack of progression opportunities, there is no need to develop a long term in depth training program for analysts because the fusion centers will always be training ̶new analysts." In turn, the fact that there is little experience amongst the intelligence analysts directly impacts the fusion center's ability to produce quality, finished intelligence products.

<u>Leadership</u>

The final area affecting the development of education and training programs within the fusion centers is the leadership of the fusion centers. There are three contributing factors surrounding the leadership function: the host agency and history of the fusion center, the role of the analyst in the fusion center and the experience and background of the leadership in the fusion center.

<u>Host Agency and History</u>

Table 2 indicates six of the seven fusion centers visited are hosted by a law enforcement agency, generally the state police. What this means is, generally speaking, the majority of the fusion center employees will be affiliated with the host agency, with that particular organizational culture permeating the fusion center. The dominate culture

amongst analysts who work for and with state troopers is one of support. Meaning, the analysts self identify their primary job is to service Requests For Information (RFI's) from the state troopers on the side of the road. Although this provides a great service, it is not an intelligence related function. In fact, one fusion center actually has an entire set of record technicians, who are below the intelligence analysts on the organization chart, who are the primary servicers for the RFI's.

Another aspect of the host agency influence is the history of the fusion center. The majority of fusion centers grew out of, or are a consolidation of, criminal intelligence units. Although this is not true for all fusion centers -- in fact some fusion centers were new entities created from scratch -- the fusion centers usually trace their history to the criminal intelligence units within the law enforcement organs of the state. Since the culture of law enforcement analysts is one of case support or responding to RFIs, the consolidation of criminal intelligence units into the fusion centers creates a dominate culture of case support, potentially reducing the broader analysis capability.

<u>Manning</u>

The second leadership aspect that affects the fusion center's education and training, as well as its ability to produce intelligence, is the mentality and perceptions of the leadership within the fusion center. The majority of fusion center leaders are sworn law enforcement personnel. This in itself is not negative, but there may be several byproducts of having sworn personnel in charge. The culture of most law enforcement personnel is one of reactive policing, although that mindset is changing with the adoption of intelligence-led policing. Many mid-level and senior managers and leaders in the law

enforcement realm have not —bought into" the utilization of intelligence to drive action and decisionmaking.

Another trait of sworn law enforcement personnel is the value they place in training over education. This theme was mentioned in the hiring aspect as well. Many law enforcement leaders, because of their experience and their requirement to maintain annual training certifications, are more comfortable with the concept of training, refining skills to sustain job performance rather than discussing the education of intelligence analysts and analytic methodologies.

<u>Duty Responsibilities</u>

The intelligence analyst working within the IC views the primary consumer of the intelligence product to be decision makers or policy makers. It may be the President or a Combatant Commander but the bottom line is intelligence drives resource allocation and decisions.

However, the same does appear to hold true for intelligence analysts within the fusion centers. Observations made during the site visits and interviews identified the primary consumer of fusion center intelligence as the trooper or first responder via the terrorism liaison officer (TLO) or the Fusion Liaison Officer (FLO) programs. The majority of fusion centers identified their primary task as answering requests for information from the law enforcement officers in the field. Although this activity does inform decisionmaking, it is at the extremely tactical level.

The host agency and the fusion center history, the role of intelligence analysts and the attitude and perceptions of the fusion center leaders must be included in any discussion regarding the development of a universal education and training program for

intelligence analysts. Each of these elements affects the viability of an education and training program along with the outcomes of that program, quality finished intelligence.

<u>Conclusion</u>

All three of these broad impact areas, the current education and training of intelligence analysts, the personnel issues, and the leadership aspects, impact the feasibility of developing a universally accepted education and training program and the expected outcome of any intelligence analyst program, good analysis.

If fusion centers do not invest in educating and training their analysts they will continue to have poor retention. If they continue to hire the wrong people and not provide a career path, they will continue to have low retention. If they do not secure alternative funding sources, they will not retain the best young analysts.

Many of these issues can be mitigated or exacerbated by the leadership of the fusion centers. The leadership needs to understand and appreciate the value the intelligence analysts provide to the entire spectrum of consumers. Fusion center governing bodies must address all of these issues when selecting the fusion center leadership.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The intent of the research was the establish the optimal education and training

curriculum for intelligence analysts at state fusion centers. During the course of the

research, the author arrived at the realization that there could not be an easy answer to

this question. However, the two broad areas of importance for fusion center intelligence

analysts were solidified. Intelligence analysts must be able to communicate and analyze.

This communication requires both written and oral aspects, from writing a one page point

paper to briefing the governor of the state. The training requirement for communicating is

very center specific due to the internal templates and formats and must be a leadership or

supervisor priority when a new analyst is hired.

Attempting to discover an optimal program for analysis education and training

was very complex. There are restrictions from members of the Intelligence Community

regarding the releasability of the curriculums which prevented a thorough analysis of

contact hours on each topic affecting analysis. The different ways the fusion centers

utilize an intelligence analyst result in different skill requirements. How the leadership

views the role and mission of the fusion center drives education and training

requirements.

During the research phase of this paper, several unanticipated questions arose

beyond mere curriculum analysis and the skill set of intelligence analysts. The three

questions most discussed during the course of research were: how does one assess what

an intelligence analyst needs for education and training without a clear standard for what

an intelligence analyst should do or skills he or she should possess. There are no universal, open source standards, or even an agreed upon definition, of an intelligence analyst's duties in a fusion center, especially with regard to analysis.

The second question that arose was whether or not fusion centers "should" produce finished intelligence. This question usually came from federal agencies as a response to intelligence sharing and expected outputs from the fusion center. The question of "should" is critical because if the expectation is fusion centers are merely information repositories or hubs, then there is no need to invest in intelligence analyst education and training. Rather, simply hiring numerous database technicians to access the information would suffice.

Although their position is understood, the researcher believes the interviewees actually were speaking to the third question of "can" the fusion centers produce finished intelligence products. The question of capability gets right to the heart of the problem of intelligence analyst education and training. If no one within the fusion centers knows what questions to ask or what a good product is, there can be no education or training program put in place to achieve the acceptable standard finished products at each level of operation: tactical, operational, or strategic.

These questions must be answered prior to effectively addressing what education and training is necessary for intelligence analysts. If the leadership at every level is content with the fusion centers merely being information repositories, not much needs to change regarding intelligence analyst training programs. However, if the leadership at both the state and federal level believe there is a shortcoming regarding the education and

training of intelligence analysts in the fusion centers, below are a few recommendations to move the discussion along regarding the optimal education and training standards.

<u>Immediate</u>

The Department of Homeland Security must develop universal standards regarding the intelligence analysts in the state and major urban are a fusion centers to compare capabilities across the emerging National Network of Fusion Centers. Currently there are no universal standards, only the common competencies document to serve as a guide for intelligence analyst capabilities and requirements. The recently completed Baseline Capabilities Assessment (BCA) of the four Critical Operational Capabilities (COC's) (Receive, Analyze, Gather, and Disseminate) is rather subjective due to the lack of established criteria or metrics.

The Department of Homeland Security must extend funding for the Intermediate Fusion Center Analyst Training (IFCAT). The IFCAT grant will expire in September 2011 and the program will cease unless additional grant funding is provided. This program needs to continue and expand, as it meets the common competencies requirement, provides a good mix of in-residence instruction(which requires time away from the fusion centers), and instructor facilitated distance learning between the in-residence modules. Numerous analysts stated it was an outstanding course, some saying it was the best course they had attended as part of their training programs.

Even if DHS does provide funding for the IFCAT program, DHS also needs to make the IFCAT program a requirement for DHS funded analysts. IFCAT was repeatedly identified as one of the most useful courses the intelligence analysts had attended. This program must be incorporated into all intelligence analysts career progression, or should

be renamed and become the initial entry training for intelligence analysts hired with DHS grant money, regardless of experience level of the new hire.

DHS should review the courses currently accepted as meeting the DHS training requirement to attain the common competencies, reduce the number of courses and reallocate the money to assist the fusion centers with travel costs or make them fully funded, in resident meaning all costs for lodging and meals are included program. Currently many programs are tuition free but require the fusion center to pay for the lodging, travel and per diem costs of the sponsored student. This additional travel burden reduces the number of intelligence analysts who can attend. If the federal government expects fusion centers to be an integral part of the Nation's early warning network, an investment must be made in intelligence analyst training.

DHS must educate and incentivize the fusion centers to revise the hiring process. The current Law Enforcement Analytic Standards allows lateral entry into the analytic arena without a strong base of civilian education or the requirement for further analytic training. A mandatory analytic training requirement must be established, even if transitioning from the law enforcement side because criminal analysis case support is significantly different and requires a different skill set when compared to intelligence analysis.

DHS must incentivize an intelligence analyst professional development program. DHS needs to highlight the importance of intelligence analysts in fusion centers by providing an incentive system for fusion centers that develop and maintain a professional development program, utilizing both internal assets (mentorship, leverage local subject

matter expertise) and external assets (like DHS' Mid-career Intelligence and Threat Analysis Course or the Advanced Analyst Program).

<u>Near Term</u>

DHS should develop and mandate training for mid and senior leaders of fusion centers to ensure the leadership receive the education necessary for them to maximize the capabilities intelligence analysts bring to the fusion center. One of the observations made was the lack of understanding of how much of a force multiplier the intelligence analysts can be if tasked properly. One interviewee stated ―Most leaders (in the fusion centers) don't know what they don't know."[86] It is in DHS' best interest to educate fusion center leaders on the capabilities and importance of their analysts through programs such as the Fusion Center Leaders Program hosted by the Naval Postgraduate School. Currently there is no resource allocation to educate the leadership of the fusion centers.

Fusion centers must develop and fund positions with progressing responsibilities and compensation for intelligence analysts within fusion centers to reduce turnover, increase depth of knowledge, reduce reoccurring training costs, and illustrate the importance of intelligence analysts. Although some fusion centers have a mechanism to move from intelligence analyst to senior intelligence analyst, many do not, nor is there a uniform mechanism or matrix as to what makes someone qualified to be a senior intelligence analyst. This difference of seniority perspective affects effectiveness and collaboration amongst fusion centers and between fusion centers and the Intelligence Community.

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[86]Notes on file with author.

DHS and ODNI should develop and oversee an intelligence analyst exchange program between the Intelligence Community and fusion centers. This exchange program would provide analysts an opportunity to gain an appreciation for the challenges associated with each level of analysis, develop a network of experts to leverage for future collaboration and bring back emerging analytic techniques to their home agency.

ODNI, primarily through DHS, must make introductory intelligence analyst courses such as Basic Intelligence Research Specialist, the Career Analyst Program, and Fundamentals of Intelligence Analysis available to fusion center intelligence analysts. This would create a synergistic effect across the Intelligence Community and fusion centers. The incorporation of fusion center analysts into the IC student population would provide a different perspective for the class to consider and provide the fusion center analysts a clear baseline of capability comparable to the Intelligence Community analysts, increasing the credibility of the analysis.

<u>Long Term</u>

ODNI, through DHS, should integrate fusion center analytic elements into the Intelligence Community. As budgets begin to shrink across all levels of government, the potential exists to increase the stature of the fusion centers and the intelligence analysts by incorporating the fusion centers into the IC. Potentially, each fusion center could become a subject matter expert (SME) in a topic relevant to the state or region and all requests for information sent to the Intelligence Community on that topic would be serviced by the designated fusion center.

DHS needs to develop a certification program for fusion centers to attain and be rewarded or compensated for having the fusion center certified by an outside agency

conducting an independent, external review. This could be modeled after the current law enforcement model of The Commission on Accreditation for Law Enforcement Agencies, which has standards for each aspect of law enforcement activities.

Congress, through DHS, must transfer grant responsibility and facilitation for fusion center funding and support from the Federal Emergency Management Agency (FEMA) to the state and local office (SLPO) in DHS, specifically the Office of Intelligence and Analysis. The current process of fusion centers competing for homeland security grant funds within the state, after the state receives the funds through the FEMA process, is suboptimal. The fusion centers can not program any activities tied to the grant money beyond the two year window, which affects many aspects of the intelligence analysts education and training, retention and leadership.

Recommendations for Additional Research

This research paper identified numerous aspects of the education and training programs within fusion centers that must be addressed. Future research should address the lack of uniformity across the fusion centers and its impact on capability, the lack of organizational culture that recognizes and encourages educational contributions to intelligence analysis when compared to training skills, and the impact of non-involvement of senior executive leaders at the state and local level as consumers of fusion center products.

Conclusion

The intent of this paper was to establish or recommend an optimal education and training program for intelligence analysts at the state and major urban area fusion centers.

Although the primary research question could not be answered, several themes emerged, such as the need to educate analysts in communication skills and analytical methodologies. Almost every person interviewed stated these basic skills are paramount for an effective intelligence analyst.

The second theme that arose focused on the requirement and capacity of fusion centers to produce finished intelligence. This involves both the education and training of intelligence analysts but also the preparation, education and training of senior leaders within the fusion centers as well.

The final theme evident throughout the research were the challenges within the fusion centers themselves. The lack of uniformity is challenging for leaders beyond the actual fusion center to get an accurate assessment of the fusion centers capabilities and contributions.

The federal government, in cooperation with the National Fusion Center Association, the National Network of Fusion Centers, DHS, and any other vested partners needs to discuss and resolve these issues to effectively move forward. If the fusion centers are not contributing to the defense and security of the Nation as a whole, then their value and utility should be seriously reconsidered.

BIBLIOGRAPHY

<u>Books</u>

Carter, David L. *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, 2nd. ed. Washington, DC: Government Printing Office, 2009.

Garst, Ronald D., and Max L. Gross. ―‖ Becoming an Intelligence Analyst." In *Learning with Professionals,* edited by Joint Military Intelligence College. Washington DC: JMIC, 2005).

Johnston, Rob. *Analytic Culture in the US Intelligence Community: An Ethnographic Study*. Washington, DC: Center for the Study of Intelligence, 2005.

Marrin, Stephen. *Improving Intelligence Analysis: Bridging the Gap between Scholarship and Practice*. London: Routledge, 2010.

Masse, Todd, Siobhan O'Neil, and John Rollins. *Information and Intelligence (Including Terrorism) Fusion Centers*. New York: Nova Science Publishers, 2008.

Merriam, Sharan B. *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass, 2009.

Moore, David T. *Critical Thinking and Intelligence Analysis*. Washington, DC: National Defense Intelligence College Press, 2007.

Swenson, Russell George. *Bringing Intelligence About: Practitioners Reflect on Best Practices*. Washington, DC: Joint Military Intelligence College, 2003.

<u>Government Documents</u>

Department of Justice's Global Justice, Information Sharing Initiative (Global). *Baseline Capabilities for State and Major Urban Area Fusion Centers: A Supplement to the Fusion Center Guidelines*. Washington, DC: Government Printing Office, September 2008.

———. *Common Competencies for State, Local and Tribal Intelligence Analysts*. Washington, DC: Government Printing Office, June 2010.

———. *Fusion Center Guidelines—Developing and Sharing Information in a New Era*. Washington, DC: Government Printing Office, August 2005.

———. *Law Enforcement Analytic Standards*. Washington, DC: Government Printing Office, November 2004.

Federal Emergency Management Agency. DHS/DOJ Fusion Process Technical Assistance Program and Services. *Considerations for Fusion Center and Emergency Operations Center Coordination Comprehensive Preparedness Guide (CPG) 502*. Washington, DC: Government Printing Office, May 2010.

Interagency Threat Assessment and Coordination Group (ITACG). *Intelligence Guide for First Responders*, 2nd ed. Washington, DC: Government Printing Office, March 2011.

Joint Chiefs of Staff. Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*. Washington, DC: Joint Chiefs of Staff, 8 November 2010 (as amended through 15 May 2011).

Joint Military Intelligence College. *Learning with Professionals*. Washington DC: JMIC, 2005.

The White House. *National Security Strategy*. Washington, DC: Government Printing Office, 2010. http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf (accessed May 1, 2011).

United Nations Office on Drugs and Crime. Criminal Intelligence Training: Manual for Front Line Officers. http://www.ialeia.org/files/docs/UN%20Analyst%20Manual-cert%20study%20guide.pdf. (accessed June 6, 2011).

U.S.Code, Title 50, Chapter 36, Subchapter1, §1801.

Journals

Harowitz, Sari. "Cigarette Smuggling Linked to Terrorism." *Washington Post*, June 8, 2004. http://www.washingtonpost.com/wp-dyn/articles/A23384-2004Jun7.html. (accessed June 8, 2011).

Marrin, Stephen. "CIA's Kent School: Improving Training for New Analysts." *International Journal Of Intelligence And Counterintelligence* 16, no. 4 (2003): 609-637.

———. "Training and Educating U.S. Intelligence Analysts." *International Journal of Intelligence And Counterintelligence* 22, no. 1 (2009): 131-146.

Marrin, Stephen, and Jonathan D. Clemente. "Modeling an Intelligence Analysis Profession on Medicine." *International Journal Of Intelligence And Counterintelligence* 19, no. 4 (2006): 642-665.

Internet Sources

Clapper, James R. Statement for the Record on the Worldwide Threat Assessment of the U.S. Intelligence Community for the Senate Select Committee on Intelligence, February 16, 2011. http://www.dni.gov/testimonies/20110216_testimony_sfr.pdf, (accessed June 6, 2011).

Grounded Theory Institute. ―What is Grounded Theory.‖ http://www.grounded theory.com/what-is-gt.aspx. (accessed 6 June 2011).

Information Sharing Environment. ―Report from the 2011 National Fusion Center Conference.‖ http://www.ise.gov/news/report-2011-national-fusion-center-conference (accessed May 31, 2011).

Institute for Intergovernmental Research. ―Criminal Intelligence Systems Operating Policies (28 CFR Part 23).‖ http://www.iir.com/Justice_Training/28cfr/default.aspx (accessed May 28, 2011).

Leiter, Michael E. Director National Counterterrorism Center Hearing before the House Committee on Homeland Security.‖ Understanding the Homeland Threat Landscape–Considerations for the 112th Congress,‖ February 9, 2011. http://www.dni.gov/testimonies/20110209_testimony_leiter.pdf (accessed June 6, 2011).

Marrin, Stephen. ―Homeland Security Intelligence: Just the Beginning.‖ 2003. http://www.homelandsecurity.org/journal/articles/marrin.html (accessed May 25, 2011).

Moore, David T. ―Species of Competencies for Intelligence Analysis.‖ http://scip.cms-plus.com/files/Resources/Moore-Species-of-Competencies.pdf (accessed June 8, 2011).

PBS. ―Are We Safer.‖ http://www.pbs.org/wgbh/pages/frontline/are-we-safer/fusion-centers/ (accessed May 31, 2011).

Ratcliffe, Jerry H. *Integrated Intelligence and Crime Analysis: Enhanced Information Management for Law Enforcement Leaders*. July 8, 2009. http://www.cops.usdoj.gov/ric/ResourceDetail.aspx?RID=433 (accessed June 5, 2011).

Research Methods Knowledge Base. ―Qualitative Approaches.‖ http://www.social researchmethods.net/kb/qualapp.php. (accessed June 8, 2011).

Thesis

Marrin, Stephen. ―CIA‗S Kent School: A Step in the Right Direction.‖ Master‗s Thesis, University of Virginia, 2002.

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