



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**IDENTIFYING AND LEVERAGING TRUST AS A KEY
ELEMENT IN THE DEVELOPMENT, IMPLEMENTATION
AND SUSTAINMENT OF THE SALT LAKE CITY FIRE
DEPARTMENT'S INTELLIGENCE PROGRAM**

by

Martha Marie Ellis

September 2014

Thesis Advisor:
Second Reader:

John Rollins
Erik Dahl

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE September 2014	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE IDENTIFYING AND LEVERAGING TRUST AS A KEY ELEMENT IN THE DEVELOPMENT, IMPLEMENTATION AND SUSTAINMENT OF THE SALT LAKE CITY FIRE DEPARTMENT'S INTELLIGENCE PROGRAM		5. FUNDING NUMBERS	
6. AUTHOR(S) Martha Marie Ellis			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number ____ N/A ____.			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) Laying the foundation for the reestablishment of the Salt Lake City Fire Department's intelligence program requires several steps: Establishing a need; identifying the stakeholders; developing an implementation and sustainment plan based on the key constructs of successful collaboration; and providing a continued mechanism for evaluation and adjustment. Distilling the constructs of collaboration into a key component of success will provide additional focus to the development and implementation process. The questions this thesis answers are, can trust be identified as a significant factor in successful, collaborative working relationships? And if so, how can focusing on developing trust add value and sustainment potential to the SLCFD intelligence gathering use and dissemination program? The research uses appreciative inquiry in combination with multiple case studies, examining elements of successful and unsuccessful collaborative efforts in the arena of the fire service and national security. This thesis investigates the rise and fall of the Salt Lake City Fire Department's national security effort for the time period spanning pre-2002 Olympics to 2014. Components responsible for the diminished involvement since the Olympics are examined, evaluating each based on the role of trust. The nexus between those constructs and trust is the foundation for the recommendations for rebuilding the Salt Lake City Fire Department intelligence program. Developing strong, trusting relationships and addressing the concerns of all stakeholders are identified as key components in the successful case studies. Trust has been identified as the underpinning to the recommendations for the redevelopment of an intelligence program in the Salt Lake City Fire Department.			
14. SUBJECT TERMS trust, collaboration, intelligence, fire department, information sharing		15. NUMBER OF PAGES 133	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**IDENTIFYING AND LEVERAGING TRUST AS A KEY ELEMENT IN THE
DEVELOPMENT, IMPLEMENTATION AND SUSTAINMENT OF THE SALT
LAKE CITY FIRE DEPARTMENT'S INTELLIGENCE PROGRAM**

Martha Marie Ellis
Division Chief-Fire Marshal, Salt Lake City Fire Department, Salt Lake City, UT
B.S. Colorado State University, 1987
A.S. Utah Valley University, 2005

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
September 2014**

Author: Martha Marie Ellis

Approved by: John Rollins
Thesis Advisor

Erik Dahl
Second Reader

Mohammed Hafez
Chair, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Laying the foundation for the reestablishment of the Salt Lake City Fire Department's intelligence program requires several steps: Establishing a need; identifying the stakeholders; developing an implementation and sustainment plan based on the key constructs of successful collaboration; and providing a continued mechanism for evaluation and adjustment. Distilling the constructs of collaboration into a key component of success will provide additional focus to the development and implementation process.

The questions this thesis answers are, can trust be identified as a significant factor in successful, collaborative working relationships? And if so, how can focusing on developing trust add value and sustainment potential to the SLCFD intelligence gathering use and dissemination program? The research uses appreciative inquiry in combination with multiple case studies, examining elements of successful and unsuccessful collaborative efforts in the arena of the fire service and national security.

This thesis investigates the rise and fall of the Salt Lake City Fire Department's national security effort for the time period spanning pre-2002 Olympics to 2014. Components responsible for the diminished involvement since the Olympics are examined, evaluating each based on the role of trust. The nexus between those constructs and trust is the foundation for the recommendations for rebuilding the Salt Lake City Fire Department intelligence program. Developing strong, trusting relationships and addressing the concerns of all stakeholders are identified as key components in the successful case studies. Trust has been identified as the underpinning to the recommendations for the redevelopment of an intelligence program in the Salt Lake City Fire Department.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	TRUST AND FIRE SERVICE INTELLIGENCE PROGRAMS.....	1
B.	DESIRED OUTCOME.....	2
C.	NATIONAL EFFORT TO IMPROVE INFORMATION SHARING	2
	1. Broadening the Value of Intelligence	2
	2. Tiers of Improved Information Sharing	3
	3. Trust as a Factor in Improved Information Sharing	4
D.	METHODS.....	5
E.	LITERATURE REVIEW	7
	1. Thesis Question	7
	2. Purpose.....	7
	3. Introduction.....	8
	4. Content.....	10
	<i>a. Making the Case for the Fire Intelligence Program</i>	<i>10</i>
	<i>b. Trust as it Relates to a Fire Service Intelligence Program ...</i>	<i>13</i>
	<i>c. Leveraging Existing Models for Trust</i>	<i>16</i>
	5. Conclusion	17
II.	THE FIRE SERVICE ROLE WITHIN THE NATIONAL SECURITY EFFORT	19
A.	MAKING THE CASE FOR FIRE DEPARTMENT PARTICIPATION	19
	1. Our Changing World.....	19
	2. Community Need – Applicability in SLC	20
	3. An Expansion in the Fire Service Model	22
	<i>a. Tools and Core Capabilities Supporting the Fire Intelligence Program</i>	<i>23</i>
	<i>b. Fire Service Functions Well-Suited for Security Effort.....</i>	<i>24</i>
B.	CASE STUDY: THE RISE AND FALL OF THE SLCFD’S SECURITY INVOLVEMENT	30
	1. SLCFD’s Role in the 2002 Olympics Preparation	30
	2. Hosting the Games	32
	3. SLCFD Post-2002 Diminished Involvement in Security Effort.....	33
	4. DHS Calls for Better Communication While SLCFD Security Effort Wanes.....	34
	5. Getting Back into the Security Circle of Trust.	36
III.	IDENTIFYING THE RELATIONSHIPS, TRUST AND COLLABORATION LINCHPINS	37
A.	THE SLCFD/SECURITY NETWORK.....	37
B.	KEY RELATIONSHIPS IN THE SLCFD SECURITY PROGRAM	38
	1. Program Development.....	38
	2. Program Implementation.....	38

	3.	Program Sustainability.....	38
C.		THE FIRE INTELLIGENCE NETWORK MODEL	39
	1.	Relationships within Salt Lake City	40
	2.	Relationships with State of Utah Agencies	42
	3.	Essential, Interchangeable and Influential Network Nodes and Links.....	43
	a.	<i>Essential and Interchangeable</i>	44
	b.	<i>Influential</i>	45
	4.	Value Added in the Network.....	46
	5.	Potential for Negative Impacts within the Network	47
	6.	Network Power Wheel, The Fire-Centric Model	49
D.		MODELING SUCCESSFUL PROGRAMS.....	50
IV.		COLLABORATION AND THE CONSTRUCT AND IMPACT OF TRUST ...	53
A.		HOW TRUST FACTORS INTO THE EQUATION	53
B.		THE CONSTRUCTS OF TRUST.....	55
	1.	Defining Trust	55
	2.	The Trustee, Benevolence and Trade.....	58
	3.	Focusing on the How over the What	59
C.		BUILDING THE TRUST NEXUS	61
	1.	Felt Need	61
	2.	Strategic Planning.....	62
	3.	Mandated Systems	63
D.		DRIVERS OF TRUST APPLIED TO POTENTIAL PROGRAM HURDLES	64
	1.	Financial Constraints.....	65
	2.	Public Perception	66
	3.	Agency Bias and Possible Resistance to Fire Service Security Program	67
E.		CONCLUSION	72
V.		LEVERAGING THE SUCCESS OF OTHER MODELS	73
A.		FDNY FIRE-CENTRIC MODEL.....	73
B.		ORANGE COUNTY SHERIFF'S LAW ENFORCEMENT- CENTRIC MODEL	76
C.		GREAT BRITAIN'S CONTEST MODEL	77
	1.	Prevent	78
	2.	Protect	79
	3.	Prepare.....	82
VI.		FINDINGS, RECOMMENDATIONS AND CONCLUSION	85
A.		FINDINGS	85
	1.	Is There a Need?.....	85
	2.	Who are the Key Stakeholders?	87
	3.	Optimizing Collaboration	88
B.		RECOMMENDATIONS.....	89

1.	Initiate Meetings with Decision Makers for Each Collaboration Partner	90
2.	Establish Consensus on Need and Degree of Involvement.....	91
3.	Develop Unified Proposal Options to Secure Funding	91
4.	Develop Strategic Plan Based on Current and Potential Funding	92
5.	Draft Policies, Procedures and MOUs between Agencies	93
6.	Establish Specific Channels of Communication for Collection and Dissemination of Information.....	94
7.	Develop Expectations and Training Program	94
8.	Deliver Training to Fire Personnel.....	95
9.	Leverage Existing assets	97
10.	Continued Training, Evaluating and Adjusting as Needed	98
C.	ADDITIONAL RESEARCH AND CONSIDERATIONS	99
D.	CONCLUSION	99
	LIST OF REFERENCES	101
	INITIAL DISTRIBUTION LIST	111

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Fire Intelligence Mission Network	39
Figure 2.	Fire Specific Intelligence Mission Relationship Network	40
Figure 3.	Fire Intelligence Mission Negative Feedback Loop	48
Figure 4.	Fire-Centric Fire Intelligence Mission Power Wheel Network	50
Figure 5.	Success Factors for Collaboration Identified by Hocevar et al.....	54
Figure 6.	Enablers of Collaboration Endurance 2002 Olympics.....	55
Figure 7.	Mayer et al. Dyadic Organizational Trust Model.	57

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

AAR	After Action Report
ACLU	American Civil Liberties Union
ALF	Animal Liberation Front
BCOT	Building Communities of Trust
CAD	Computer Aided Dispatch
CHDS	Center for Homeland Defense and Security
CPNI	Centre for the Protection of National Infrastructure
CST	Civil Support Team
CT	Counter Terrorism
CTDP	Center for Terrorism and disaster Preparedness
DHS	Department of Homeland Security
DPS	Department of Public Safety
EM	Emergency Management
EOC	Emergency Operations Center
EPCRA	Emergency Planning and Community Right-to-Know Act
EPA	Environmental Protection Agency
FDNY	Fire Department of New York
FEMS 2002	Fire and EMS 2002
FISA	Foreign Intelligence Surveillance Act
IAFC	International Association of Fire Chiefs
IC	Intelligence Community
ILO/TLO	Intelligence Liaison Officer/Terrorism Liaison Officer
ISIS	Islamist State in Syria
JOC	Joint Operations Center
JTAC	Joint Terrorism Analysis Center
LDS	Church of Jesus Christ of Latter-day Saints
LEO	Law Enforcement Officer
LEPC	Local Emergency Planning Committee

MOU	Memorandum of Understanding
NaCTSO	National counter Terrorism Security Office
NCTC	National Counter Terrorism Center
NSA	National Security Agency
OCIAC	Orange County Intelligence Assessment Center
OCSO	Orange County Sheriff's Office
OIC	Olympic Intelligence Center
OJTTF	Olympic Joint Terrorism Task Force
QHSR	Quadrennial Homeland Security Review
PSB	Public Safety Building
RICU	Research Information Communication Unit
SIAC	Statewide Information and Analysis Center
SLC	Salt Lake City
SLCFD	Salt Lake City Fire Department
SLCFPB	Salt Lake City Fire Prevention Bureau
SLCPD	Salt Lake City Police Department
SLIC	Salt Lake Information Center
SLTT	State, Local, Tribal and Territorial
SME	Subject Matter Expert
TECC	Tactical Emergency Casualty Care
UOPSC	Utah Olympic Public Safety Command
US	United States
USAR	Urban Search and Rescue

EXECUTIVE SUMMARY

In 2014 the Department of Homeland Security (DHS) released its second Quadrennial Homeland Security Review (QHSR), refining its focus within the agency's defined missions. One of the notable components of the 2014 review was the focus on community-level engagement and public-private partnerships. According to the DHS web page, "This second quadrennial review reflects a more focused, collaborative Departmental strategy, planning and analytical capability." The Review acknowledges shared responsibility in the national security effort and the value added by engaging in public-private partnerships while leveraging resources at the federal, state, local, tribal and territorial levels of government, as well.

Contrary to that effort, however, are the growing concerns for the preservation of civil liberties within the realm of gathering intelligence in the name of national security. As the National Security Agency's (NSA) tactics make the headlines and questions about the Foreign Intelligence Surveillance Court's scope of authority increase, citizens are left wondering if they can trust their government to operate within the confines of the law governing the country. The American Civil Liberties Union has also voiced considerable concern over the intelligence community's tactics and secrecy in securing the country.

These opposing perspectives are at the core of the purpose of this thesis. Finding a methodology to bridge the gap between those who see value in fire intelligence program and those who do not, requires close attention to the necessary relationships and how they are fostered and maintained. The question that the research answers is, could trust be identified as a key consideration in the development of a fire department intelligence program and if so, how can the constructs of trust be applied to the implementation plan for the Salt Lake City Fire Department? Although this work is specific to the Salt Lake City Fire Department's intelligence program development, the findings relating to trust have value for other fire departments and intelligence agencies looking to develop long-standing collaborative relationships.

Analysis of successful fire department intelligence programs, in addition to research and analysis of the constructs of successful collaboration, was the foundation of the research. Having realized success in the integrated security effort during the 2002 Winter Olympics, an analysis of how the Salt Lake City Fire Department integrated into the Olympic security effort and then subsequently removed itself from the continued post-Olympic effort was also a source of insight into how to reintegrate.

Salt Lake City Fire Department's role within the national security effort is validated through supporting documentation from the Department of Homeland Security, the Department of Justice and the International Association of Fire Chiefs. The implementation will require partnerships with city and state administrators, city and state fusion centers, the Salt Lake City Police Department, citizens and civil liberties advocacy groups. Finding a way to garner support or, at a minimum, reduce the resistance to a fire service intelligence program, was accomplished through a multistep process.

According to the article, "Firefighters' Developing Role in Counterterrorism," Daveed Gartenstein-Ross and Kyle Dabruzzi specifically address trust as a major factor in the maintenance and development of a fire intelligence program. To that point, getting to the root of trust in an effort to build the collaboration strategy necessary for Salt Lake City Fire Department's intelligence mission to succeed, was required.

Research conducted by Center for Homeland Defense and Security graduate Chris Bertram identified key constructs of collaboration endurance specific to the 2002 Olympics security effort during and post event. These constructs were analyzed and compared with previous work presented by Hocevar et al. in their article, "Inter-Organizational Collaboration: Addressing the Challenge." Felt need, strategic planning and mandated systems were identified as enablers of successful collaboration within Bertram's survey results and the findings within Hocevar et al's publication.

Trust was also identified as a key construct in successful collaborations in both works. However, this research demonstrates that trust is intrinsic to all constructs identified as enablers of collaboration by Bertram and Hocevar. Mayer et al. Dyadic Organizational Trust Model was identified as the most applicable framework to address

the challenges the fire intelligence mission could face. The model breaks trust down into four components; the trustee, or the person wanting or needing to be trusted; the trustor, the person who will be doing the trusting; perceived risk; and the context in which that risk is being taken. Qualities of the trustee that would make him or her more or less trustworthy, according to the Mayer et al. model, are ability, benevolence and integrity. Focusing on the trustee and the impact he or she has on the success of collaborative relationships empowers program developers to use those constructs in an effort to fortify the collaborative relationships that will support the success of the program.

Based on the findings of this research, there are ten sequential steps recommended for the development and implementation of the Salt Lake City Fire Department intelligence program offered. The steps are seated in the understanding that building and maintaining trust must stay ever-present in the program development and implementation process. Inclusiveness in developing the program structure and the policies and procedures that will govern the program will be necessary to assure that consideration has been given to all perspectives.

Ten Steps of Recommended Implementation:

1. Initiate meetings with decision makers for each collaboration partner
2. Establish consensus on need and degree of involvement
3. Develop unified proposal options to secure funding
4. Develop strategic plan based on current and potential funding
5. Draft policies, procedures and MOUs between agencies
6. Establish specific channels of communication for collection and dissemination of information
7. Develop expectations and training program
8. Deliver training to fire personnel
9. Leverage existing assets
10. Continue planning, evaluating and adjusting as needed.

These recommendations are designed to provide ample opportunity for open dialogue throughout the development, implementation and sustainment phases of the program. Encouraging input from the stakeholders builds trust that the program will address the interests of all affected parties. Soliciting evaluation and feedback affords a higher probability of lasting collaboration and a successful, sustainable program, as changing needs are addressed and the program is allowed to stay agile.

According to the Department of Homeland Security's Quadrennial Review, the nature of the threat to homeland security is changing. Centralized threats are shifting to the less predictable lone wolf attacks like the Boston bombings. Radicalization within the western countries has become a greater concern with the developments in Syria and Iraq and the advancement of the Islamist State in Syria. The Department of Homeland Security has identified community-level engagement as a key element in securing the country.

The fire service provides unique perspective and core capabilities to the effort. Having identified trust as the cornerstone to success in the development, implementation and sustainment of the Fire intelligence program model within Salt Lake City, it will be important to assure that all necessary steps are taken to promote inclusion, ownership and added value to all parties within the network.

ACKNOWLEDGMENTS

To the staff at the CHDS: Thank you for inviting me into this amazing adventure. An education in self-exploration balanced with relentless tests of my stamina and mettle.

To my classmates: Thank you for challenging me on so many different levels. The depth and breadth of your contributions to my learning experience are immeasurable.

To Team Ellis: There are no words to express my deepest gratitude to those of you who should equally share the author title on this thesis.

Mike Akin, for lighting my way.

Tom Shannon, this effort all began with you.

Erik Dahl and John Rollins, thank you for engaging in my thesis effort. John, thank you for adjusting my trajectory toward success.

All of my amazing friends, thank you for the love and support. Ria, Philip, Tad, Kim, Pippa, Kim M. Jon and Amy. Knowing my daughter and four-legged children were in your able hands allowed me to focus on my work. Thank you.

My organization, particularly Mayor Ralph Becker, whose support brought my longtime desire to apply to the program to fruition. To Karen, whose moral support and editing contributions were invaluable. To Cristal, who came up with my thesis topic, and my staff, who stayed calm and carried on in my absence, thank you

My family, who above all, sacrificed daily on my behalf. My mom and dad, thank you for being amazing parents. You have given me all of your best traits. My daughter Rosemary, who I hope learned the value of getting her master's before her 51st birthday, thank you for your love and understanding. To my daughter Karin and son Scott, thank you for providing the comic relief so needed throughout this process. And most importantly, to my husband, Jeff: There are not enough pages available to express my gratitude for your unwavering support. I could not have completed this program without your love and support, and I am truly appreciative of everything you have done to help me complete this thesis. Sail on, my love.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

A. TRUST AND FIRE SERVICE INTELLIGENCE PROGRAMS.

As the memory of 9/11 fades, the federal government and its agencies are being more thoroughly scrutinized on financial and ethical aspects of the homeland security effort.¹² According to a recent New York Times article, the Foreign Intelligence Surveillance (FISA) Court has created dozen of classified rulings, creating laws that grant the National Security Agency (NSA) the power to collect a mass of data on Americans in the name of pursuing terrorism suspects and those potentially involved in cyber attacks, spying, and nuclear proliferation.³ The media coverage of this event translated to a key question in the public eye: can the government, in the broadest definition of the word, be trusted? President Obama is working to reform U.S. intelligence gathering measures at the national level; however, do these events have any bearing on local efforts to collect, share and disseminate intelligence in the name of public safety?⁴

National interest in community level involvement in counterterrorism effort is increasing; including greater interest in the role of the fire service. As the reach of intelligence and national security programs expands, managing scrutiny of such programs continues to be an ongoing challenge. The primary goal of this thesis is to isolate trust as a key factor in creating a development and sustainment plan for the SLCFD intelligence gathering, use and dissemination program. This argument—that trust is a key factor—has been made before, as in an article by the Manhattan Institute that argues attention must be

¹ John Mueller and Mark G. Stewart, “Terror, Security and Money:Balancing the Risks, Benefits, and Costs of Homeland Security,” *Annual Convention of the Midwst Poitical Schience Association*, 2011.

² Chelsea J. Carter and Jessica Yellin, “CNN Read More,” ABC 4, CNN, Aug 10, 2013, <http://www.wtae.com/news/politics/obama-wants-you-to-feel-better-about-surveillance/-/9680976/21401140/-/3a5dw2z/-/index.html#ixzz2cTC2a8fJ>.

³ Eric Lichtblau, “In Secret, Court Vastly Broadens Powers of N.S.A.” *New York Times*, July 6, 2013, http://www.nytimes.com/2013/07/07/us/in-secret-court-vastly-broadens-powers-of-nsa.html?pagewanted=all&_r=0 (accessed Aug 18, 2013).

⁴ Chelsea J. Carter and Jessica Yellin, ABC 4, CNN, Aug 10, 2013, By Chelsea J. Carter and Jessica Yellin CNN Read more: <http://www.wtae.com/news/politics/obama-wants-you-to-feel-better-about-surveillance/-/9680976/21401140/-/3a5dw2z/-/index.html#ixzz2cTC2a8fJ>.

given to the maintenance and development of trust within the fire intelligence program.⁵ This thesis will build upon this earlier work, and discuss the importance of trust in the context of the Salt Lake City Fire Department.

B. DESIRED OUTCOME.

The Fire/Intelligence relationship is a developing component of the national effort to improve safety and security for the citizens and responders within their communities. This work will build the nexus between trust, effective information sharing and collaborative relationships specific to the Salt Lake City Fire Department (SLCFD). The objectives are: to identify where the SLCFD fits into the national network; to evaluate and compare the SLCFD's previous involvement in the security efforts during the 2002 Olympics to current involvement; to assess the post-Olympic environment and its impact on SLCFD's collaboration endurance; and to distill down the components of failed collaboration to the single element of trust. Creating a single point of failure may allow program developers to focus on specific methods to build and maintain trust within the SLCFD/IC model and advance the SLCFD's efforts to support national information sharing efforts.

C. NATIONAL EFFORT TO IMPROVE INFORMATION SHARING

1. Broadening the Value of Intelligence

Intelligence only has value when shared and utilized. Because of the sensitive nature of intelligence work in general, there is an intrinsic tendency for those who have access to sensitive information to want to keep it to themselves or within their agency. This is a questionable tactic, as large-scale, preventable events have been successfully executed due to a lack of communication in the past.

The willingness of the keepers of intelligence to share what they know is reliant on a multitude of factors. Not knowing what others need to know, not trusting that they'll do the right thing once they have it and believing that sharing it may compromise the

⁵ Daveed Gartenstein-Ross and Kyle Dabruzzi, "Firefighters' Developing Role in Counterterrorism," *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

value of the intelligence, are possible explanations. No matter the driver, the need to share information and engage more agencies, groups and individuals in the national security effort has been made clear by Homeland Security leadership.⁶⁷

2. Tiers of Improved Information Sharing

The post 9/11 environment continues to evolve and provide the United States with unique security challenges. In the immediate wake of the 2001 attacks on the US, mismanagement of intelligence, critical to disrupting the attacks, was identified as a key component in failing to stop them. The 9/11 Commission Report defined the problem as an inability to “connect the dots.”⁸ A lack of information sharing was pivotal in the successful attacks. Three tiers within the effort to improve interdepartmental communication can be identified within our nation.

At a federal level, the Department of Homeland Security (DHS) was developed. The idea being that putting several of the national security agencies under one department would provide an intrinsic continuity to the goal of protecting the homeland. The secretary of Homeland Security oversees eight child agencies, with a stated goal of preparing for, preventing and responding to domestic emergencies to be working toward the basic homeland security mission.⁹

The value and importance of state, local and tribal agencies was also made clear during post 9/11 analysis. Interagency collaboration at all levels continues to be the focus in addressing how domestic intelligence is gathered, disseminated and utilized. Bridging the gaps between federal, state, local and tribal entities has begun. Fusion centers, a network of information collection and analysis hubs, have provided a mechanism to more effectively connect the dots, as information is obtained, analyzed and disseminated to participating parties at all levels of government. The challenge comes in recognizing who

⁶ Department of Homeland Security, *2014 Quadrennial Homeland Security Review* (Washington, DC: The Department of Homeland Security, 2014).

⁷ 9/11 Commission, *The 9/11 Commission Report* (New York: W.W. Norton & Company, 2004).

⁸ Ibid.

⁹ Department of Homeland Security, *2014 Quadrennial Homeland Security Review* (Washington, DC: The Department of Homeland Security, 2014).

needs to be involved and determining who may benefit from specific intelligence. The increase in fire service involvement within this tier of the effort on a national level will be discussed later in this work and be applied to the recommendations.

The final tier of improving information sharing is to engage citizens at the community level. The 2014 Quadrennial Homeland Security Review emphasized the importance of involving the citizen, communities, and private sector leadership in the homeland security effort. Law enforcement has traditionally led local intelligence efforts, however national interest is shifting to include fire and emergency medical personnel. The desired outcome of this research is to identify the optimum development and implementation model to best leverage the SLCFD as an intelligence asset.

The paradigm shift toward including the fire department in the national intelligence effort is the impetus for this research. Within each tier there is a clear need for collaboration between agencies, organizations and individuals. Creating a module, with a high probability for success, will depend on breaking down the key elements of successful collaboration and reconstructing them around the challenges SLCFD may face in the effort.

3. Trust as a Factor in Improved Information Sharing

Balancing trust with the necessity to obtain, analyze and use information or intelligence in the name of public safety can be a challenge. In order to achieve the desired outcome, this research will compare the current SLCFD intelligence program to that of 2002, reestablish the need for a robust Fire/Intelligence program, and develop a plan to reinvigorate an ailing program with sound policy development. Policy drives all aspect of government. Trust in policy development with an emphasis on the legal, civil and human elements of implementation should be explored because this type of program affects people.

This challenge has multiple fronts: Attention to civil liberties, privacy laws and ethics with regard to firefighter access into private property. The others are subtle, yet can play an equally important role in the success and sustainability of the program. The role of trust, across the necessary partnerships for the SLCFD/IC program to flourish, needs to

be understood. There are technical components of program development, such as policies and procedures, memorandums of understanding and the task of managing the classification of intelligence materials; and there are the relationships necessary to make the vision come to fruition. Understanding the intricacies and value of each node and link within the network is critical. Assessing the cost of breaking or weakening a link due to a lack of credibility is also relevant.

D. METHODS.

“The moment there is suspicion about a person’s motives, everything he does becomes tainted.”

–Mahatma Gandhi¹⁰

Utilizing the principles of appreciative inquiry,¹¹ an assessment of the current SLCFD/IC program, as compared to the 2002 Olympics time period, will identify the successful constructs of collaboration at work when involvement was high. This would include SLCFD’s participation in the preparation and management of the 2002 Olympics, in addition to an analysis of why the SLCFD has experienced a decrease in the overall participation in the security effort within its jurisdiction. The hypothesis is that trust plays a key role in collaboration endurance and that collaboration development and durability will be driven by program development recommendations made in the context of building trust.

Identifying a network structure necessary to successfully leverage firefighters within the intelligence community brings to light the relationships that underpin the program. Whether personal or professional, when human relationships are formed, the outcome of that interaction is dependent on many factors. This work will explore the potential impact and value of trust between stakeholders, the implementation and sustainment of a fire service intelligence program.

¹⁰ Quote found in Stephen M.R. Covey, *The Speed of Trust, The One Thing That Changes Everything* (New York, NY: Free Press, 2006). 8.

¹¹ Appreciative inquiry is an analysis perspective that focuses on further developing components of a system that are working favorably.

The hypothesis is that there is value in identifying all of the necessary relationships and focusing on developing trust between the working groups during the program development, implementation and sustainment phases in order to attain the desired outcome. This work will review reports and documentation evaluating the collaborative security efforts during the 2002 Winter Olympics, Chris Bertram's analysis of the enablers of collaboration endurance during and post Olympics, identify a framework for developing trust, and use existing models for minimizing vulnerability in program development and implementation. The development of the alternative solutions and the criteria used to develop policy supporting the desired outcome, i.e. successful integration of the fire service into the IC, will be based on Bertram's findings and the analysis of those findings against the constructs of trust. Potential hurdles will be identified and trust-building opportunities from successful models that could potentially be utilized to overcome those hurdles will be evaluated.

The research will rely on a combination of literature and data from like programs that will be identified as collaboration dependent and assessed for relevance to the Salt Lake City Fire/intelligence community program (SLCFD/IC). Using summative evaluation, the outcomes and the bearing of efforts to foster trust and transparency within the examples, in addition to comparing similarities and differences to the cases and policy development in the SLCFD/IC, will either validate or dismiss the evaluation's relevance.

A case study of the SLCFD intelligence program, both past and present, will be utilized in two ways: First to determine if the Fire/Intelligence program in Salt Lake City would add value to the community; and second, to analyze Salt Lake City itself, and the rise and fall of the fire department's involvement in the national security effort (and how the strength of this partnering arrangement might affect SLC). Study into the principles of social science and how they relate to successful collaboration within the Fire/Intelligence model will also be evaluated.

Questions that will need to be answered:

1. Is there national support for fire service involvement in the intelligence efforts?
2. What evidence is available to support that SLCFD was an integral part of the

- security efforts during the 2002 Olympics?
3. What are the indicators that the SLCFD involvement has changed?
 4. What are the factors that led to the successful Olympics security framework?
 5. What agencies would be necessary for a successful SLCFD intelligence model today?
 6. Does trust play a role in successful collaborative security efforts and if so, how?
 7. What model can be used to measure the value of trust within a collaborative model's development?
 8. Are there specific strategies and/or tactics that can foster trust within the realm of the SLCFD intelligence program development?

This methodology supports the desired outcome of this research. The findings will direct the development and sustainment model for the integration of the Salt Lake City Fire Department into the IC. Trust, as a consideration for and solution to potential derailments in development and implementation of the SLCFD Intelligence program, will direct efforts toward relationships. By evaluating the successes and failures of other program and policy development models, policy makers for the SLCFD will have a more informed direction and understanding of the dynamics of entering into the IC. Potential hurdles will be identified and concepts in developing trust will be presented in the recommendations of this thesis.

E. LITERATURE REVIEW

1. Thesis Question

Can trust be identified as a significant factor in successful, collaborative working relationships and if so, how can focusing on developing trust add value and sustainment potential to the SLCFD intelligence gathering, use and dissemination program?

2. Purpose

The purpose of this literature review is to examine not only the published information on the specific subject matter of fire service (Fire) involvement in the

national security effort, but to examine the content of other literature which, although not specific to the mission, could be relevant to answering the thesis question. The desired outcome is to identify the value of trust-driven program development, implementation and sustainment and develop a strategy based on the findings. The goal of this thesis is to add a deeper understanding of the relationship between trust and successful policy development and implementation using the fire/intelligence apparatus partnership as a model.

3. Introduction

The concept of incorporating Fire and/or emergency medical services into the network of intelligence gathering, use and dissemination has been identified as an area previously overlooked, yet valuable in the counterterrorism, intelligence and all-hazards approach to homeland security. The model of integrating the emergency services with the fusion effort has been widely accepted and promoted at an administrative level since the events of September 11, 2001. While some have suggested it would be negligent to do anything short of integrating Fire into the intelligence network,¹² the model has been met with some concern and opposition by civil liberty groups and within various tiers of the organizations involved.¹³

The documents supporting fire service involvement in the fusion process include popular, scholarly and professional literature. The opinions for or against the relationship seem to be directly correlated with specific advocacy interests of the source of the materials. The most prolific source of opposing literature has come from civil liberties advocacy groups like the American Civil Liberties Union (ACLU) and its affiliated organizations. Interestingly, the disapproval of the ACLU is expressed across the board on the topic of fusion centers in general, and is not specific to fire department involvement.¹⁴

¹² Bryon Heirston, *Terrorism Prevention and Firefighting: Where are the Information-sharing Boundaries* (master's thesis, Naval Postgraduate School, 2009).

¹³ American Civil Liberties Union, "More About Fusion Centers," *ACLU.org*, 2013, <http://www.aclu.org/spy-files/more-about-fusion-centers> (accessed July 10, 2013).

¹⁴ *Ibid.*

Professional publications in favor of the partnership have been produced by government agencies like the DHS and fire service leadership organizations such as the International Association of Fire Chiefs (IAFC).¹⁵ Examples of more scholarly contributions would be Dabruzzo and Garenstien's work for the Manhattan Institute for Policy Research,¹⁶ FDNY Battalion Chief Joseph Pfeifer's writings, including *Network Fusion: Information and Intelligence Sharing for a Networked World*¹⁷ and several theses that have been submitted at the Naval Postgraduate School and the National Fire Academy's Executive Fire Officer Program.

As organizations like the DHS galvanize support for the fire service/fusion center partnership by creating documents like the *Fire Service Integration for Fusion Centers*, which defines not only why, but how the fire service could be leveraged in the field of homeland security,¹⁸ leadership organizations within the fire service have also embraced further development of the firefighter's role in intelligence fusion. An example would be the International Association of Fire Chief's publication, *Homeland Security: Intelligence Guide for Fire Chiefs*. Both documents provide road map-style direction on building and leveraging the program. Several pioneering agencies have also led the way on integrating Fire into fusion operations and have provided written professional works to assist other agencies in the process in doing so. Salt Lake City, the Fire Department of New York City and Orange County Sheriff's office in California are three examples.¹⁹

¹⁵ International Association of Fire Chiefs, "IAFC Terrorism and Homelands Security Committee," *International Association of Fire Chiefs*, 2012, <http://www.iafc.org/committees/content.cfm?itemnumber=4648&navitemnumber=4439> (accessed June 26, 2013).

¹⁶ Daveed Gartenstein-Ross and Kyle Dabruzzo, "Firefighters' Developing Role in Counterterrorism," *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

¹⁷ Joseph Pfeifer, "Network Fusion: Information and Intelligence Sharing for a Networked World," *HSAJ.ORG, HOMELAND SECURITY AFFAIRS*, 2012 October, <http://www.hsaj.org/?fullarticle=8.1.17> (accessed 2013 8-July).

¹⁸ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

¹⁹ FDNY, *FDNY Counter Terrorism and Risk Management Strategy* (NY: FDNY, 2011).

Orange County Sheriff's Department, *Orange County Intelligence Assessment Center*, 2013, <http://ocsd.org/divisions/fieldops/security/iac> (accessed June 25, 2013).

As an emerging concept, assessing trust within the Fire intelligence model is still relatively new and specific literature on the topic is sparse. When considering how trust impacts the process and how to foster trust at all tiers of the network, writing specifically on that issue is lean. Up to now the focus has been procedurally driven. There are two exceptions; the first is a thesis written by CHDS student Chris Bertram. His work will be used to evaluate what role trust played specifically in the collaboration necessary to manage a successful and safe Olympics in 2002. He also discusses the maintenance aspect of the security community in Salt Lake City, post-Olympics. Although his focus is on law enforcement, his work reveals relevant information on how and why the SLCFD's involvement in the IC diminished since 2002. The second exception, also law enforcement centric, is the Guidance for Building Communities of Trust report, written by Robert Wasserman. Wasserman's work was funded by grant money from the Bureau of Justice Assistance, Office of Justice Programs and the U.S. Department of Justice. His work provides relevant insights to the task of developing community trust within the scope of intelligence gathering, use and dissemination programs at the community level.²⁰

Ample literature exists on the concept of collaboration and trust. Within the arena of homeland security, Caudle, Hocesvar, Jansen and Thomas's work on the topic of collaboration is often cited. Comparisons between these works and Bertram's findings will be discussed later in this document.

4. Content

a. Making the Case for the Fire Intelligence Program

The fusion/Fire literature reveals three commonalities within the discussions of fire service integration into the fusion center functions: justification, concerns and mechanics. The variations within these common frameworks, focused on program development, are minimal among advocates of Fire involvement in intelligence gathering, use and dissemination. Advocates and critics alike agree that great care and

²⁰ Robert Wasserman, *Guidance for Building Communities of Trust* (Washington, DC: U.S. Department of Justice, 2010).

attention must be given to privacy, civil liberties and any other legal concerns associated with this type of a shift in job expectations for fire personnel.²¹

Justifications for why fire service entities are well suited to participate in the IC consistently refer to the core competencies of fire departments in this country. An example would be work by Dabruzzi et al. Additionally, government publications such as the *Fire Service Integration for Fusion Centers*,²² popular and scholarly works by Pfeifer²³ and Rice²⁴ that are cited in favor of a fire/intelligence program, present consistent arguments. There is clear understanding that the sheer number of firefighters either volunteering or working full-time within the three primary roles of the fire service – prevention, protection and response – could be leveraged to further the IC mission. How the firefighter’s warrantless access is viewed varies between negative and positive, again, depending on who’s making the assessment. Those who promote the idea of more fire involvement in the intelligence effort see the access as an opportunity; others with civil liberty and privacy concerns see it as a recipe for disaster and another means for the government to spy on average citizens.²⁵

Mike German, former FBI agent and senior policy counsel at the ACLU’s Washington Legislative Office, stated in an article regarding the FBI’s efforts in gathering intelligence, “Rather than aiding its terrorism prevention efforts, the FBI’s expanded investigative and intelligence powers have overwhelmed agents with a flood of irrelevant information and false alarms.”²⁶ He cites the recent NSA security leaks by Richard Snowden as a revelation into the secret interpretation of the laws governing

²¹ The Markle Foundation Task Force on National Security in the Information Age, *Privacy and Civil Liberties* (New York: Markle Foundation, 2009).

²² Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

²³ Joseph Pfeifer, “Network Fusion: Information and Intelligence Sharing for a Networked World,” *Homeland Security Affairs Journal* (Naval Postgraduate School) 8, no. 17 (October 2012).

²⁴ Lewis Rice, “Raising the Alarm,” *Harvard Kennedy School Magazine* (Summer 2010). Add link

²⁵ American Civil Liberties Union, “More About Fusion Centers,” *ACLU.org*, 2013, <http://www.aclu.org/spy-files/more-about-fusion-centers> (accessed 2013 йил 10-July).

²⁶ Mike German, “National Security, Washington Post,” *Washington Post*, September 16, 2013, http://www.washingtonpost.com/world/national-security/aclu-calls-on-obama-congress-to-rein-in-power-of-the-fbi/2013/09/16/64481b6e-1bf1-11e3-8685-5021e0c41964_story.html (accessed September 16, 2013).

domestic surveillance. Firefighters would be walking a fine line when filling their role within the intelligence effort, which most of the supporting literature acknowledges. Admittedly, the leaks have changed the landscape for introducing new intelligence gathering programs and will require extra care in policy development, management and accountability for the program.

Firefighter reluctance in fusion center-related activities is widely discussed, but poorly documented, representing a gap in the research. Anecdotal accounts of firefighters' unwillingness to participate in a role perceived as belonging to law enforcement has not been substantiated with statistics; however, to those in the service the idea is believable and needs consideration when an intelligence program is being developed and introduced. The concerns that typically arise from Fire relate specifically to the legal aspects of civil liberties adherence and the vulnerability of social capital, which is integral to successful execution of daily operations for emergency services. Ronald Burt, a professor at Chicago University, defines *social capital* as a metaphor about advantage.²⁷ He cites Putnam's definition: "Social capital here refers to features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated action."²⁸

Law enforcement could resist the idea as well, due to an attitude, whether valid or not, that Fire is less competent when it comes to managing sensitive law enforcement information. According to Wasserman's report on community policing, "Law enforcement agencies can be unwilling to share information with other agencies because they want to keep control of what enforcement actions are taken."²⁹ This pushback, although more subtle than the protests of the ACLU, will be critical when a strategy for developing trust and adding value to the program are considered.

²⁷ Ronald S. Burt, "Structural Holes versus Network Closure as Social Capital," *Chicagobooth*, 2001, faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf (accessed July 10, 2013).

²⁸ Robert D. Putnam, *Making Democracy Work* (Princeton, NJ: Princeton University Press, 1993).

²⁹ Robert Wasserman, *Guidance for Building Communities of Trust* (Washington, DC: U.S. Department of Justice, 2010). 16

Literature like the DHS and DOJ's Fire Service Integration for Fusion Centers³⁰ and FDNY's Counter Terrorism and Risk Management Strategy³¹ discuss variations in the mechanics of creating an intelligence program involving the fire service and are in favor of the effort. The challenges facing the fire service today, such as the hazards of chemical, biological, explosive, radiological and nuclear threats in the response environment are compounded by the fierce competition for dwindling funds. Many options are provided throughout the literature to allow adaptation to municipal needs and variable budgets. Gaining political buy-in with the hopes of garnering financial support needs development. Included in the analysis will be documentation on how other programs add value to the community and the other nodes within the IC network. Documentation describing Great Britain's Contest program is also relevant in increasing trust and public value in the Fire/intelligence model. A comparison of the Contest program with the current IC program in Salt Lake City in an effort to discover opportunities for implementation will also be analyzed.

b. Trust as it Relates to a Fire Service Intelligence Program

The available literature on the topic of fire service involvement in the intelligence effort is primarily focused on why it is a good idea and how it can be accomplished logistically. Pfiefer touches on the idea of trust and the intrinsic value of leadership, relationships and accountability. Given the gravity of the task at hand, a greater emphasis on the leadership skills it takes to manage change and develop trust between all parties involved or impacted by the process is essential. This includes but is not limited to relationships between agencies, administrations and labor, the fusion centers and those protecting the rights and civil liberties of the U.S. citizens.

According to the Government Accountability Office, "The federal government faces a series of challenges in the 21st century that will be difficult, if not impossible, for

³⁰ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

³¹ FDNY, *FDNY Counter Terrorism and Risk Management Strategy* (NY: FDNY, 2011).

any single agency to address alone.”³² Collaboration will be paramount. As finances become scarce, trust wanes in government policy and scrutiny of domestic intelligence efforts and programs continues, judicious planning for program development and policy implementation is critical.

Acknowledging the connection between policy and the impact it has on individuals, groups or society as a whole is at the core of trust-driven program development. Recognizing the nexus policy formation and operational implementation and the resulting impact on the people will allow us to examine the role of trust in the development of policy for fire department intelligence gathering, use and dissemination. Enablers of collaboration and trust can be leveraged in program development, implementation and sustainment effort.

Drivers of collaboration have been examined in works by Caudle on high performance partnerships,³³ Hocevar et al. on the specific factors that create successful collaboration, and Bertram and the specific relationship collaboration had to the Olympics security effort in 2002.³⁴ Chief J. Pfeifer from FDNY should also be recognized for his insight on responsibility, accountability and the need to acknowledge and strategize on combating competition among team members and channel energy and focus on the common purpose.³⁵

“Collaboration success factors” identified by the work of Hocevar et al. were the foundation of a study conducted by Bertram, which focused specifically on security efforts before, during and after the 2002 Olympics.³⁶³⁷ Interviewing twenty-two law

³² Government Accountability Office, *Practices That Can Help Enhance and Sustain Collaboration Among Federal Agencies* (Washington, DC: Government Accountability Office, 2005). link

³³ Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* 2, no. 3 (October 2006). Add link

³⁴ Christopher Bertram, *Factors the Effect Interagency Collaborations: Lessons During and Following the 2002 Winter Olympics* (master’s Thesis Naval Postgraduate School, 2008). Add link

³⁵ Joseph Pfeifer, “Network Fusion: Information and Intelligence Sharing for a Networked World,” *Homeland Security Affairs* 8, no. 17 (October 2012). link

³⁶ Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* 2, no. 3 (October 2006).

³⁷ Susan Page Hocevar, Erik Jansen and Gail Fann Thomas, “Inter-Organizational Collaboration: Addressing the Challenge,” *Homeland Security Affairs* 7, The 9/11 Essays (September 2011). link

enforcement leaders who had been involved in the Olympics security effort, Bertram identified enablers or facilitators of collaboration development and endurance. There were significant similarities between Bertram's finds and the constructs of successful collaboration identified in the work of Hocevar et al. Bertram's key concepts; social capital, felt need, leadership and mandated systems, provided a platform for further research into how trust impacted each construct within his collaboration endurance model.

Research was required to address several different opportunities for trust to have a positive or negative impact on the success of the program. The concerns identified earlier, civil liberties and agency resistance, are relevant to the essential organizations or agencies identified within the Fire/Intelligence mission network. Finding tools to foster trust in the program, in an effort to ease the concerns, required looking into organizational tactics in trust development outside the Fire/Intelligence mission arena.

Linsky and Heifetz speak to the concept of "confronting the gaps between our values and behavior."³⁸ Linsky and Heifetz point out the challenge of confronting the gaps between values and behavior, which applies to both individuals and organizations.³⁹ The struggle is a continuum and requires strong leadership to manage the mission and the multitude of personalities critical to success. The gaps that form between values and behaviors are key in defining integrity as individuals and organizations. What rests in those gaps are opportunities to tarnish and betray trust.⁴⁰

Mark H. Moore developed the idea of adding public value in policy development.⁴¹ The ideas he presents are helpful in building the foundation of public trust. He talks about "value as stakeholder and customer satisfaction," which broadens the perspective of program development. Considering the "stakeholder" means a more inclusive mechanism of program development. Moore places a high level of importance

³⁸ Ronald A Heifetz and Linsky Marty, *Leadership on the Line* (Boston: Harvard Business Review Press, 2002).

³⁹ Ibid.

⁴⁰ Ronald A. Heifetz and Marty Linsky, *Leadership on the Line* (2002).

⁴¹ Mark H. Moore, "Public Value as the Focus of Strategy," *Australian Journal of Public Administration* 53, no. 3 (1994): 297.

on the satisfaction of citizens, as “their goals are the only things that justify the expenditure of public resources.”⁴²

Moore’s assertions are reiterated in community intelligence-specific terms in Wasserman’s report. Wasserman addresses the overall concept of Building Communities of Trust (BCOT).⁴³ The content of his report supports the development of added public value, in addition to supporting the concepts of Britain’s Contest program.

c. Leveraging Existing Models for Trust

The efficiency of trust is the primary assertion of Stephen Covey in *The Speed of Trust*.⁴⁴ The concept is developed within the personal and professional context within Covey’s work. In an effort to minimize setbacks and optimize time and resources, the concepts within *The Speed of Trust* emphasize and reinforce the examples and frameworks specifically used to develop the recommendations within this thesis.

Arbinger Institute’s work on personal and organization relationships brings clarity to the destructive concepts of collusion and self-deception, which work to erode trust and influence.⁴⁵ This group has successfully distilled centuries of philosophy, psychology and sociology into clear, straightforward and applicable concepts in collaboration. Arbinger’s model and framework lends practical support to the concept of developing trust and strengthening collaboration.

The dyadic model of organizational trust completed by Mayer, Davis and Schoorman provides a dynamic framework and a multifaceted perspective of the constructs of trust.⁴⁶ What makes this model unique from earlier conceptualizations of trust is the differentiation between trust and trustworthiness, and the inclusion of

⁴² Ibid. 301.

⁴³ Robert Wasserman, *Guidance for Building Communities of Trust* (Washington, DC: U.S. Department of Justice Office of Community Oriented Policing Services, 2010). 16

⁴⁴ Stephen R Covey, *The Speed of Trust, The One Thing That Changes Everything* (New York: Free Press, 2006).

⁴⁵ The Arbinger Institute, *Leadership and Self Deception* (San Francisco: Berett-Koehler Publishers. 2010).

⁴⁶ Roger C. Mayer, James H. Davis and F. David Schoorman, “An Integrative Model of Organizational Trust,” *The Academy of Management Review* 20, no. 3 (July 1995): 711.

vulnerability and context in the formulation of trust. Three antecedents of trust within the construct of trustworthiness; ability, benevolence and integrity, are identified within the Mayer et al. model. This breakdown of trustworthiness defines a variable within the model, which is dependent on the character and competency of the trustee, the person seeking to be trusted.

Consideration for the personality traits of the trustor, the individual doing the trusting within a relationship, recognizes the variability of that individual's propensity to trust. The Mayer et al. model creates a dynamic interdependence between the constructs they've identified. This dynamic equates to opportunity when seeking mechanisms to facilitate trust and consequently build stronger, more lasting collaboration.

The key commonality among these works is the understanding that human behavior conforms to norms, with little variation. People are prone to agency bias, have expectations of how they should be treated, and oftentimes fail to reciprocate the very treatment they'd like to experience at the hands of others. This thesis will explore the value and mechanics of developing a fire service intelligence model through the available literature, as well as key ways to minimize the resistance to the idea by utilizing principles, concepts and lessons learned in other policy development and implementation scenarios.

5. Conclusion

As the homeland security effort develops at the community level, the debate over how much is too much continues. While some literature supports the idea that fire and emergency services are untapped resources, others express reluctance to the idea of trusted first responders collecting intelligence on the customers they serve. Even within the service-level agencies, differing opinions exist on what, if any, role Fire should or could play in the IC effort.

Although how Fire fits into program implementation varies, documentation from organizations like the DHS, IAFC, and those already incorporating Fire into their community intelligence efforts, is unanimous in support. The arguments in favor of Fire's greater involvement stem from citing the sheer number of firefighters as a resource to the

natural fit of the skill sets those in the emergency services embody with the homeland security effort.

Concerns are still prevalent within the civil liberties organizations, law enforcement and the fire service itself. The documentation questioning the practice focuses on trust and value. Bertram's work on trust within the IC during the Olympics in 2002 will provide insight into the role of trust and interagency collaboration. The data he collected demonstrates the relevance of trust in the IC and will be factored into the recommendations of this work.

II. THE FIRE SERVICE ROLE WITHIN THE NATIONAL SECURITY EFFORT

Examining the Department of Homeland Security's 2014 Quadrennial Report, it is clear the nation is working hard to stay ahead of security threats. Local, state and tribal resources are being recruited to broaden the reach of protecting our country. As additional security assets are called upon to participate in the effort, it is important to clearly define roles and expectations.

A. MAKING THE CASE FOR FIRE DEPARTMENT PARTICIPATION

In order to promote a paradigm shift the magnitude of asking firefighters to engage in intelligence and security activities, the value added needs to be well substantiated. Revealing the threat posed, the vulnerability of the community served and the tools at the disposal of the fire service to mitigate potential harm will be significant aspects of promoting the fire department intelligence program. Building trust in the basis of the program will involve assuring all stakeholders see the need and want to be a party to its success.

1. Our Changing World

As our national security challenges change from a centralized threat like Al Qaida, to more of a decentralized, lone wolf model, like the Boston Marathon bombing, creativity in how we provide for the safety, security and resiliency of our nation must be encouraged.⁴⁷ Concern is growing over the strength, funding and global recruitment efforts of the Islamist State in Syria (ISIS). Suspicions that western militants trained and fighting in Syria will return home to their western regions have been confirmed. According to an NBC report, as of June 2014, "In the past 18 months, British authorities

⁴⁷ Department of Homeland Security, *2014 Quadrennial Homeland Security Review*, Government (Washington, DC: The Department of Homeland Security, 2014).

have arrested 65 people returning from Syria...⁴⁸ Michael Leiter, NBC News' counter-terrorism and national security analyst, is quoted as saying, "For the United States and Western Europe, this is a very significant threat—probably as significant and complex a threat as we have faced since 9/11."⁴⁹ These trends validate increasing community-level security and resiliency efforts.

2. Community Need – Applicability in SLC

Determining if developing a Fire intelligence program within Salt Lake City or the State of Utah would be prudent and add public value to the citizens is a critical component in determining how to proceed. Salt Lake City has several unique homeland security challenges. There is significant infrastructure target potential with our joint civil-military international airport, a major railway hub for freight, Amtrak and local commuter lines, a nuclear reactor and more than 800 hazardous materials storage or use facilities within city boundaries.⁵⁰

According to the Utah Department of Natural Resources, The State of Utah is ranked 11th in the country in crude oil production and 9th in natural gas gross production (Energy Information Administration; rankings based on 2011 oil production and 2011 natural gas production, not including Federal Offshore production areas). There are approximately 11,000 wells currently in production within the state.⁵¹ Facilities that support the extraction of oil and gas include five oil refineries and a complex rail and pipeline system could also be vulnerable to eco-terrorism. Although the eco-terrorism activity in the U.S. has decreased, the FBI continues to express significant concern with

⁴⁸ Michele Neubert, Alastair Jamieson and Sarah Burke, "NBC News Storyline, Iraq Turmoil," *NBC News*, June 29, 2014, www.nbcnews.com/storyline/iraq-turmoil/rise-isis-heightens-threat-terrorism-west-experts-warn-n141661 (accessed August 23, 2014).

⁴⁹ Ibid.

⁵⁰ Salt Lake City Fire Prevention Bureau, *SLCFPB.com*, 2013, <http://www.slcfpb.com/go/doc/3687/1334907/> (accessed July 9, 2013).

⁵¹ Utah Department of Natural Resources, *Utah Oil and Gas*, 2013, <http://oilgas.ogm.utah.gov/index.htm> (accessed July 10, 2013).

the potential resurgence.⁵² These types of attacks have also taken place repeatedly in Canada. In 1990 the pipelines were attacked in the Peace River region in Alberta and in October 2008, EnCana sour gas pipelines were sabotaged by anonymous individuals.⁵³ Although the frequency of such attacks has diminished, consideration for protecting against them needs to remain, according to the FBI.⁵⁴

The predominant religious sect that is central to Utah, the Church of Jesus Christ of Latter-day Saints (LDS), could create target potential, as well. In 2009, the Heritage Foundation reported that since the Mormon Church's support for California Proposition 8 was made public in 2008, "Mormons were particularly and systematically targeted for supporting prop 8."⁵⁵ The centralized structure of the LDS headquarters, the Conference Center, Temple Square and the Church History Library in the heart of downtown Salt Lake City, also adds to the vulnerability of the LDS sites.

Since 1991 the Salt Lake Valley has experienced five active shooter incidents in public areas, four within Salt Lake City proper in the past 14 years. One of those incidents occurred inside the LDS Genealogy Library.⁵⁶⁵⁷ Recent threats from the Animal Liberation Front (ALF) have named Utah as a key target for mink farm attacks as

⁵² Juliet Eilperin, "The Washington Post Health and Science," *Washington Post*, March 10, 2012, http://www.washingtonpost.com/national/health-science/as-eco-terrorism-wanes-governments-still-target-activist-groups-seen-as-threat/2012/02/28/gIQAA4Ay3R_story.html (accessed August 20, 2014).

⁵³ Katerina Bondarchuk, "Hear Us Out: Radical Activism or "Eco-Terrorism" in Canada," *Academia.edu*, April 2011, http://www.academia.edu/6415201/_Hear_Us_Out_Radical_Activism_or_Eco-Terrorism_in_Canada (accessed August 20, 2014).

⁵⁴ Juliet Eilperin, "The Washington Post Health and Science," *The Washington Post*, March 10, 2012, http://www.washingtonpost.com/national/health-science/as-eco-terrorism-wanes-governments-still-target-activist-groups-seen-as-threat/2012/02/28/gIQAA4Ay3R_story.html (accessed August 20, 2014).

⁵⁵ Thomas M Messner, "The Heritage Foundation research reports," *Heritage.Org*, October 22, 2009, <http://www.heritage.org/research/reports/2009/10/the-price-of-prop-8> (accessed August 23, 2014).

⁵⁶ KSL News Agency, *KSL.com*, Feb 13, 2007, <http://www.ksl.com/?nid=148&sid=888784> (accessed July 8, 2013).

⁵⁷ Wendy Ogata, *KSL.com*, February 13, 2007, <http://www.deseretnews.com/article/660195182/Infamous-shooting-incidents-in-Salt-Lake-County.html?pg=all> (accessed July 8, 2013).

well.⁵⁸ Utah is familiar with ALF activity as the group was responsible for the 1995 fire at Tandy Leather store in Salt Lake City.⁵⁹

The area's potential vulnerabilities measured against recent history provide a compelling argument for more robust law enforcement and fire department relationships. Two of the five HLS mission statements contained within the 2014 Quadrennial Homeland Security Review, Prevention and Strengthening National Preparedness and Resilience, are national goals that have local significance.⁶⁰ The strategy of engaging communities throughout the country is recognized at the federal level as a plausible way to counter terrorism's impact on our nation. First responders are being enlisted to identify warning signs of local terrorist involvement, radicalization or preparation for a domestic attack as they perform their regular duties. As this expanded role of fire departments becomes more widely accepted among the national security partners, it is time to identify the best course of action to reintegrate the SLCFD into local, state and federal intelligence networks.

3. An Expansion in the Fire Service Model

The fire service has traditionally served a specific role within its respective communities. Throughout the evolution of the fire service, particular skill sets have been developed, broadening the value of the departments to the community. An example would be when the fire service began providing emergency medical response in addition to fire suppression in the 1960s.⁶¹ This represented a significant service model change and was met with considerable resistance; however, today, on a national level, nearly 70

⁵⁸ Roxeanne Vainuku, *KUTV.com*, June 18, 2013, http://www.kutv.com/news/top-stories/stories/vid_5368.shtml (accessed July 9, 2013).

⁵⁹ Southern Poverty Law Center, *SPLC Southern Poverty Law Center*, Fall 2002, <http://www.splcenter.org/get-informed/intelligence-report/browse-all-issues/2002/fall/from-push-to-shove/eco-violence-the-rec>.

⁶⁰ Department of Homeland Security, *2014 Quadrennial Homeland Security Review* (Washington, DC: The Department of Homeland Security, 2014).

⁶¹ Franklin D. Pratt, Paul E. Pepe, Steven Katz and David Persse, "Prehospital 9-1-1 Emergency Medical Response: The role of the United States Fire Service in Delivery and Coordination," *www.iaff.org*, International Association of Fire Fighters, July 2007, <https://www.iaff.org/tech/PDF/FB%20EMS%20Whitepaper%20FINAL%20July%205%202007%20.pdf> (accessed August 23, 2014). 5.

percent of calls the fire service responds to are medical in nature.⁶² The forward-thinking paradigm shift enhanced the usefulness of the fire service to the communities it serves and further solidified the municipal fire service model.

Members of the fire service have a multitude of resources and abilities that could serve the nation's security efforts well. The primary objective of this chapter is to explore the national trends, assess the applicability of the fire service within the national security effort and evaluate Salt Lake City's previous involvement in security efforts during and after the 2002 Olympics.

a. Tools and Core Capabilities Supporting the Fire Intelligence Program

Emergency responders are an abundant resource, with access to people and places that others may not have through emergency response, arson investigation and business inspections. According to the National Fire Protection Association there were a total of 1,100,450 firefighters in the United States in 2012; 344,050 were career firefighters and 756,400 were volunteers.⁶³ The role of the firefighter integrates well into the needs of the national intelligence network effort. The core competencies of firefighting provide several avenues of program implementation, diversifying the opportunities for using and collecting actionable intelligence. Through training and experience, firefighters develop a knowledge base in situational awareness, fire behavior and suppression, emergency medicine, fire code, rescue, hazardous materials, fire investigation, scene safety, fire protection systems and building construction. Fire service personnel have analytical skills and subject matter expertise (SME), ideal for contributing to intelligence analysis, production and use.⁶⁴ According to a Gartenstein-Ross and Dabruzzi article from the Manhattan Institute for Policy Research, "There are three broad ways in which fire departments can contribute to counterterrorism efforts; as intelligence collectors, users

⁶² Jennifer D. Flynn, *Fire Service Performance Measures*, Statistical, Fire Analysis and REsearch Division, National Fire Protection Association (Quincy: NFPA, 2009), 8.

⁶³ National Fire Protection Association, *National Fire Protection Association*, 2012, http://www.nfpa.org/itemDetail.asp?categoryID=955&itemID=23688&cookie_test=1 (accessed June 22, 2013).

⁶⁴ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012) 3.

and sharers; as developers of community networks; and as organizers of joint planning, preparedness, and response.”⁶⁵ These are integral roles in Homeland Security that could be missed if a thoughtful plan is not developed, implemented and evaluated within Salt Lake City. Analyzing the current application of these functions more closely will demonstrate that Salt Lake City Fire is actively involved in the use of intelligence in a different but relevant application.

b. Fire Service Functions Well-Suited for Security Effort

Comparing Gartenstein-Ross and Dabruzzi’s description of the firefighter’s counterterrorism role to current activities performed on the SLCFD, reveals several opportunities that could be leveraged into an IC model. Offered are a few examples of existing programs that, by nature, could be utilized to broaden the scope of the Fire Department’s involvement in the overall security measures within the community. Because these programs are already in place or skill sets have already been developed, the expansion into the IC would not require a great deal of effort.

(1) Intelligence Collectors, Users and Sharers

Every member of the SLCFD is trained to make observations in a broad array of applications. Fire and medical events, accident scenes and occupancies under inspection provide ample opportunity to assess an area for cause, event reconstruction and suspicious activity. Some examples are the cause and origin of a fire; the mechanism of injury for motor vehicle accidents; and evidence of illegal drugs present at the scene of an unconscious patient. Specific training relating to observed activities associated with criminal or terrorist activity may help prompt a different reaction to items once overlooked as nonconsequential. What must be clear is that the end objective of heightened awareness is a goal, not an enforceable mandate.⁶⁶ The hope is to broaden the scope of knowledge so things that may not have seemed strange or out of place before can be perceived as potentially relevant. According to the Nationwide SAR Initiative

⁶⁵ Daveed Gartenstein-Ross and Kyle Dabruzzi, “Firefighters’ Developing Role in Counterterrorism,” Policing Terrorism Report no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

⁶⁶ Ibid. 2.

training for firefighters, “suspicious activity reporting focuses on behaviours and incidents, not race, ethnicity, national origin or religious affiliations.”⁶⁷ Maintaining this focus will build credibility with the public as well as the firefighters engaged in the program.

(2) Developers of Community Networks

One example of how SLCFD builds networks within the city is through the work of Salt Lake City’s Fire Prevention Bureau (SLCFPB). The primary function of the SLCFPB is to connect with the general public, business owners and contractors in order to provide useful information on various safety procedures and practices. This division is in constant contact with the community through permit and business inspections, school programs, Fire Prevention Week activities, community council participation and partnering with private sector entities for community safety events.⁶⁸ Inspectors spend their days entering into every newly constructed building in the city and those that have been involved in moderate to significant renovation. Longstanding relationships are developed as each inspector works within a specific specialty.

An example would be the law enforcement officer (LEO) fire inspectors and the high life safety occupancy program. Entertainment venue operators work closely with the LEO inspectors to assure the safety of their patrons. Through this program, the LEO inspectors build strong working relationships with bar managers and owners. Developing networks among the nightclub management has led to information sharing about illegal or suspicious activity within their businesses and illegal parties and venue use.⁶⁹ LEO fire inspectors are also diligent in collecting intelligence and acting on leads, in addition to patrolling high life safety occupancies. Gathering intelligence through Internet advertisements to break up illegal rave parties is one example.

⁶⁷ Nationwide SAR Initiative, *National Criminal Intelligence Resource Center*, 2012, http://nsi.ncirc.gov/training_online.aspx (accessed July 9, 2013).

⁶⁸ Salt Lake City Fire Prevention Bureau, *SLCFPB.com*, 2013, <http://www.slcfpb.com/go/doc/3687/1334907/> (accessed July 9, 2013).

⁶⁹ *Ibid.*

Within the department, the SLCFPB is key to providing valuable intelligence to the Operations Branch of the fire department. One example of this is through the hazardous materials permitting and inspection program. Inspectors perform over 800 hazardous materials inspections annually. Through the department records management system (RMS) chemical type, quantities and location are recorded and integrated into the computer aided dispatch system (CAD). Not only is the information at the fingertips of the operations crews when preplanning the district, dispatchers can feed pertinent information to the crews when en route to a reported incident.

An extension of the SLCFPB is the existing business license inspection program, which is conducted by the operations personnel. In 2013, the SLCFD operations section conducted over 3,000 business inspections.⁷⁰ Combined with the over 4,000 permit and new business license inspections conducted by the SLCFPB, this represents a significant amount of access into business occupancies in SLC. The fire department network has been established. These factors make the SLCFPB the ideal division for the development of the SLCFD/IC program. The next step is to integrate it into a broader pool of shared intelligence.

(3) Organizers of Joint Planning, Preparedness and Training

Salt Lake City Fire plays a key role as organizer of joint training, preparedness and response throughout the valley. SLCFD works in tandem with other city departments and outside agencies, both private and public, in assuring a ready state in emergency preparedness and management. Three examples of this involvement are filling key roles in the city's Emergency Operations Center (EOC), managing the Salt Lake City Local Emergency Planning Committee (LEPC), and developing training exercises with mutual aid communities and outside agencies like the Utah National Guard 85th Civil Support Team (CST).

(a) EOC

⁷⁰ Salt Lake City Fire Prevention Bureau, *Accela Permit Records Management System*, Data (Salt Lake City, UT: Salt Lake City, 2013).

The Fire Department has been key in developing new technology and training for all of the EOC roles. Other divisions serving in the EOC include police, public utilities, streets, communications, emergency management, finance and the executive and legislative branches of the SLC government. Working closely with other divisions within the city fosters a better understanding of each other's roles and builds relationships that promote continuity in response and recovery.

On June 11, 2010, this theory was put to the test. Sometime around 2200 hours a crude oil pipeline broke, sending approximately 20,000 gallons of thick crude oil into Red Butte Creek. The EOC was activated and SLC resources including Fire, Police, Hazmat, Public Utilities and SLC environmental protection representatives, responded to the scene. Not only were the mitigation efforts developed in concert, but messaging to the media and the recovery plan were all developed with consideration for each department's interests. Although the potential for a disastrous outcome was ever-present due to the nature of the chemical involved, the lengthy response ended without injury to civilians or first responders. City departments were able to work together with outside agencies as well, providing a united voice in the interest of Salt Lake City.⁷¹

Although the fire service has been working with the Incident Command System since its inception in the wildland setting, exercising these principles across multiple department boundaries is instrumental in creating a more seamless effort in exercise and actual events.⁷²

(b) *The SLC LEPC*

Fire department leadership chairs the Salt Lake City LEPC. The LEPC is a key provision of the Emergency Planning and Community Right-to-Know Act (EPCRA), which was enacted in an effort to establish "a national framework for Environmental Protection Agency (EPA) to mobilize local government officials, businesses, and other

⁷¹ Amy Joi O'Donoghue and Josh Smith, "Deseret News Utah Page," *Deseret News*, June 12, 2010, <http://www.deseretnews.com/article/700039797/Oil-spill-in-Red-Butte-Creek-threatens-waters-wildlife.html?pg=all> (accessed Aug 20, 2014).

⁷² Firescope California, *Incident Command System for Fire Department Structure Fire Operations* (Riverside, CA: OES Firescope OCC, 1994).

citizens to plan ahead for possible chemical accidents in their communities.”⁷³ There are more than 3,000 designated local emergency planning districts throughout the country; most are established by county.⁷⁴ Federal mandates require LEPC membership to include:

1. Elected state and local officials
2. Police, fire, civil defense and public health professionals
3. Environment, transportation and hospital officials
4. Facility representatives
5. Representatives from community groups and the media⁷⁵

Although SLC is not required by law to have an LEPC, leadership within the fire department recognized the importance of creating such a committee to address concerns specific to the community. The SLCFPB processes over 800 hazardous materials permits per year.⁷⁶ Before a permit can be issued, a hazardous materials inspector inspects each site. The sheer volume of hazardous materials stored, used or dispensed within SLC warrants the SLC LEPC. Each permit holder is a member of the SLC LEPC, and although not all are able to attend the quarterly meetings, agendas, minutes and notifications are sent to all members through the LEPC web and information sharing system.⁷⁷

The LEPC is central to sharing information regarding the “storage, use, and transportation of hazardous materials in the City.” The SLC LEPC and the SLCFD are recipients of federally mandated Tier II reports, governed by the EPA. The EPA has established threshold quantities of specific chemicals and requires Tier II reports be

⁷³ Linda-Jo Schierow, *The Emergency Planning and Community Right to Know Act (EPCRA): A Summary* (Washington, DC: Congressional Research Service, 2012).

⁷⁴ U.S. Environmental Protection Agency, *Local Emergency Planning Committees*, July 25, 2014, <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed August 23, 2014).

⁷⁵ Ibid.

⁷⁶ SLC Fire Prevention Bureau, *FDM Records Management System, Hazardous Materials Permitting Records* (Salt Lake: Salt Lake City Fire Department, 2013).

⁷⁷ www.SLCLEPC.com

submitted to the State Emergency Response Commission or Emergency Response Commission of the Tribe; The Local Emergency Planning Committee; and the fire department with jurisdiction over the reporting facility.⁷⁸ Upon receipt of the Tier II reports, the Special Operations Specialist for the SLCFD enters the information into data sharing software, (CAMEO)⁷⁹ enabling immediate access by response crews.

This shared information also allows members of governmental entities and private sector businesses to develop responses to emergency situations and mitigate their effects, which is a mandate of the EPCRA.”⁸⁰ The DHS continues to promote the added value of private-public partnerships, most recently in the 2014 Quadrennial Review.⁸¹ Recognizing that prevention, mitigation and recovery will take a collective effort, these partnerships should not be underestimated. Private sector representation in the co-chair positions of the SLC LEPC allows industry leaders and administrators in the fire department to work together to identify issues needing attention and design meetings that are fruitful, interesting and relevant.⁸²

(c) *Training*

Salt Lake Valley is a conglomerate of 16 incorporated cities and 6 townships.⁸³ Recognizing the need for integrated training, ten of the municipal fire departments joined forces to create the Salt Lake Valley Training Alliance in 2010.⁸⁴ The key function of

⁷⁸ Environmental Protection Agency, “Tier II Inventory Form,” *EPA.Gov*, June 27, 2014, <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed August 23, 2014).

⁷⁹ CAMEO is software developed by the EPA and the National Oceanic and Atmospheric Administration (NOAA). It is used during planning of and response to hazardous material incidents. Environmental Protection Agency, “Cameo,” *EPA.Gov*, 2014, <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed Aug 23, 2014).

⁸⁰ Environmental Protection Agency, *What is EPCRA*, June 27, 2014, <http://www2.epa.gov/epcra/what-epcra> (accessed August 23, 2014).

⁸¹ Department of Homeland Security, *2014 Quadrennial Homeland Security Review*, Government (Washington, DC: The Department of Homeland Security, 2014). 29.

⁸² As the Chair of the SLCLEPC, the author has witnessed first hand improved relationships and shared information as the SLCLEPC develops. Partnering with leadership from the University of Utah and Tesoro has provided a mechanism to share ideas, concerns and strategies in emergency response, mitigation and recovery.

⁸³ Salt Lake County, *Salt Lake County*, 2013, <http://www.slco.org/bydepartments/yourcounty/govWithinSLCo.html> (accessed July 10, 2013).

⁸⁴ Salt Lake Valley Training Alliance, *Salt Lake Valley Training Alliance*, 2013, <http://saltlakevalleyfirealliance.wordpress.com/about/> (accessed July 10, 2013).

SLVTA is to create and implement training exercises that develop relationships, familiarity and continuity in service delivery, standard operating procedures and standard operating guidelines. The value of these relationships was demonstrated in a large 37-hour hazardous materials incident starting on June 30, 2013. Members of the SLCFD worked with agencies with whom they had drilled as recently as 10 days prior to the event, such as Murray City Fire Department, Unified Fire Authority and the 85th Civil Support Team.⁸⁵

B. CASE STUDY: THE RISE AND FALL OF THE SLCFD'S SECURITY INVOLVEMENT

1. SLCFD's Role in the 2002 Olympics Preparation

In June of 1995 Salt Lake City won the bid for the 2002 Winter Olympics. Planning for a secure Olympics began immediately.⁸⁶ Protecting more than 3,500 participants representing 80 nations and millions of anticipated spectators and visitors took a coordinated effort.⁸⁷ The venues, ten competitive and six noncompetitive, were geographically spread out between three different counties, adding to the challenge. A worldwide audience in excess of 3.5 billion television viewers and 9, 000 media representatives broadcasting the events assured this was a world-class event. Collaboration was going to be necessary on every level of national, state and local security and emergency response.⁸⁸ To facilitate the security effort, the fusion center concept was introduced during the preparation for the 2002 Olympics.

The SLCFD was integral to the original operational plan. According to the Utah Olympic Public Safety Command (UOPSC) After Action Report (AAR). The UOPSC enabling legislation authorized two fire and EMS representatives to sit on the Command.

⁸⁵ Pat Reavy, *Quarter-mile Radius Evacuated due to Chemical Leak*, June 30, 2013, <http://www.deseretnews.com/article/865582449/Quarter-mile-radius-evacuated-due-to-chemical-leak.html?pg=all> (accessed July 15, 2014).

⁸⁶ Dale Watson, "Testimony," *FBI.Gov*, May 31, 2001, <http://www.fbi.gov/news/testimony/the-2002-olympics-cooperation-between-federal-state-local-and-private-agencies-to-address-public-safety-concerns> (accessed May 19, 2014).

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

The Utah State Fire Chiefs Association appointed the representatives. They served the interests of “Fire & EMS 2002” (FEMS 2002), a committee formed to coordinate the disciplines’ Olympics planning.

Dan Andrus, the fire marshal for SLCFD at the time, also credits fire officials for pushing for greater involvement of the fire service in the safety and security effort. He stated,

Inclusion of fire service personnel in planning for venue security was instrumental in building working relationships. Credit is also due to those fire officials who recognized the significant public safety implication of hosting the Olympic Games and who were early and vocal advocates for joint planning.⁸⁹

Solely responsible for the Fire & EMS Operations Branch of the UOPSC, SLCFD was a key component in the Olympics security effort from the beginning.⁹⁰ The SLCFD participated in regular briefings, both before and during the Olympics and was integral to the Olympic Intelligence Center (OIC). Fire Investigator Cristal Vandongen, who represented the SLCFD in the OIC, described the fire department’s involvement as,

the collection, evaluation, analysis, and dissemination of relevant, accurate and timely intelligence to meet the strategic and tactical intelligence requirements of the UOPSC, the Joint Operations Center (JOC), and the Olympic Joint Terrorism Task Force (OJTTF).⁹¹

Vandongen also functioned as a Team Leader in the Criminal Intelligence Collection and Dissemination Unit, further demonstrating the depth of the fire department’s involvement in the security effort.⁹²

SLCFD was actively engaged in Terrorist Awareness Training, Disentanglement and Protest Deterrence Training, which consisted of didactic and tactical training programs and had built several working relationships with key security agencies such as

⁸⁹ Dan Andrus, interview by Martha Ellis, *Fire Marshal, 200X-200X* (August 25, 2014).

⁹⁰ David Schwendiman, “2002 Winter Olympic Games, Utah Olympic Public Safety Command,” *Olympic Intelligence Center Operational Plan* (Salt Lake City, UT: David Schwediman, February 8, 2002).

⁹¹ Cristal Vandongen, interview by Martha Ellis, *Fire Investigator/Deputy Director, Fire and EMS Branch of UOPSC/Team Leader, Criminal Intelligence Collection and Dissemination Unit* (August 24 2014).

⁹² Ibid.

the FBI, ATF and the CIA. Every member of the department received an exposure protection bag that contained a level B protection suit, a respirator, duct tape, protective eyewear and rubber gloves. The Fire Department was put on alert for any suspicious activity and was given specific directions on how to manage witnessing and reporting any observed activities that were inconsistent with the conditions or surroundings. Salt Lake City Police and Fire Departments had drilled extensively on a number of active shooter, bomb threat and activism scenarios. At the time of the 2002 Olympics, Salt Lake City's counterterrorist and intelligence management strategies and tactics were the model that other jurisdictions would aspire to in the wake of the September 11 attacks.⁹³

2. Hosting the Games

Five months after the 9/11 attacks, Salt Lake City welcomed the world to compete, celebrate and socialize in the spirit of the Winter Olympic Games. By all accounts the games were a success – not only from the standpoint of spirited competition, pageantry and camaraderie, but also in security and protecting patrons. Special consideration was given to the effort in Salt Lake City due to the close proximity in time to the 9/11 attacks.⁹⁴ “The Utah Model” as it became known, was recognized and recommended as a best practice for future events by national leaders even before the Games were over.⁹⁵ On the heels of our nation's most devastating attacks on home soil and political controversy over the planning and organization of the Olympics in Salt Lake, the security team, including the fire department, prepared to receive the world.

According to Chris Bellavita, the Executive Director of Utah Olympic Public Safety Command, stated that, “eighteen months before the 2002 Olympic Games Opening Ceremony, the security group had 150 people in it.”⁹⁶ The successes come down to the people, the plan and the ability to execute it. Bellavita goes on to explain that

⁹³ Derek Jensen, “Oly Security Effort ‘Model for Nation,’” *Deseret News*, March 9, 2002.

⁹⁴ Meg James, “NBC ‘confident’ with Russian security measures for Sochi Olympics,” *LATimes.com*, Jan 23, 2014, <http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-nbc-russian-security-sochi-olympics-20140123-story.html> (accessed May 31, 2014).

⁹⁵ Chris Bellavita, “Changing Homeland Security: A Strategic Logic of Special Event Security,” *Homeland Security Affairs* 3, no. 3 (September 2007) <http://www.hsaj.org/?fullarticle=3.3.1>

⁹⁶ *Ibid.*

when the Olympics came to a close, the exodus was swift and thorough. He stated, “At its peak, Salt Lake’s Olympic security operations involved more than 11,000 public safety people. A few weeks after the Games were over, the security organization—like a circus leaving town—vanished.”⁹⁷

3. SLCFD Post-2002 Diminished Involvement in Security Effort

Although the Salt Lake City Police Department has continued to advance within the realm of intelligence management through its fusion center, the Fire Department involvement has all but vanished. Today, many employees who were key to the Olympic security effort have left the fire department to work for private sector emergency preparedness companies like Booz Allen or federal agencies like the Defense Threat Reduction Agency and the ATF. Fire Inspector Vandongen is the sole Intelligence Liaison Officer (ILO) working for the fire department. The ILO has a cursory role within the Statewide Information and Analysis Center (SIAC) and the role has no formal recognition within the Department’s organizational chart.⁹⁸

The state continued to recognize the value of fire department participation in the intelligence community in Utah, especially for the contributions the fire department could make in protecting critical infrastructure. SLCFD was offered vehicle and office space in the SIAC in an effort to maintain a presence in the process. The SLCFD demonstrated a complete lack of interest in furthering the FD security effort by declining the offer.⁹⁹

The SLCFD does not have policies or procedures in place that govern the collection, use or dissemination of potentially sensitive information. This has proven to be problematic, where as recently as April 2014, law enforcement sensitive information was released to the press by one of the SLCFD combat crews.¹⁰⁰ Controlling the

⁹⁷ Ibid.

⁹⁸ As the supervisor of this individual within her organization the author’s insights are offered as a participant observer.

⁹⁹ Cristal Vandongen, interview by Martha Ellis, *Fire Investigator/Deputy Director, Fire and EMS Branch of UOPSC/Team Leader, Criminal Intelligence Collection and Dissemination Unit* (August 24, 2014).

¹⁰⁰ Caroline Connolly, *Fox 13 News*, April 24, 2014, <http://fox13now.com/2014/04/24/officials-warned-of-potential-gang-retaliations-in-wake-of-courthouse-shooting/> (accessed May 5, 2014).

information and messaging to avoid breaches of this nature will be critical if the SLCFD expects to receive additional information from the police department and fusion centers in the future.

4. DHS Calls for Better Communication While SLCFD Security Effort Wanes

In 2003, the federal government published guidelines that initiated the development of the fusion center network. The goal: to form a robust and fully integrated national network of intelligence collecting and analyzing centers, operating in cooperation with state and local entities. According to DHS, “The National Network allows the federal government, SLTT (state, local, tribal and territorial), and private sector partners to participate as full contributors to, and beneficiaries of, the homeland security enterprise.”¹⁰¹ This effort was preemptive to the findings of the 9/11 Commission, which concluded that the biggest deterrent to information sharing and the likelihood of “connecting the dots” is the human or systemic tendency to avoid information sharing. As the rest of the country was ramping up their communication efforts, Salt Lake City Fire and the Utah fire service in general, began its gradual disengagement from terrorist awareness, intelligence management and law enforcement involvement as it pertains to Homeland Security. This is evident through the attrition of positions in the fire department previously filled in intelligence during 2002 as compared to today.¹⁰²

Several factors contributed to the disengagement on the part of the SLCFD with the IC mission. When the Olympics were over, it wasn’t just the energy, funding and national attention that left the area. According to research completed by Lieutenant Christopher D. Bertram of the Salt Lake County Sheriff’s Office, “the major explanations

¹⁰¹ Department of Homeland Security, *State and Major Urban Area Fusion Centers*, 2013, <http://www.dhs.gov/state-and-major-urban-area-fusion-centers> (accessed July 7, 2013).

¹⁰² Salt Lake City Fire, *Organizational Chart*, Dec 8, 2013, <http://www.slcfire.com/external/content/document/3687/1885646/1/Pages%20from%20Organization%20Chart%20Aug%202013.pdf> (accessed July 11, 2014).

for the discontinuation of other Olympic collaborations were lack of motivation or need, lack of leadership, lack of strategic planning and no mandated system.”¹⁰³

Bertram’s work identified these collaboration construct deficiencies during his examination of the interagency efforts before and after the Olympics. Through his interview and analysis process he was able to identify the four main enablers to collaboration within the Salt Lake Valley during these time periods. They are motivation, leadership, trust and mandated systems. The research also investigated the undoing of well-developed interagency relationships when the Olympics came to a conclusion.

The vacuum effect of the closing of the Games would have challenged even the strongest leadership in maintaining established coalitions. After years of preparation the emotional letdown of successfully delivering a safe and secure Olympic Games, in conjunction with the vacating of federal resources, the welcome perspective of getting back to normal was pervasive.¹⁰⁴

Maintaining the Olympics security framework may not have been a realistic goal. As the majority of the federal resources left the area, so did many of the cornerstones of that framework. The rapid elimination of a focused outcome, funding and physical and human resources, in conjunction with the emotional letdown that came with the conclusion of the Games were strong forces to overcome.

The absence of vision and leadership within the SLCFD post-Olympics was demonstrated through diminished commitment of time and resources to intelligence community participation, in addition to letting valuable top secret security clearances held within the department lapse.¹⁰⁵

¹⁰³ Chris D. Bertram, *Factors that Effect Interagency Collaborations : Lessons During and Following the 2002 Winter Olympics* (master’s thesis Naval Postgraduate School, 2008). link

¹⁰⁴ Author is drawing on historical perspective since beginning employment with the SLCFD in 1995.

¹⁰⁵ Cristal Vandongen, interview by Martha Ellis, *Fire Investigator/Deputy Director, Fire and EMS Branch of UOPSC/Team Leader, Criminal Intelligence Collection and Dissemination Unit* (2014 йил August 24).

5. Getting Back into the Security Circle of Trust.

Twelve years later, given the national security concerns, the question is, what will it take to reinvigorate the Salt Lake City Fire Department's participation in the national, state and local security effort?

By nature of the core responsibilities the Fire Department has to the community, several key foundational elements are in place within the SLCFD. There is growing national support for greater fire department involvement in the national security effort. DHS, DOJ and IAFC are just a few examples of how this movement is being supported at a federal level.¹⁰⁶⁻¹⁰⁷ The work being done by FDNY and the Orange County Sheriff's Office are examples of the vigorous efforts taking place at the local level, which will be explored further in this research.¹⁰⁸⁻¹⁰⁹ It is equally important to note that support is not universal. Addressing the concerns of those who are not in agreement with including the fire service in national security efforts will drive the extent and nature of the effort.

This research will identify the stakeholders within the Fire intelligence mission model, assess the potential concerns and desires of those stakeholders and develop a plan for building trust and common purpose in the program.

¹⁰⁶ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

¹⁰⁷ International Association of Fire Chiefs, "IAFC Terrorism and Homelands Security Committee," *International Association of Fire Chiefs*, 2012, <http://www.iafc.org/committees/content.cfm?itemnumber=4648&navitemnumber=4439> (accessed June 26, 2013).

¹⁰⁸ FDNY, *FDNY Counter Terrorism and Risk Management Strategy* (NY: FDNY, 2011).

¹⁰⁹ Captain Nick Colonelli, interview by Martha Ellis, *TLO Coordinator, Orange County Intelligence Assessment Center* (July 15, 2014).

III. IDENTIFYING THE RELATIONSHIPS, TRUST AND COLLABORATION LINCHPINS

A. THE SLCFD/SECURITY NETWORK

The relationships necessary for the SLCFD's effort to integrate into the IC are diverse. They reach across professional and political boundaries, and all stakeholders need to understand how the program can positively affect their area of influence in order for the IC to succeed. As the fire department develops an intelligence program and fire department members broaden the scope of their understanding and role in the IC, all departments, agencies and individuals within the critical network will need a clear understanding of their roles within the program. It will be equally critical to program developers to understand the rules governing how the rulers rule within each node.¹¹⁰ According to *The Dictator's Handbook*, how politicians spend money says a great deal about their loyalties; however, capital expenditures may not always involve currency. Allocation of time, human resources and other tangible assets can also reflect a leader's priorities. A leader leads by the driver of his or her interests. If the interest is to stay in power, the allocation of capital will satisfy the needs of the essential coalition. That coalition can be the voters, who would advocate funding into projects creating the greatest good for the greatest numbers, or a small coalition of highly influential essentials, resulting in big gains for smaller numbers.¹¹¹ Leadership looking to develop a fire department intelligence program would benefit from knowing the motivations, priorities and desired outcomes of all parties required for achieving success. It is also important to identify to whom the leaders of each node in the network has to answer. This will have a bearing on their motivation. The challenges surrounding the development of a fire department intelligence program are anchored in the ability of the individuals within the necessary network to develop and maintain trust; trust in the individuals working within the program and trust that their interests will be met. Understanding that

¹¹⁰ Bruce Bueno De Mesquita and Alastair Smith, *The Dictator's Handbook: Why Bad Behavior is Almost Always Good Politics* (New York, NY: Public Affairs, 2011).

¹¹¹ *Ibid.* 19.

“partnership[s] should only be used when the partnership produces more in value than can be achieved by working alone,” defining those benefits and demonstrating how the policy supports them will be paramount.¹¹²

B. KEY RELATIONSHIPS IN THE SLCFD SECURITY PROGRAM

Focusing on the Salt Lake City program, the pairing list and diagram below are representative of the components of the network that will need to work together to advance the SLCFD intelligence program.

Phases of Program Development and the Interdependent Relationships:

1. Program Development

Fire – City Administrators and Representatives: Mayor & City Council

Fire – Fire: Admin, ILO, Firefighters and Emergency Managers

Fire – Fusion: State Information Analysis Center (SIAC)

Fire – SLCPD: Salt Lake Information Center (SLIC)

2. Program Implementation

Fire – City Administrators and Representatives: Mayor & City Council

Fire – Fire: Admin, ILO, Firefighters and Emergency Managers

Fire – Fusion: State Information Analysis Center (SIAC)

Fire – SLCPD: Salt Lake Information Center (SLIC)

3. Program Sustainability

Fire – City Administrators and Representatives: Mayor & City Council

Fire – Fire: Admin, ILO, Firefighters and Emergency Managers

Fire – Fusion: State Information Analysis Center (SIAC)

Fire – SLCPD: Salt Lake Information Center (SLIC)

Fire – Citizens: Within the community, visitors and the ACLU

¹¹² Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* 2, no. 3 (October 2006).

Each of these stakeholders will have varying degrees of interest in the Fire intelligence program depending on what they can gain, what it could cost them and how participation satisfies the overall mission of their own agencies, departments or initiatives.

C. THE FIRE INTELLIGENCE NETWORK MODEL

The network model of these relationships is demonstrated in Figure 1. The relationships are illustrated with links and essential nodes. Overlaid on those links are the exchanges between the nodes. These are defined as communication, formal agreements or directives and laws. Each exchange represents an opportunity to enhance or weaken the relationship between the respective nodes. The balance and functionality of the network and consequent exchange of information is dependent on strengthening the links by developing and sustaining collaboration between each node.

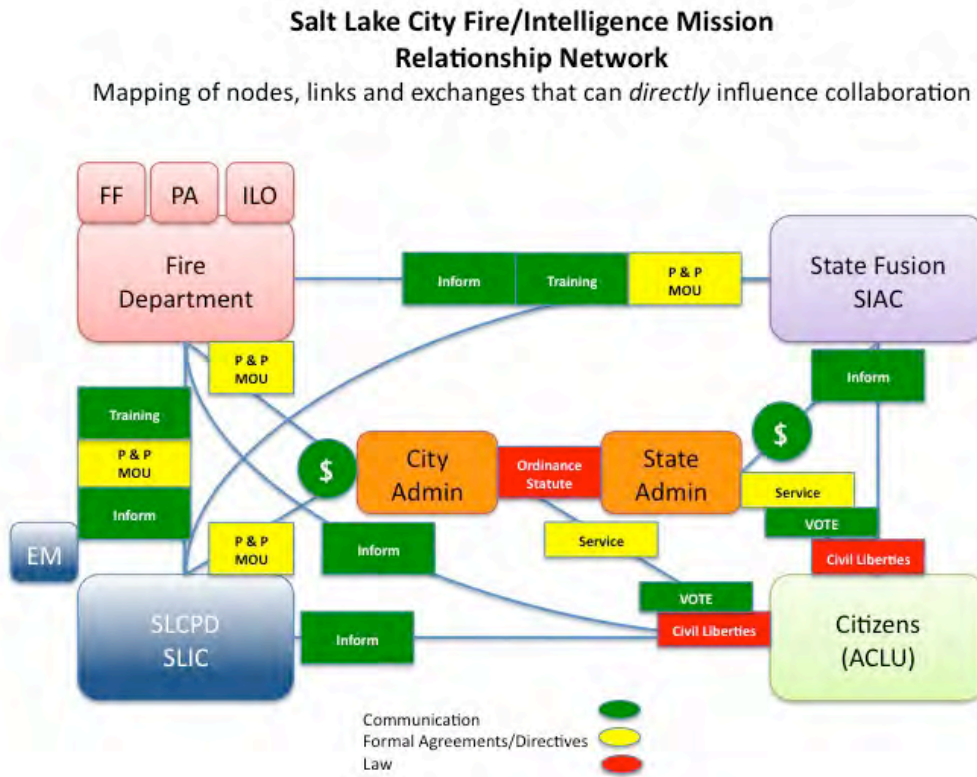


Figure 1. Fire Intelligence Mission Network

The primary stakeholders are Fire, City Administrators, State Administrators, the SIAC, SLIC and the citizens the FD is sworn to serve. A separate dynamic exists within the fire department itself, depicted in Figure 2. The exchanges necessary within the SLCFD organization will also be critical to the success of the greater network. If there is a lack of unity on the part of the Fire Department, the stability of the entire effort could be jeopardized. Administrators and field personnel will need to be aware of the role they will each play in the program.

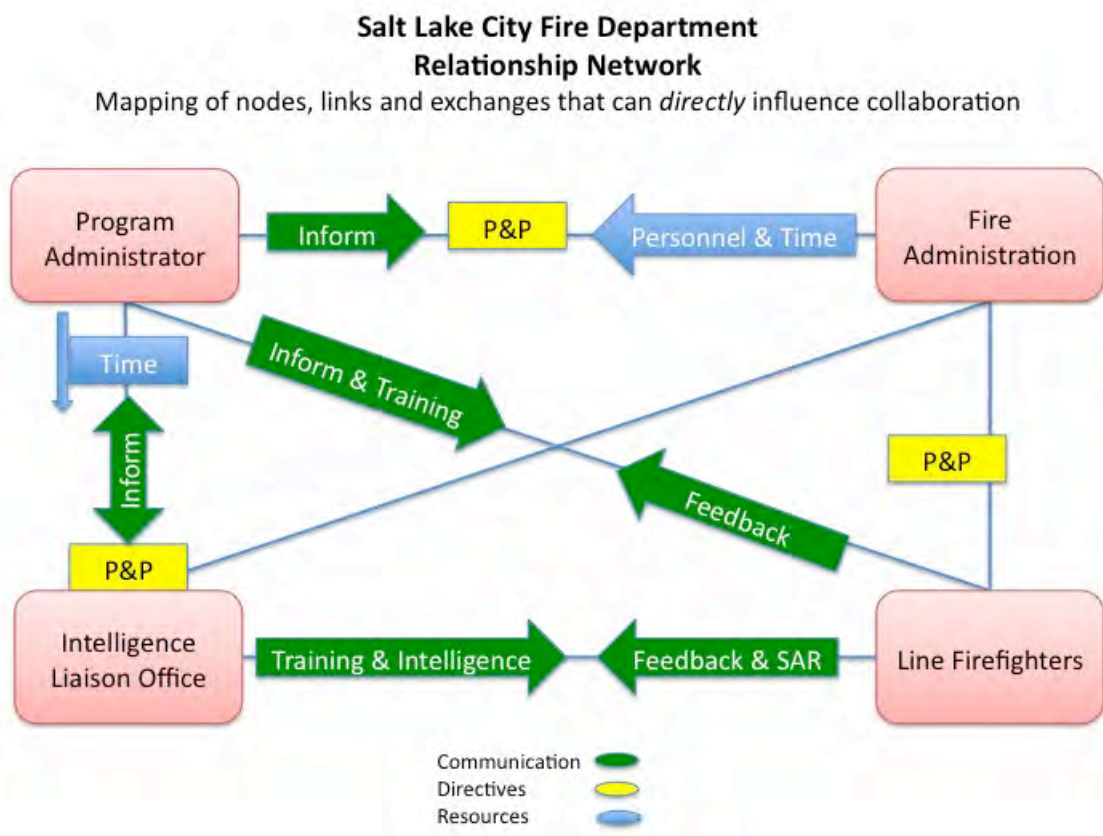


Figure 2. Fire Specific Intelligence Mission Relationship Network

1. Relationships within Salt Lake City

Both of the public safety departments in SLC, Fire and Police, have similar drivers, or motivations. The chiefs of those organizations serve at the pleasure of the Mayor. How well the chiefs address the Mayor's initiatives drives the allocation of

money. An example would be air quality and carbon footprint. The mayor of SLC is environmentally focused. If either department fails to recognize this priority in their strategic plan, the city administration will manage those departments through budget and service model adjustments, or resource allocation. Reducing the number of light fleet vehicles and converting remaining vehicles to fuel-efficient models, are examples of SLC administrative actions taken to bring both public safety departments in line with the city initiative.

Another consideration in program development is appealing the city council, which is an extension and representation of the citizens of Salt Lake City on a more refined level than the mayor. The city council representatives serve to protect the interest of the citizens within their district and the city as a whole. Fiscal responsibility is the primary way this is demonstrated. Re-election hinges on decisions that add value to the greatest numbers voters.

The relationship between fire and the police presents its own unique challenges. Agency bias will play a role as the program develops. The key will be in maintaining a clear distinction in roles and responsibilities and not trying to morph firefighters into police officers. Clearly defining, understanding and acting upon the respective roles each public safety official has within the joint security effort will be critical in managing mission creep. These steps will be developed in tandem with law enforcement, to assure that clear, appropriate parameters are set for SLCFD's involvement.

The motivation of the public safety leadership is anchored in demonstrating value to the public and city leadership. Both the police chief and the fire chief are appointed positions, not elected. There is an intrinsic value to public safety, but as budgets become lean and other infrastructure and environmental needs arise within SLC, competition for funds becomes more fierce among city agencies, including police and fire. The delicate nature of building programs that closely knit the two departments together can be favorable if the efforts demonstrate synergy and add public value. A good example would be the active shooter program currently being developed. Having an orchestrated response and mitigation plan with police and fire produces a more efficient and effective

service model.¹¹³ SLCFD/PD Active Shooter classroom training, administered in July 2014, was designed to define roles, expectations and terminology. SLCFD and SLCPD officers taught the course in tandem. Concepts in tactical emergency casualty care (TECC) and rescue task force operations, developed by the Arlington Police and Fire Departments, are being introduced into the SLC response model. The mission, according to the Arlington County police and fire leadership, is to “get medical care to victims within minutes of being wounded,” in the active shooter environment. This includes providing immediate medical attention to wounded police officers, as well.¹¹⁴

Specific training on utilizing the Incident Command system was also part of the classroom session, as leadership and command structure are integral to incident management. Classroom training was reinforced with a live drill involving both SLCFD and PD. The need for this training is not only demonstrated through Salt Lake City’s history with active shooter incidents. Just prior to an active shooter drill, scheduled to take place after-hours in a downtown mall in September of 2013, a man was arrested for making threats of violence, including plans to shoot guns and detonate a bomb, at that very mall. The drill was postponed.¹¹⁵

2. Relationships with State of Utah Agencies

The final key relationship will be between the SLCFD and the SIAC. Predominately law enforcement driven, Fire has played a small but underutilized role within SIAC in the past. It is a state-run entity, under the Department of Public Safety (DPS). The governor of Utah appoints the commissioner of DPS. Although there isn’t a constituency component to the commissioner’s position, the Governor must consider valuable public safety policy if reelection is to be considered. He must also exercise fiscal responsibility and optimize his budget.

¹¹³ Police Executive Research Forum, *The Police Response to Active Shooter Incidents: Critical Issues in Policing Series* (Washington, DC: Police Executive Research Forum, 2014), 22.

¹¹⁴ Ibid.

¹¹⁵ Lindsay Whitehurst, *ABC News*, August 13, 2014, <http://abcnews.go.com/US/wireStory/probation-suspect-utah-mall-shooting-plot-24968409> (accessed August 20, 2014).

The impact of this program on the motivations within the agencies, departments and individuals it will touch, again, will vary. Within the scope of public safety, value can be added by building reliable lines of communication. The 9/11 Commission Report made it clear that our failure to “connect the dots” through effective interagency information sharing played a significant role in the successful execution of those attacks.¹¹⁶ Sharing information without the development of the relationships early in the process creates vulnerability; however, the belief that one agency is more competent than another drives information hoarding and hampers the imagination of the collective group.

3. Essential, Interchangeable and Influential Network Nodes and Links

Value can be assessed within the network by identifying the essential, interchangeable and the influential nodes and links. The essential nodes and links are those that the network cannot function without or their absence would have significant negative impact. They are essential to the mission of the network. Interchangeable nodes are those that can be swapped out or interchanged with other nodes. Typically this would represent a duplication of duties that one node could perform independent of one it is replacing. The influential nodes are those that carry power or influence in the wellbeing of the network or the advancement of the mission.¹¹⁷ Measuring the importance of each node in this network is accomplished by identifying the interchangeable, essential and influential aspects they have within the system. Doing so reflects a measure of each node’s political and fiscal clout. Additionally, important is how they work into this system that is being developed from the standpoint of collaboration and trust. Identifying the essential, interchangeable and influential components directs efforts to the optimum use of the network itself.¹¹⁸

¹¹⁶ 9/11 Commission, *The 9/11 Commission Report* (New York: W.W.Norton & Company, Inc).

¹¹⁷ Bruce Bueno De Mesquita and Alastair Smith, *The Dictator’s Handbook: Why Bad Behavior is ALmost ALways Good Politics* (New York, NY: Public Affairs, 2011).

¹¹⁸ *Ibid.* 5.

a. Essential and Interchangeable

All the nodes are essential because they fulfill different roles critical to the development and sustainability of the program. Interchanging the SLIC and the SIAC could be considered, however, sacrificing one for the other will jeopardize respective access. They both play similar roles within the network, however the SIAC has a greater state and federal involvement and consequent access. Although the SIAC is a state-run office, the Department of Homeland Security does have a representative working with the SIAC team. Substituting this agency with the SLIC would also minimize our ability to strengthen the relationships with the state DPS and subsequently the office of Emergency Management (EM).

Fusion centers were developed and situated within states and major urban areas throughout the country “to empower front-line law enforcement, public safety, fire service, emergency response, public health, critical infrastructure protection, and private sector security personnel to understand local implications of national intelligence, thus enabling local officials to better protect their communities.”¹¹⁹ Having the SIAC within 10 miles of city boundaries, the focus for Salt Lake City will be more consistent with the Orange County Sheriff’s Department in California. This model will rely on existing law enforcement-centric resources, building in fire-related elements as the program evolves. According to the Orange County Intelligence Assessment Center’s web page, “The purpose of this program is to ensure that fire department first responders throughout the urban area maintain a real-time awareness of terrorist trends, tactics, and procedures.”¹²⁰

Focusing on the SIAC and not the SLIC could also be done, but not without its shortcomings. The SLIC is in the Salt Lake City Public Safety Building (PSB). This building was built specifically to house Police, Fire and the 911 Center. The design of the building was aimed to reflect greater openness and communication—communication between the public safety officers and the public, as well as openness and communication between Fire and Police. Not working with the SLIC could have a negative impact on the

¹¹⁹ Ibid.

¹²⁰ Orange County Sheriff’s Department, *Orange County Intelligence Assessment Center*, 2013, <http://ocsd.org/divisions/fieldops/security/iac> (accessed June 25, 2013).

relationship between Police and Fire. Opportunities to share information relevant to local efforts could be missed; information that could be useful in a joint response from both public safety agencies should be shared.

The administrative nodes are going to play a joint role in any of the proposed delivery models. Interchanging administrative nodes from the fiscal perspective may be a possibility as funding options for the program structure could arguably be placed within either administrative budget. A complete replacement of one node for another however, is not feasible. Both nodes would need to remain from an administrative, regulatory perspective.

The feasibility of interchanging any other nodes within this network would disrupt the balance needed between finance, information and trust. The nodes are intertwined to provide stability to the program design and removing one could jeopardize the stability of the entire network.

b. Influential

The influential components in this network are also in all tiers of the effort. Leadership will play a key role in the development and success of the program. Without the support from leadership in DPS, SIAC, SLIC, city and state administration and the SLCFD, the program will struggle if not fail. The support of the operations personnel will be equally as critical. They will need to see value in the program not just for themselves, but for the citizens, in order to garner buy-in.

Because the participation of the firefighters in training, sharing information and receiving and acting upon intelligence is the lynchpin to the program success, developing trust in the program among combat personnel will be crucial. Therefore, those promoting the program will need to be effective at influencing all parties in seeing the value of the program and more importantly, the criticality of their role and participation.

The citizens and civil liberty watchdog groups such as the ACLU are also influential. Citizens' rights and the laws protecting them will need to be considered early and often as the program develops and strives for sustainability. The program must

demonstrate added value to the public in order to satisfy the drivers of all of the nodes, while adhering to all civil liberty laws and regulations. Paul Gordon describes “value-based ethics” as, “ behaviors that serve the public good and maximize the values of life, health, and freedom, values that can be seen as being reflected in the Preamble to the U.S. Constitution.”¹²¹ Components of Gordon’s ethics map will be considered in the development of the SLCFD model.

4. Value Added in the Network

The development of this program could be a win for all parties involved as long as full participation is fostered. The public safety entities, SLCFD, SLCPD, SLIC, and SIAC will experience greater access and exchange of information. This program also includes joint training, both didactic and tactile, taking this network development to a higher level by improving the mutual understanding of respective roles and response capabilities within the city.

Political gains may be subtle since protecting the public through prevention often goes unnoticed. However, developing more seamless responses to incidents such as active shooters, weapons of mass destruction or even natural disasters will result in added public value and demonstrate a worthwhile use of tax revenue.¹²²

The process of developing the SLCFD intelligence program will need to be thoughtful, methodical and inclusive. For the program to flourish, all agencies, administrators, and personnel will have to believe it adds value to their work, initiatives, and interests. Sharon Caudle states, “In simple terms, a partnership should only be used when the partnership produces more in value than can be achieved by working alone.”¹²³

¹²¹ Paula D. Gordon, “The Ethics Map: A Map of the Range of Concerns Encompassed by ‘Ethics and the Public Service,’” *Gordonhomeland.com*, March 2007, <http://users.rcn.com/pgordon/homeland/> (accessed January 29, 2014).

¹²² Police Executive Research Forum, *The Police Response to Active Shooter Incidents: Critical Issues in Policing Series*, Research (Washington, DC: Police Executive Research Forum, 2014), 22.

¹²³ Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* (Naval Postgraduate School) 2, no. 3 (October 2006). 4.

Assessing the value added within the partnerships will be a continuum and part of the ongoing evaluation process. The network and the threats and vulnerabilities it is designed to mitigate will be dynamic. Necessary adjustments to the components and the functions within the network will be driven by the desired outcomes. The value of the network and the overall effort will only be maintained if the network remains agile to changing needs. According to Caudle, “Managers of an enduring partnership will develop a process for evaluating benefits and periodically renegotiate the compact between partners.”¹²⁴

How those changes are managed can also have an impact on the value of the network. As Heifetz and Linsky point out, managing the changes people are asked to embrace can oftentimes be more crucial to the success of the mission than the mechanics of the mission itself.¹²⁵ As adjustments are made or players within the network change, it will be crucial to manage those changes openly with ample feedback and input from the stakeholders.

5. Potential for Negative Impacts within the Network

Any given location within the network can present an opportunity for failure. As stated early, no interchangeable nodes appear in the Fire intelligence mission network. By using the network models, the critical components of the nodes and links can be identified. The role trust plays in developing the resiliency of each relationship can be evaluated individually or on a network level. Figure 3 illustrates the potential negative impacts of breached trust within the various areas of the network. This illustration also demonstrates the impact on the network and consequently the program, if there are failures within any component of the network.

The negative consequences of the collaborative efforts failing are tightly intertwined. When any one of these impacts arise, the likelihood of others following is high. The lack of participation and a willingness to share information due to trust issues

¹²⁴ Ibid. 5.

¹²⁵ Ronald A Heifetz and Linsky Marty, *Leadership on the Line* (Boston: Harvard Business Review Press, 2002).

has been demonstrated in the past. Trust was compromised when fire department personnel shared sensitive information they had received from the SIAC. According to Major Jeff Carr, Utah State Deputy Homeland Security Advisor, that incident in particular had a significant impact on the SIAC's desire to work with the fire department.¹²⁶

Another example is within the SLCFD. After the 2002 Olympics, when leadership did not trust in the idea of continuing on with its security involvement, tangible withdrawal from the existing network was witnessed. Denied requests for time to participate in ongoing Joint Terrorism Task Force meetings, and resources necessary to or participate in the partnership offers from the State of Utah, are demonstrative of the negative impact of not having buy-in from all of the necessary stakeholders.

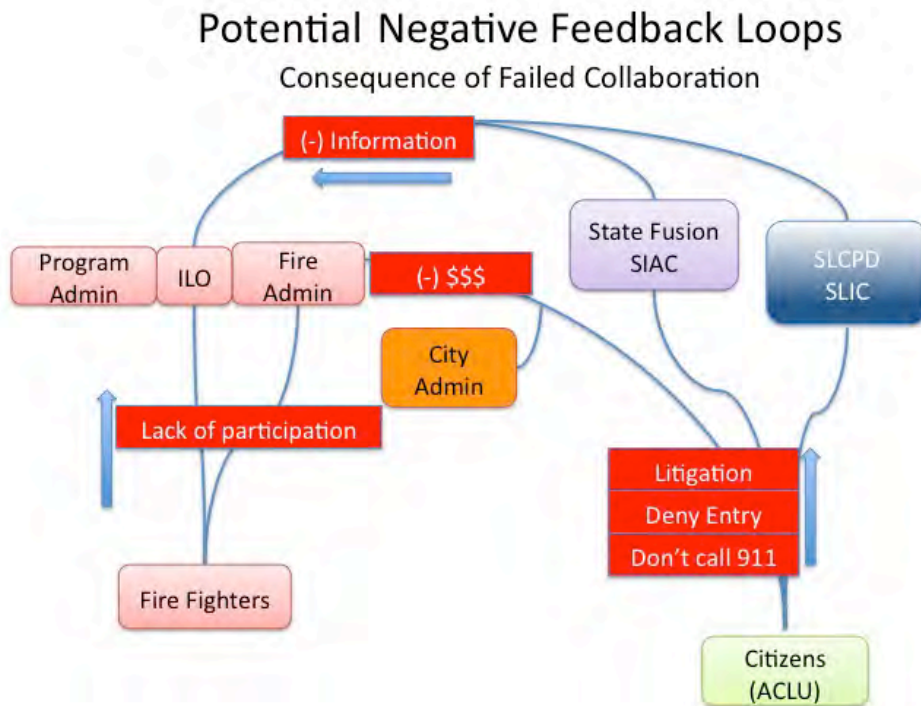


Figure 3. Fire Intelligence Mission Negative Feedback Loop

¹²⁶ Major Jeff Carr, interview by Martha Ellis, *State Deputy Homeland Security Advisor* (9-July, 2013).

These network models allow program developers to assess the stakeholders from a recognition and evaluation perspective. The diagrams presented in this chapter provide a road map for targeted and global consideration toward trust and the viability of the proposed program. This provides a solid platform for analysis in the application of concepts and models developed for organizational trust.

In the next chapter the constructs of collaboration will be assessed as they relate to the Fire intelligence mission model. Refining the constructs to the single element of trust will be the final phase before developing recommendations. The role trust plays within all aspects of the network models provided will be the cornerstone of those recommendations.

6. Network Power Wheel, The Fire-Centric Model

The Power Wheel concept comes from the Harvard Kennedy School of Government's Executive Leadership program. The general premise is to map out the necessary coalition for a specific program's development, implementation and sustainment, using a centralized node as an anchor point. This model allows targeted attention to each individual stakeholder within the network. By isolating each node, specific concerns or interests can be addressed in the development, implementation and sustainment plan while maintaining consideration for the network as a whole.

Figure 4 demonstrates the fire-centric perspective, as the main drive for the program will come from within the Fire Department. Examples like the FDNY's Center for Terrorism and Disaster Preparedness derived the components of Figure 3. Chief Joseph Pfeifer describes how and why the FDNY intelligence network developed into its current structure:

Through research, analysis and exercise design, the Center brings together Fire Service, EMS, Law Enforcement, City, State and Federal agencies, Fusion Centers, building managers, utility companies, National Guard and active military together to jointly develop protocols for challenging Homeland Security and disaster management incidents.¹²⁷

¹²⁷ Assistant Chief Joseph W. Pfeifer, interview by Martha Ellis, *FDNY* (27-August, 2014).

The Salt Lake City network model captures the key components directly and indirectly, as several of the specific elements Chief Pfeifer identifies are participants in the SLC LEPC.

Fire Centric Power Wheel



Figure 4. Fire-Centric Fire Intelligence Mission Power Wheel Network

D. MODELING SUCCESSFUL PROGRAMS

Agency bias will be one of the more challenging hurdles to overcome as this program is developed. Identifying a methodology, developing trustworthy relationships and supporting that framework with consistent procedures and policy have demonstrated effectiveness in other agencies' programs. FDNY's Center for Terrorism and Disaster Preparedness (CTDP), founded by Battalion Chief Joseph Pfeifer, and the Orange County Intelligence Assessment Center (OCIAC), run by the Orange County Sheriff's Office

(OCSO), are two examples of successful models in fire intelligence involvement.¹²⁸¹²⁹ What's compelling about these two intelligence programs is that one lies in the law enforcement branch of public safety, (OCSO) and the other in Fire (CTDP). Leveraging these and other known successes to demonstrate value to all parties involved will be key in building trust and ownership in the program. As described earlier, the leadership within public safety has to meet the expectations of the elected officials. Their survival is based on sound policy and adding value to the overall effort of protecting the citizens.

¹²⁸ Orange County Sheriff's Department, *Orange County Intelligence Assessment Center*, 2013, <http://ocsd.org/divisions/fieldops/security/iac> (accessed 2013 йил 25-June).

¹²⁹ Lewis Rice, "Raising the Alarm," *Harvard Kennedy School*, 2010, <http://www.hks.harvard.edu/news-events/publications/hks-magazine/archives/summer-2010/raising-the-alarm> (accessed September 20, 2013).

THIS PAGE INTENTIONALLY LEFT BLANK

IV. COLLABORATION AND THE CONSTRUCT AND IMPACT OF TRUST

“Technique and technology are important, but adding trust is the issue of the decade.”

–Tom Peters, business author¹³⁰

Trust is the main focus of this section; It will identify trust as a key element in the past security efforts within SLC, define the construct of successful collaboration, identify the elements (or components) that constitute trust, and demonstrate how they come together to create the phenomenon (often experienced as a feeling) of trust.

A. HOW TRUST FACTORS INTO THE EQUATION

If the overall goal is to reestablish a role for the SLCFD in the homeland security effort, the logical place to start is to evaluate the factors that led to the diminished involvement after the 2002 Olympics. In 2008, Christopher Bertram’s research aimed to answer the question, “What are the factors that explain why some of the successful collaborations used during the 2002 Winter Olympics endured and some did not after the end of the Olympics?”¹³¹ Bertram’s work identifies key factors that explained weakening of collaborations that were established during the Olympics. Hocevar, Thomas and Jansen identify the success factors and sub-factors that impact collaboration, illustrated in Figure 5.¹³²

¹³⁰ Stephen R Covey, *The Speed of Trust, The One Thing That Changes Everything* (New York: Free Press, 2006).

¹³¹ Christopher Bertram, *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*, Thesis (Monterey: CHDS, 2008).

¹³² Susan Page Hocevar, Erik Jansen and Gail Fann Thomas, “Inter-Organizational Collaboration: Addressing the Challenge,” *Homeland Security Affairs* (www.HSAJ.org) 7, no. The 9/11 Essays (September 2011).

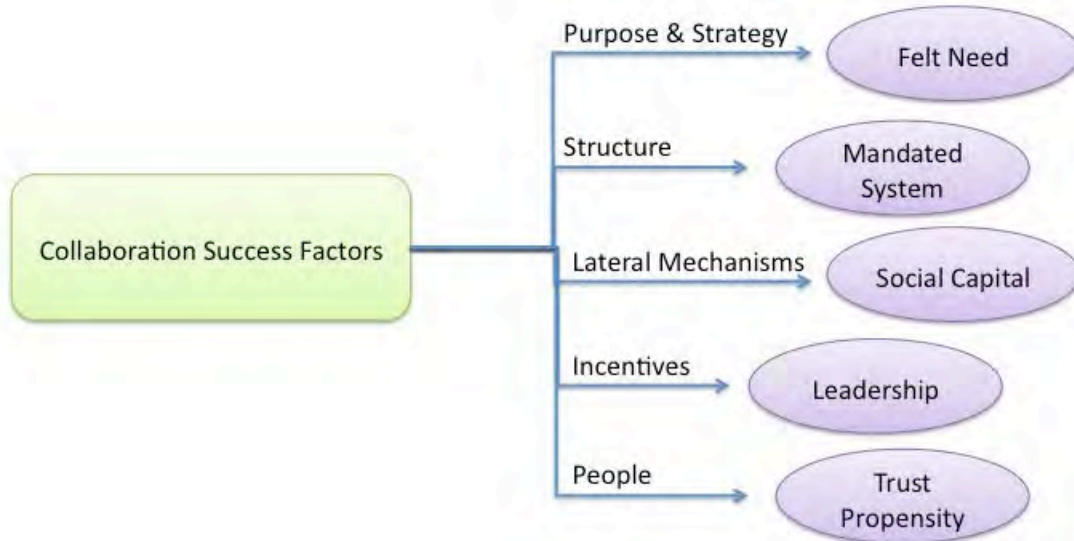


Figure 5. Success Factors for Collaboration Identified by Hocevar et al.¹³³

When comparing Hocevar et al’s findings to Bertram’s, similarities can be found. Bertram’s research involved surveying twenty-two public safety leaders integral to the successful security efforts during the Olympics. Of these twenty-two public officials, fourteen were with local law enforcement agencies, five were with state and three were with federal agencies.¹³⁴ The findings are illustrated in Figure 6.

¹³³ Ibid.

¹³⁴ Christopher Bertram, *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*, Thesis (Monterey: CHDS, 2008). 23

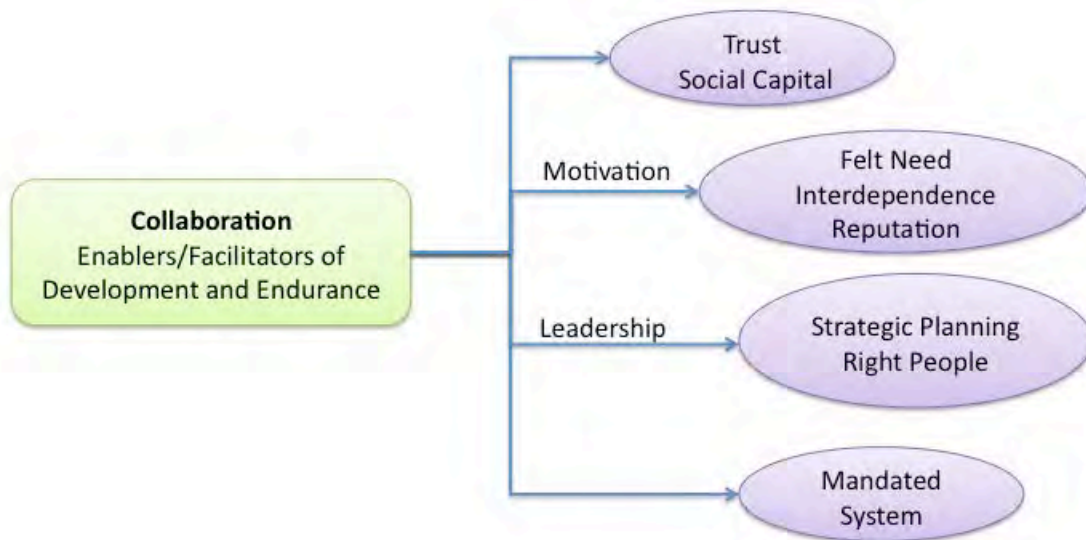


Figure 6. Enablers of Collaboration Endurance 2002 Olympics.¹³⁵

Parallels between Bertram’s work and Hocevar et al. are sound drivers for establishing a framework in the rebuilding of the Fire intelligence effort and the necessary relationships. Having the nexus established between national and local enablers for collaboration, can the component of trust be established as the pervasive element that drives the constructs identified by Bertram?

B. THE CONSTRUCTS OF TRUST

This section will analyze trust from a large-scale, organizational level, as well as evaluate the subtlety of how individuals interact with each other, to either create or dismantle trust.

1. Defining Trust

Defining trust can be challenging due to its subjective nature, but most know it when they feel it. Oftentimes, it is defined by using synonyms in order to build the nexus

¹³⁵ Ibid.

between trust and a more finite definition; however, some argue that technique obfuscates the true nature of trust.¹³⁶ Kee and Knox refer to trust in opposition to suspicion. They state, “Trust and suspicion appear to underlie many social interactions. Thus, it is not surprising that they occupy an important role in various efforts to account for the stability or instability of a wide variety of human relationships.”¹³⁷ Viewing trust as a reflection of predictability, it can foster or undermine security and stability of relationships. Mayer, Davis and Schoorman point out, however, “The need for trust only arises in a risky situation.”¹³⁸ Since risk can be subjective, it will be critical to recognize conditions within the program planning, implementation and sustainment phases that could be risky to the participants.

An early theorist, J.B. Rotter, defined trust as “an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon,”¹³⁹ However, Mayer et al. point out that Rotter’s definition “focuses on a generalized trust of others.”

Mayer proposes that trust is more the synergistic sum of its parts; as the variables change so does the overall sense of trusting. The constructs of Mayer et al’s organizational trust model include the trustor, the trustee, risk and context.¹⁴⁰ The trustor, being the one presumably doing the trusting; the trustee, being the one needing to be trusted; the risk is what’s at stake if things don’t go how the trustor envisions; and the context includes the variables or circumstances surrounding the situation. Variations between them will have an effect on the overall trust the trustor has in the trustee and the choices they’ll make.¹⁴¹

¹³⁶ Jennifer Moyer, *Trust and PR Practice*, January 14, 2011, <http://www.instituteforpr.org/trust-and-pr-practice/> (accessed June 26, 2014).

¹³⁷ Herbert W. Kee and Robert E. Knox, “Conceptual and Methodological Considerations in the Study of Trust and Suspicion,” *Journal of Conflict Resolution* 14, no. 3 (1970): 357–366.

¹³⁸ Roger C. Mayer, James H. Davis and F. David Schoorman, “An Integrative Model of Organizational Trust,” *The Academy of Management Review* 20, no. 3 (July 1995): 711.

¹³⁹ J. B. Rotter, “A new Scale for the Mearsuement of Interpersonal Trust,” *Journal of Personality* 35 (1967): 651.

¹⁴⁰ Roger C. Mayer, James H. Davis and F. David Schoorman, “An Integrative Model of Organizational Trust,” *The Academy of Management Review* 20, no. 3 (July 1995): 711.

¹⁴¹ *Ibid.*

Mayer et al. looked further into the characteristics of the trustee, or that group or individual seeking or needing to be trusted in a given relationship, i.e. to be trustworthy. The three key components of trustworthiness are identified as ability, benevolence and integrity.¹⁴² (Figure 7) Demonstrating the ability to perform a task, the benevolence to care about the good of the task and the integrity to complete the task as promised are positive influencers of trust.

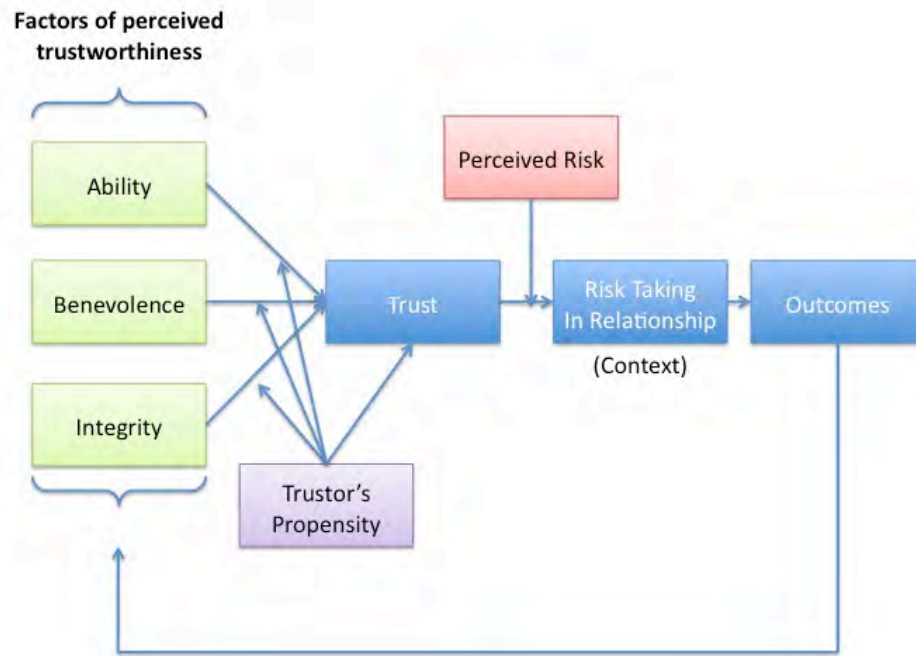


Figure 7. Mayer et al. Dyadic Organizational Trust Model.¹⁴³

Mayer et al. define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.”¹⁴⁴ This is consistent with Sharon Caudle’s assessment of cooperation. Caudle

¹⁴² Ibid.

¹⁴³ Roger C. Mayer, James H. Davis and f. David Schoorman, “An Integrative Model of Organizational Trust,” *The Academy of Management Review* (Academy of Management) 20, no. 3 (July 1995): 711.

¹⁴⁴ Ibid.

identifies a study that demonstrates how successful collaborations occur when all parties recognize the vulnerability and interdependence necessary for the partnership to function. Additionally, these partnerships will succeed when clear roles, responsibilities and procedures are established.¹⁴⁵ This also supports the idea that mission creep needs to be avoided with clear policies, procedures and memorandums of understanding (MOUs).

2. The Trustee, Benevolence and Trade

Trust can be fleeting depending on disruptive triggers. As the fire intelligence program is developed, the focus will be on the attributes the trustee contributes to developing trust. The goal will be to minimize vulnerability of all parties by fostering a high level of trust. Moyer states, “To overcome the anxiety created by putting ourselves in a vulnerable position, we cognitively, and affectively, evaluate the trustee on having certain qualities.” She goes on to cite the characteristics of trustworthiness as measured in previous research as, “benevolence, competence, honesty, integrity, reliability, predictability, good judgment, concern and openness.”¹⁴⁶

The role of benevolence in an individual and organization’s ability to build trust may be difficult to measure, but it could carry significant weight in the final outcome. Philosopher David Kelley’s defines benevolence as, “A commitment to achieving the values derivable from life with other people in society, by treating them as potential trading partners, recognizing their humanity, independence, and individuality, and the harmony between their interests and ours.”¹⁴⁷

The concept of trade extends past the boundaries of material goods. Non-material values can be traded, as well, demonstrated through friendships, exchange of knowledge, love and mutual protection.¹⁴⁸ According to Ayn Rand, philosopher and novelist, “Love,

¹⁴⁵ Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* (Naval Postgraduate School) 2, no. 3 (October 2006).

¹⁴⁶ Jennifer Moyer, *Trust and PR Practice*, January 14, 2011, <http://www.instituteforpr.org/trust-and-pr-practice/> (accessed June 26, 2014).

¹⁴⁷ Jeff Landauer and Joseph Rowlands, “Importance of Philosophy, Ethics_Benevolence,” *Importance of Philosophy*, 2001, http://www.importanceofphilosophy.com/Ethics_Benevolence.html (accessed Aug 20, 2014).

¹⁴⁸ Ibid.

friendship, respect, admiration, are the emotional response of one man to the virtues of another, the spiritual payment given in exchange for the personal, selfish pleasure which one man derives from the virtues of another man's character."¹⁴⁹ The Trader Principle is predicated on "attaining value from other people through mutually beneficial trade rather than force, fraud, or parasitism."¹⁵⁰

This is consistent with Caudle's assertion that highly functional partnerships are driven by mutual benefit.¹⁵¹ People are willing to enter into a trade agreement based on value added and the social capital carried by the other parties. In the case of the Fire intelligence program, demonstrating those attributes will equate to the willingness to genuinely participate and contribute value to the success of the effort.

3. Focusing on the How over the What

In the book, *From Good to Great*, Jim Collins wrote a chapter called, First Who...Then What.¹⁵² The significant finding of his research on the core of successful companies revealed what distinguishes successful organizations. He states, "The executives who ignited the transformations from good to great did not first figure out where to drive the bus and then get people to take it there. No, they first got the right people on the bus (and the wrong people off the bus) and then figured out where to drive it."¹⁵³

Placing the focus on the players above the finite mission demonstrates tremendous faith in all three constructs of trustworthiness within those individuals or organizations. Organizational trustworthiness is a function of the individuals within the organization.

¹⁴⁹ Jeff Landauer and Joseph Rowlands, "Importance of Philosophy, The Trader Principle," *Importance of Philosophy*, 2001, http://www.importanceofphilosophy.com/Ethics_TraderPrinciple.html (accessed August 23, 2014).

¹⁵⁰ Ibid.

¹⁵¹ Sharon Caudle, "Basic Practices Aiding High-Performance Homeland Security Regional Partnerships," *Homeland Security Affairs* (Naval Postgraduate School) 2, no. 3 (October 2006). 4.

¹⁵² Jim Collins, *Good To Great* (New York: HarperCollins Publishers. 2001). 41.

¹⁵³ Ibid.

Finding effective ways to assess trustworthiness as a measure of benevolence can be challenging. The Arbinger Institute (Arbinger), founded by C. Terry Warner, professor emeritus of philosophy at Brigham Young University, has developed tangible methods for individuals or groups to assess their effectiveness by focusing on the core of trust, specifically the basis for influence.

Considering that the recognition of the humanity of others is central to Kelly's definition of benevolence, how do we know when we are recognizing the humanity of those with whom we wish to enter into trade? Consistent with Collin's findings, Arbinger makes a clear distinction between the 'what' and the 'how' of doing business. The 'what' is usually the mechanics of a behavior or the method of accomplishing a task; much like the mechanics of setting up the framework for a fire department intelligence program. Yet the 'how' is what creates the distinction between programs that flourish versus those that limp toward failure.¹⁵⁴

The basis of the 'how' is seated in how we see other people and the impact that has on how we interact with them.¹⁵⁵ The principle is rooted in the philosopher Martin Buber's observation that in all relationships, we either see the people in our lives as a person, like us, or as an object, not like us.¹⁵⁶ When people are seen as objects, it can be in one of three ways; they are an obstruction, a vehicle, or are an irrelevance to us.¹⁵⁷ Regardless, the results are the same. They are treated differently than we would expect to be treated ourselves. When individuals sense disparity in a relationship, and their sense of value is compromised, their willingness to engage in fruitful dialogue diminishes. Once this happens, the ability to influence decreases, social capital diminishes, and the willingness to trade becomes less likely.

¹⁵⁴ The Arbinger Institute, *Leadership and Self Deception* (San Francisco: Berett-Koehler Publishers. 2010).

¹⁵⁵ The Arbinger Institute, *Arbinger History*, 2014, <http://arbinger.com/history/> (accessed August 23, 2014).

¹⁵⁶ Ibid.

¹⁵⁷ The Arbinger Institute, *The Anatomy of Peace; Resolving the Heart of Conflict* (San Francisco: Berrett-Koehler Publishers. 2006).

C. BUILDING THE TRUST NEXUS

Within the context of the relationships that have been identified as essential to the Fire intelligence mission model, what can be drawn from Bertram's findings and the trustee factors from the organizational trust model? The first step is to recognize that all components of Bertram's enablers to collaboration development and endurance are related to trust. The second step is to identify specific hurdles in the program development, implementation and sustainment phases and measure solutions with the constructs of the trust model. Focusing on social capital, felt need, strategic planning and mandated systems, the common thread of trust can be identified. These constructs can be analyzed individually while anticipating greater significance with the sum of the whole.

Burt concludes from his review of several interpretations, social capital is widely viewed as a metaphor "in which social structure is a kind of capital that can create for certain individuals or groups a competitive advantage in pursuing their ends. Better connected people enjoy higher returns."¹⁵⁸ Identifying trust as a component of social capital combined with the value added to pursuing ends afforded with social capital, it is clear that trust will impact this construct of developing collaborative efforts.

1. Felt Need

In the context of security in the Salt Lake area, *felt need* has faded since the Olympics ended. The influx of millions of visitors to the Salt Lake area disappeared within weeks of the closing ceremonies of the Olympics. Mike Stever, Emergency Management Director for Salt Lake City in 2004, describes the homeland security effort in Salt Lake as "similar in comparison to the preparation for the Olympics; however, you obviously can't put a fence around it."¹⁵⁹ Not being able to contain or define a threat in Utah as succinctly as during the Olympics presents a challenge to those wishing to advance prevention and preparation efforts. Scott Behunin, CHSD graduate, describes the Utah homeland security preparation effort in the post-Olympic environment: "It feels like

¹⁵⁸ Ronald S. Burt, "Structural Holes versus Network Closure as Social Capital," *Chicagobooth*, 2001, faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf (accessed July 10, 2013).

¹⁵⁹ Scott A. Behunin, *Homeland Security Advisory System*, Thesis, Center for Homeland Defense and Security, Naval Postgraduate School (Monterey: CHDS, 2004), 20.

we're preparing for the Olympics all over again, we just don't know when they are coming."¹⁶⁰

Not having a clear-cut, definitive threat or vulnerability like the Olympics does pose a challenge to the *felt need* of the Fire intelligence program development. Creating the sense of relevance in developing an intelligence program within the SLCFD requires trust in the need. Salt Lake City has several unique Homeland Security challenges. Even with a cursory assessment, the greater Salt Lake area can be identified as a target-rich environment for domestic or international terrorist attacks. We have significant infrastructure target potential, hazardous materials storage and use facilities and a high profile, globally recognized religious organization's headquarters within our response district.

Publications from the ALF have named Utah as a key target for mink farm attacks, as well.¹⁶¹ Utah is familiar with ALF activity as the group was responsible for the 1995 fire at Tandy Leather store in Salt Lake City.¹⁶² The area's potential vulnerabilities measured against previous experience with extreme behavior within the community, supports the development of an intelligence program within the SLCFD.

Building a plausible case for developing the program is founded in the ability to present compelling evidence to support *felt need*. Bertram's data showed that one-third of those interviewed reported "that trust cannot be developed in the middle of a crisis."¹⁶³ This point cannot be made too often.

2. Strategic Planning

When done collectively, *strategic planning* provides the opportunity for individual interests to be addressed within the scope of the larger project. Part of the

¹⁶⁰ Ibid.

¹⁶¹ Roxanne Vainuku, *KUTV.com*, June 18, 2013, http://www.kutv.com/news/top-stories/stories/vid_5368.shtml (accessed July 9, 2013).

¹⁶² Southern Poverty Law Center, *SPLC Souther Poverty Law Center*, Fall 2002, <http://www.splcenter.org/get-informed/intelligence-report/browse-all-issues/2002/fall/from-push-to-shove/eco-violence-the-rec>.

¹⁶³ Christopher Bertram, *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*, Thesis (Monterey: CHDS, 2008).

strategic planning process is to make sure the “right people” are in the right positions. One state law enforcement leader quoted in Bertram’s work stated, “One of the biggest things about the strategic plan, without the players in the same room it just would have been a free-for-all.”¹⁶⁴ This comment ties back to social capital. The working group has to have faith in the leadership and other participants in the program in order to trust the process. If the “players” are not part of *strategic planning*, the sense is that key decisions cannot be made and time would be wasted. These individuals had to be agencies leaders or trusted representatives for the given agencies involved in the effort. Those interviewed described how they selected their representatives. They focused on people with the ability to develop relationships and “build social capital and trust with their colleagues.”¹⁶⁵

Strategic planning builds trust in the system as a whole by bringing the right people together in the spirit of charting the course. It provides the fluidity that fosters perspective, innovation, and failure recognition and correction. Those involved can intervene early, avoiding commitment to poor decisions. Because *strategic planning* is a continuum, the process in itself allows for continual input and keeps the leadership group dynamic and adaptable.

3. Mandated Systems

Mandated systems demonstrate a commitment on the part of the administrators. Creating a mandate through administrative policy, procedures, ordinances or statutes creates a foundation of reliability. Without the support of all relevant administrators, programs can be stifled without financial support, human resources and other resources necessary for success. The integrity of the program is elevated with administrative support. Codifying the Fire intelligence program lends credibility to the effort and an anchor point to return to if efforts get off track. Bertram quotes one of his interviewees as saying, “I think at some point, of course, the system becomes more important than the relationships. We have to fall back to the system that we had in place when relationships

¹⁶⁴ Ibid. p 34

¹⁶⁵ Ibid. p 36

failed.”¹⁶⁶ In worst-case scenarios, when relationships became inhibitors to the mission, the network could still rely on the mandated structure and trust the sustainability of the system.

All of the components of Bertram’s analysis are human-driven elements of the Olympics security system. As long as people are involved, necessary or impacted, trust will be a key factor. Bellavita describes trust as, “the glue that holds special events coalitions together.”¹⁶⁷ Trust will be at the heart of the Fire intelligence program development, implementation and sustainment recommendations, forthcoming.

D. DRIVERS OF TRUST APPLIED TO POTENTIAL PROGRAM HURDLES

The previous analysis linked trust to all of the enabling or facilitating factors of development and endurance of collaboration, identified by Bertram. Focusing solely on trust as the predominant driver of collaboration, what is the applicability of ability, benevolence and integrity within the Fire intelligence mission network and the individual components? Can focusing on trust provide solutions to some of the anticipated hurdles to success of the Fire intelligence program?

When implementing a new program, obstacles must be anticipated. Three potential hurdles that will be analyzed against the trust model are financial constraints, concerns regarding public perception and civil liberties, and agency pushback and bias. Those marketing the program will need to leverage the components of the organizational trust model to garner support and counter the opposition to the proposed program. Remaining agile and willing to adapt as other unforeseen obstacles arise will also be critical to the success of the program development and sustainability.

¹⁶⁶ Christopher Bertram, *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*, Thesis (Monterey: CHDS, 2008).

¹⁶⁷ Chris Bellavita, “Changing Homeland Security: A Strategic Logic of Special Event Security,” *Homeland Security Affairs*, 2007 йил September, <http://www.hsaj.org/?fullarticle=3.3.1> (accessed 23-August, 2014).

1. Financial Constraints

Financial hurdles will be central to the City and State administrative bodies. Funding a new program or an effort to make an existing program more robust will need sound justification and the ability to demonstrate increased value on a number of fronts. Available funds will also be a factor. Competition for whatever funding is available will be fierce. The onus will be on the program developer to build trust in the program by reducing the vulnerability of the trustor, or the administrative bodies, in this case.

In chapter 3, the administrative drivers were identified as fiscal responsibility and added public value in policy development. Reducing vulnerability to the administrative bodies will come with demonstrating added public value relative to the cost. The higher the value-cost ratio, the more appealing the program will be. Providing implementation options will increase the probability of success. Implementation models will include variations in the program design that will present different funding options. Components of the existing program can be leveraged as assets such as the SIAC and the SLIC. The strategy will be to compel administrators to further develop those components as opposed to presenting the Fire intelligence component as a stand-alone.

Examples of how similar models have added public value within their community will be helpful. The benefits have been realized in examples such as the thwarting of the Times Square car bombing, where alert, well-trained firefighters recognized the signs of a potential car bomb prior to it causing mass destruction.¹⁶⁸ Intelligence provided to the fire department allows staff to focus resource and training on a particular area bolstering their ready state in an increase threat or hazard environment.¹⁶⁹

The exact configuration of the relationship the SLCFD will have with the fusion centers will depend on which models, if any, are most appealing to the funding bodies. For example, fire service personnel can serve as:

¹⁶⁸ Lewis Rice, "Raising the Alarm," *Harvard Kennedy School Magazine*, 2010.

¹⁶⁹ Daveed Gartenstein-Ross and Kyle Dabruzzo, "Firefighters' Developing Role in Counterterrorism," *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

- Fusion/Terrorism/Intelligence Liaison Officers (FLOs/TLOs/ILOs) to provide information directly to the fusion center and to facilitate vital information sharing between fire departments and fusion centers.
- Ad hoc fire, emergency medical service, rescue, hazardous materials, fire investigation, responder safety, and/or building/construction code SME to provide analytical support to fusion centers.
- Intelligence analysts embedded within fusion centers to provide a consistent emergency services analytical perspective to the fusion process.¹⁷⁰

Program developers must be prepared to support the viability and value of all proposed models. Citing the success within other municipalities, such as the Orange County Sheriff's office or the FDNY's preparedness center will provide reliable anchor points to the credibility of program development.

2. Public Perception

Building public trust will also be key. Failure to do so will not only impact the citizen node of the network, but could also lead to civil liberty violation lawsuits and decrease public trust in the administrative bodies. According to the American Civil Liberties Union, fusion centers "can employ officials from federal, state and local law enforcement and homeland security agencies, as well as other state and local government entities, the federal intelligence community, the military and even private companies, to spy on Americans in virtually complete secrecy."¹⁷¹ Civil liberty concerns must be addressed in order to maintain the integrity of not only the fire department, but also the fusion network as a whole. Training in the sensitivity of the fire department's involvement and access to information would be paramount. The potential legal pitfalls have been well vetted, as cited in Bryan Heirston's paper, *Firefighters and Information Sharing: Smart Practice or Bad Idea?* Heirston concludes,

¹⁷⁰ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

¹⁷¹ American Civil Liberties Union, "More About Fusion Centers," *ACLU.org*, 2013, <http://www.aclu.org/spy-files/more-about-fusion-centers> (accessed July 10, 2013).

legal and operational issues may be addressed by firefighters using standardized terrorist indicators while operating as sensors of opportunity during emergency and non-emergency operations, but fire personnel must not be specifically asked or assigned to gather information on suspected terrorists or terrorist activities.¹⁷²

Along the same line, it is crucial to stress the importance of preventing abuse of privilege in the spirit of gathering intelligence. This can include purposely exceeding the scope of an inspection by looking specifically for evidence of possible terrorism activity, violating an individual's civil liberties or taking sensitive information to the media when it is not appropriate.¹⁷³

3. Agency Bias and Possible Resistance to Fire Service Security Program

Agency bias, as described by Chief Joseph Pfeifer, is when organizations “Create a positive in-group bias in favor of those who are part of the same group and a negative out-group bias against those who are part of an alternate group.¹⁷⁴ Because members of a given group identify more closely with others inside the group, the tendency is to share information within that closed system and withhold information from outsiders. The interests of the individuals within the group are typically driven by the similar interest of the organization. This closed circuitry of information sharing limits the imagination and fails to allow for other possibilities that would come from an outside perspective.¹⁷⁵ As Thomas Schelling astutely pointed out, “One thing a person cannot do, no matter how rigorous his analysis, or heroic his imagination, is to draw up a list of things that would never occur to him.”¹⁷⁶

¹⁷² Bryan Heirston, “Firefighters and Information Sharing: Smart Practice or Bad Idea?,” *Homeland Security Affairs* (Naval Postgraduate School) VI, no. 2 (May 2010).

¹⁷³ Daveed Gartenstein-Ross and Kyle Dabruzzi, “Firefighters’ Developing Role in Counterterrorism,” *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

¹⁷⁴ Joseph Pfeifer, “Network Fusion: Information and Intelligence Sharing for a Networked World,” *HSAJ.ORG, HOMELAND SECURITY AFFAIRS*, 2012 October, <http://www.hsaj.org/?fullarticle=8.1.17> (accessed 8-July, 2013).

¹⁷⁵ *Ibid.*

¹⁷⁶ <http://www.archives.gov/era/acera/presentations/mmowgli.pdf>.

Agency bias can also present as a sense of superiority. As people's confidence in their skills and that of their agency increase, it becomes easier to discredit an outside agency's ability to perform within the same arena. The problem is exacerbated if the outside agency suffers a misstep. An example would be the mishandling of sensitive information at the hands of fire department personnel. Jeff Carr, State Deputy Director of Homeland Security, spoke to agency bias when sharing a story about sensitive documents that were leaked to the media by the Salt Lake County Fire Department.¹⁷⁷ There could have been several explanations for the leak, but the reality is, those types of experiences create a history that complicates networking agencies together.

Counterterrorism efforts and intelligence gathering have traditionally been the role of law enforcement. As reported in the Manhattan Institute for Policy Research, "a role in intelligence-gathering beyond identifying actual and potential hazards would represent an expansion of fire departments' traditional mission."¹⁷⁸ Building trust in the program will be predicated on value added and assurances that we are not trying to turn firefighters into police officers and visa versa. Looking beyond firefighter competencies to the willingness of department members to participate will require value and assurances that are tangible. Firefighters and law enforcement personnel must see value in what they're doing. Efforts to foster full buy-in will start by leveraging existing SLCFD/PD program development efforts, drawing on existing successes within the Fire intelligence model on a national level, and demonstrating value added to community, as well as to the individual firefighters and their peers.

It is critical that members from both agencies feel confident that the program is not trying to create a hybrid position of police and fire within the ranks. Sheriff Jim Winder stressed the importance of "identifying and maintaining the roles and responsibilities of each member within the model. The goal should not be to create the

¹⁷⁷ Major Jeff Carr, interview by Martha Ellis, *State Deputy Homeland Security Advisor* (July 9, 2013).

¹⁷⁸ Daveed Gartenstein-Ross and Kyle Dabruzzo, "Firefighters' Developing Role in Counterterrorism," *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

labradoodle of police and fire.”¹⁷⁹ This can be accomplished by maintaining a clear distinction in responsibilities through policy and procedure development to solidify the distinction in roles. Identifying areas where responsibilities may dovetail will also be important.

As individuals are asked to change or accept responsibilities that are contrary to what they are accustomed to, recognition of that change acknowledges a perceived sacrifice. Heifetz and Linsky address this issue and state, “It’s not enough to point to a hopeful future. Make explicit your realization that the change you are asking them to make is difficult, and that what you are asking them to give up has real value.”¹⁸⁰ Leadership will be critical to reassuring all sworn public safety personnel that the change in direction will be well thought out and thoughtfully implemented. Participants, from the highest level of administration to the line firefighter, should have a general understanding of the common vision and purpose of this program. Leadership, as the catalyst to change, must avoid becoming a lightning rod for conflict by continually making the vision tangible, valuable and attainable.¹⁸¹

Utilizing the SIAC will be key to the success of this effort. As explained by Battalion Chief Joseph Pfeifer of FDNY,

Network fusion is an information sharing system that fuses information and intelligence from multiple sources to allow decision makers to better adapt to a changing threat environment. It leverages technology to improve awareness and collaboration across different disciplines by connecting voice, video, and data communications at classified and unclassified levels.¹⁸²

The true purpose of developing this plan is to show value in fully integrating the Utah fire service into a vast, national network of information sharing with the hope of mitigating potential hazards and increasing public safety for the citizens and the public

¹⁷⁹ Jim Winder, interview by Martha Ellis, *Sheriff, Salt Lake County* (May 14, 2014).

¹⁸⁰ Ronald A Heifetz and Linsky Marty, *Leadership on the Line* (Boston: Harvard Business Review Press, 2002). 94

¹⁸¹ *Ibid.* 120.

¹⁸² Joseph Pfeifer, “Homeland Security Affairs Journal,” *HSAJ.ORG*, HOMELAND SECURITY AFFAIRS, October 2012, <http://www.hsaj.org/?fullarticle=8.1.17> (accessed July 8, 2013).

servant. Creating this strategy memo lays the foundation for securing the necessary funding to advance the effort.

Broadening the perception of involvement in a program of this nature can be looked at in the context of social capital.¹⁸³ Burt states, “Society can be viewed as a market in which people exchange all variety of goods and ideas in pursuit of their interest.” As connections and ties improve or strengthen there is an increased probability of successful exchange. Being part of this system or network increases the value of the individual based on connectivity.¹⁸⁴ Using information as a commodity, increasing the number of ties between individuals or groups will increase the chances of identifying new information.¹⁸⁵ Diversifying the goods available for exchange can also increase the odds of sustainability and value. This concept is not new to the firefighters as viewed from the standpoint of “diversify or become extinct.” When the effectiveness of fire prevention efforts through enforcement of the building and fire code began to be realized, the need to diversify into emergency medical services became evident, and the fire service moved into a new realm of social capital. Today, 80% of the calls SLCFD respond to are for medical purposes.¹⁸⁶

The social capital metaphor also demonstrates the reciprocal nature of the intelligence network. The intent is not for information to move solely away from firefighters. Firefighters will fulfill the role of intelligence consumers, collaborators and contributors.¹⁸⁷ Intelligence provided to the fire departments can allow them to focus resource and training on a particular area bolstering their ready state in an increased

¹⁸³ Ronald S. Burt, “Structural Holes versus Network Closure as Social Capital,” *Chicagobooth*, 2001, faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf (accessed July 10, 2013).

¹⁸⁴ *Ibid.* 1,2.

¹⁸⁵ Joseph Pfeifer, “Homeland Security Affairs Journal,” *HSAJ.ORG*, HOMELAND SECURITY AFFAIRS, October 2012, <http://www.hsaj.org/?fullarticle=8.1.17> (accessed July 8, 2013).

¹⁸⁶ Salt Lake City Fire Department, *Salt Lake City Fire Department Annual Report 2012*, Statistical (SLC: Salt Lake City Fire Department, 2012).

¹⁸⁷ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

threat or hazard environment.¹⁸⁸ The Times Square car bombing attempt is a good example of when firefighters mitigated a potential hazard before it could do further harm to the citizens and response crews.¹⁸⁹

Demonstrations of added value may be leveraged to alleviate the trepidation police and fire will initially feel toward the program. It may be equally as important to take advantage of previous and current collaboration success police and fire have experienced in the past. An example would be the active shooter protocol training and the fire department's involvement with medic support for the SWAT team. Both of these programs have created productive ties between police and fire that could be further utilized to promote the intelligence program.

Collectively, the anticipated hurdles can be addressed by minimizing the vulnerability of the trustor. Tactics used by trustees to garner the trust and support needed to advance causes go back to the organizational trust model and Bertram's findings. It will be critical to work from a place of integrity, with the focus on the greater good of the program. Systematically addressing concerns of the individual groups can only be accomplished if open and candid dialogue is allowed and encouraged. The need for greater fire department involvement in the national security effort is made clear regularly in current federal agency reports. Recent state level ILO training in Utah is also a good indicator that the environment is ready to accept a viable model for the development of a fire intelligence program.¹⁹⁰¹⁹¹

In her NPS Masters Thesis, *Terrorism Awareness and Education as a Prevention Strategy for First Responders*, Alicia Welch cites Malcolm Nance, author of *The Terrorist Recognition Handbook*, as stating, "The single best method of defeating terrorism is educating our first responders, law enforcement personnel, military and

¹⁸⁸ Daveed Gartenstein-Ross and Kyle Dabruzzi, "Firefighters' Developing Role in Counterterrorism," Policing Terrorism Report no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

¹⁸⁹ Lewis Rice, "Raising the Alarm," *Harvard Kennedy School Magazine*, 2010.

¹⁹⁰ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

¹⁹¹ First annual Utah State sponsored ILO training. Park City, UT. May 14, 15, 2014

security professionals (as well as the public) how to recognize the roles and motivations of individual terrorists, their cell systems, and the street-level mechanics of terrorist operations.”¹⁹² Why? Because the more eyes you have trained to the awareness level, the better the odds of catching something pre-catastrophe. This concept has been embraced with the Department of Homeland Security’s “If You See Something, Say Something” campaign.¹⁹³

E. CONCLUSION

Weighing Bertram’s findings against the Organizational Trust Model developed by Mayer et al. identified trust as a key element to developing, implementing and sustaining the Fire intelligence program in Salt Lake City. Mayer et al. provide a clear framework for organizational trust that can help program developers recognize their role as the trustee within the model. The influence the trustee has on trust between participants can foster or destroy essential relationships necessary for the Fire intelligence program’s success. By utilizing models that exemplify the constructs of the trustee’s impact on trust, steps can be taken to develop the sense of integrity and ability in the program and its leadership, thereby minimizing perceived vulnerability on the part of the participants.

Participants must also understand the role they each play in developing the program and the relationships. Successful relationships are central to successful collaboration, and each participant is accountable. Personal responsibility for how we view others and how that impacts the effectiveness of our own efforts must remain in the forefront of program management.

Mayer et al’s organization model operates like a dynamic system. When a trustee is seeking to be trusted, all components must be considered. There will be times when significant effort will be needed to foster the trust of the trustor, depending on how vulnerable the trustor feels in the given circumstances.

¹⁹² Alicia L. Welch, “Terrorism awareness and Education as A Prevention Strategy for First Responders,” Thesis, Naval Postgraduate School (Monterey: NPS, 2006 March), 76.

¹⁹³ Department of Homeland Security, *See Something, Say Something*, 2013, <http://www.dhs.gov/if-you-see-something-say-something-campaign> (accessed July 9, 2013).

V. LEVERAGING THE SUCCESS OF OTHER MODELS

Analyzing existing programs that have attained sustainment could be helpful in garnering support during the development, implementation and sustainment phases. There are several fire departments in the U.S. that are successfully participating in municipal or state fusion efforts, in addition to fire department involvement in the British program CONTEST. Two successful models in the U.S. were developed by the FDNY and the Orange County Sheriff's office in California. The organizational structures differ between the two. FDNY is more fire-centric, being driven by fire department members, while Orange County is more law enforcement-centric, with the sheriff's office inviting fire into the operation. Both are good working models to draw from regardless of the driving forces behind program development.

A. FDNY FIRE-CENTRIC MODEL

Convinced that the fire service could play an integral role in improving how first responders utilize and share information with other agencies, Battalion Chief Joseph Pfeifer of FDNY founded the Center for Terrorism and Disaster Preparedness (CTDP).¹⁹⁴ Recognizing the need for fire department collaboration with other agencies, Chief Pfeifer has led the country's emergency response community to a service model paradigm shift. The CTDP efforts focus on research, training, relationships, and the weekly intelligence newsletter, Watchline, all of which have been acknowledged as adding value within the national security effort.¹⁹⁵¹⁹⁶ According to Chief Pfeifer, "FDNY's Center for Terrorism and Disaster Preparedness engages public and private sector organizations in preparedness efforts by forming networks for information sharing, setting conditions for collaboration and partnering with others for coordination."¹⁹⁷

¹⁹⁴ Lewis Rice, "Raising the Alarm," *Harvard Kennedy School Magazine*, 2010.

¹⁹⁵ Ibid.

¹⁹⁶ Naval Postgraduate School Center for Homeland Security and Defense, *FDNY and CHDS: More than a Decade of Homeland Security Education Partnership*, Statistical, Center for Homeland Defense and Security, Naval Postgraduate School (Monterey: CHDS, 2014).

¹⁹⁷ Assistant Chief Joseph W. Pfeifer, interview by Martha Ellis, *FDNY* (August 27, 2014).

One of the primary areas of research has been on the use of fire as a weapon and the related tactics necessary to prevent and mitigate the subsequent emergency. FDNY has been the leader in this research and has driven the paradigm shift for first responders to rethink how they respond to fires. The term *Mumbai-style* attack describes the multi-front attacks executed in Mumbai. Using fire as distracter, enhancer or a mechanism to cover a crime is not new. When considering fire's use within the context of terrorism, however, a layer of complexity is added to what are already considered large-scale events. Attention must be given to the chance a fire was intentionally set and related to another attack method, focusing to developing strategies and tactics to combat the potential hazards.¹⁹⁸The training that accompanies the research adds immediate and relevant value to the responding firefighters.

Heightening the awareness of the response crews to trends or intelligence on specific threats allows focused training, appropriate resource allocation, targeted safety protocols and standard operating procedures that play a role in risk management.¹⁹⁹ The most well publicized example was the response and actions taken by FDNY and NYPD to the Times Square car-bombing attempt. Both teams were aware of the warning signs present at the scene, worked together to protect the proximal population and mitigated the hazard with nominal negative impact to the community because of specific training they had received on responding to car bombs.²⁰⁰ Leadership also plays a role in successfully mitigating hazards or large-scale incidents. Chief Pfeifer describes crisis leadership as “the art of generating trust so others can adapt to extreme events.”

Developing the relationships and response plans to successfully mitigate threats or disasters, is central to the Fire intelligence mission model. Chief Pfeifer and his CTPD team have developed relationships within the New York City municipal services, and reached beyond the boundaries of the City to state and federal agencies. Both are necessary to assure a coordinated response to potential Mumbai-style attacks.

¹⁹⁸ Joseph Pfeifer, “Fire as a Weapon in Terrorist Attacks,” *Combating Terrorism Center*, West Point, July 23, 2013, <https://www.ctc.usma.edu/posts/fire-as-a-weapon-in-terrorist-attacks> (accessed August 2, 2014).

¹⁹⁹ Ibid.

²⁰⁰ Lewis Rice, “Raising the Alarm,” *Harvard Kennedy School Magazine*, 2010.

Pfeifer stated, “Building a sustainable platform for collaboration requires a level of trust among agencies.”²⁰¹ He has accomplished this through inclusion, research, analysis and exercise design that adds value to those participating.²⁰² An example was a partnership formed with the FBI’s NYC SWAT team. The goal was to develop a response plan specific to the multi-front attack. Dialogue led to tabletop exercises, which developed into full-scale exercises. In June 2012, the Interagency Tactical Response Model was released as a result of that collaborative effort.

CTPD also sends officers to the National Counterterrorism Center (NCTC) for one-year assignments. This is mutually beneficial as the officers receive current intelligence that can be shared with the CTPD and the NCTC gains perspective on information that can be analyzed from the fire point of view. These are a few examples of the value-driven partnerships that have strengthened the impact and influence of the FDNY counterterrorism effort.

Chief Pfeifer has also been pivotal in solidifying the relationship the FDNY has with the Center for Homeland Defense and Security (CHDS), a DHS-sponsored graduate and executive leadership education center. In February of 2014, the CHDS published a report showcasing the relationship between the center and the FDNY. Referencing the FDNY intelligence newsletter, the report states,

In February 2008, [FDNY] issued first edition of FDNY Watchline, a weekly intelligence newsletter. Today, as the flagship intelligence product of the FDNY, it is sent via email and posted on several homeland portals, reaching an estimated 40,000 responders and homeland security partners representing more than 100 agencies.²⁰³

The publication addresses fire service-relevant information like the potential use of wildland fire as a terrorist tactic. The FDNY model has paved the way for more effective utilization of emergency responders in the arena of counterterrorism nationwide.

²⁰¹ Assistant Chief Joseph W. Pfeifer, interview by Martha Ellis, *FDNY* (August 27, 2014).

²⁰² Ibid

²⁰³ Naval Postgraduate School Center for Homeland Security and Defense, *FDNY and CHDS: More than a Decade of Homeland Security Education Partnership*, Monterey, CA: CHDS, 2014).

Chief Pfeifer's focus on research, training, formal and informal relationships, and relevant and timely bulletins has led to the credibility of the CTPD.

Chief Pfeifer's focus on trust and its importance to successful collaboration is clear when he spoke on developing trust between all participating agencies. From the beginning, fostering trust was a consideration, demonstrated by FDNY decision to "create a Center, instead of a Bureau for preparedness," to demonstrate inclusiveness.²⁰⁴

B. ORANGE COUNTY SHERIFF'S LAW ENFORCEMENT-CENTRIC MODEL

The Orange County Sheriff's Office runs the Orange County Intelligence Assessment Center (OCIAAC). According to its web page, "The purpose of this program is to ensure that fire department first responders throughout the urban area maintain a real-time awareness of terrorist trends, tactics, and procedures."²⁰⁵

Captain Nick Colonelli, Anaheim Fire & Rescue, OCIAAC, is the coordinator for the Terrorism Liaison Officer (TLO) program. In trying to get the program started, he states, "Once it was explained to them [firefighters] the value of having them trained in observing suspicious behavior and the amount of work that went into the tips they submitted, the program gained speed."²⁰⁶

This is a critical point. As the program develops and moves into implementation that the firefighters will need to feel the work they are doing is valuable and is serving a greater purpose. Seeing the information the Orange County firefighters gathered being well-managed and eventually converted into intelligence bulletins that benefitted the greater firefighting community added validity and momentum to the OCIAAC program.

The momentum of the program is described further by Colonelli: "After a hundred or so firefighters had the training and were receiving Intelligence Bulletins and related products, word spread much faster and our growth has remained relatively

²⁰⁴ Assistant Chief Joseph W. Pfeifer, interview by Martha Ellis, *FDNY* (August 27, 2014).

²⁰⁵ Orange County Sheriff's Department, *Orange County Intelligence Assessment Center*, 2013, <http://ocsd.org/divisions/fieldops/security/iac> (accessed June 25, 2013).

²⁰⁶ Captain Nick Colonelli, interview by Martha Ellis, *TLO Coordinator, Orange County Intelligence Assessment Center* (July 16, 2013).

consistent, adding around 50 each quarter.”²⁰⁷ The leadership within this organization continues to develop social capital within the firefighter ranks. As the momentum grows, so does the credibility and confidence in the program.

Colonelli describes the current state of the program in a recent interview:

The continued training opportunities that we bring to the AOR [area of responsibility] are open to all first responders, and although the majority are Law Enforcement focused trainings, we allow our Fire Service TLOs to attend as well, which helps in building relationships across disciplines, and encourages Fire Service TLOs to maintain engagement with the Fusion Center. To date, since we stood up the fusion center in 2007, we have trained 832 Fire Service personnel as Terrorism Liaison Officers. Regarding bulletins, our center produces, on average, three products a month, which are distributed to our entire TLO network of over 3000 local first responders.²⁰⁸

The OCIAC has developed a program that has demonstrated value to the community and the participating firefighters. The inertia demonstrated through the increased interest in the program is representative of the social capital program leadership it has earned and the collaboration endurance that follows. Leadership has been able to show added value through relevant information bulletins and training. This is a good example of a law enforcement-centric model that demonstrated key elements of development and sustainment of trust among the key stakeholders.

As the growth of the OCIAC’s social capital is demonstrated through increased interest and participation, the integrity, ability and commitment of the OCIAC leadership is validated. The synergy of increasing participation in conjunction with the increased quality of the intelligence product is also a model for a desired outcome.

C. GREAT BRITAIN’S CONTEST MODEL

CONTEST, the counterterrorism program in Great Britain, is another resource for program development that could demonstrate added value to the community and the IC network in the US. The UK’s national counterterrorism (CT) policy, CONTEST, is

²⁰⁷ Ibid.

²⁰⁸ Captain Nick Colonelli, interview by Martha Ellis, *TLO Coordinator, Orange County Intelligence Assessment Center* (July 15, 2014).

comprised of four key objectives: Prevent; Protect; Prepare and Pursue.²⁰⁹ Four specific work groups or organizations have been developed to support the mission, as well. The Research Information Communication Unit (RICU), The Centre for the Protection of National Infrastructure (CPNI), The National Counter Terrorism Security Office (NaCTSO), and the Joint Terrorism Analysis Centre (JTAC).²¹⁰ Applicable components of this program to the Fire intelligence program are within the Prevent, Protect and Prepare branches of the program.

1. Prevent

Inclusiveness is at the core of prevention in this model. The Prevent component of the UK CT policy emphasizes the importance of effective communication and inclusion to attempt to stave off opportunities for radicalization and homegrown terrorism or violence. The goals, as described in an online lecture dated January 28, 2014, Counter-terrorism in the UK Module II – Policy Response, are:

- Communicate with people not just their faith.
- Support common positions/purpose and denounce violence.
- Counter misperceptions of “Islamophobic” foreign policy.
- Utilize the RICU to promote the concepts of CONTEST.²¹¹

By utilizing the RICU, which was designed to clearly communicate British foreign policy concepts across government agencies and the Muslim community, in addition to countering the assertions made by extremist groups and al-Qaida sympathizers from within and out of the UK, the relationships become mutually beneficial, inclusive and sustainable to all parties concerned. Getting the messages out quickly, accurately and in the spirit of exposing half-truths and misinterpretations, supports the goal of staying ahead of the radicalization effort of impressionable Muslims.

²⁰⁹ Paul Smith, Presentation CHDS, *Counter Terrorism Contingency Planning* (January 2014).

²¹⁰ Ibid.

²¹¹ Paul Smith, *CHDS Moodle Learning Platform*, January 28, 2014, https://www.chds.us/coursefiles/comp/lectures/comp_CT_in_the_UK_mod02_ss/player.html (accessed February 20, 2014).

One of the key lessons learned from the UK model of *Prevent* is the corrections they've made in their own approach to the prevent effort. The job of "prevent" initially fell onto the police. Because of the tremendous sense of urgency, the method was more aggressive than effective. The most critical aspect of Prevent is the intent at the core of the effort. The goal is to reach beyond solely benefiting law enforcement or fire. The relationship has to be mutually beneficial to all parties involved. Developing these relationships is universal and has great potential in the SLCFD.

Currently, the SLCFD does minimal community outreach. Most community interaction, beyond the emergency response, stems from public education efforts in CPR, Fire Prevention and public relations events. Salt Lake City has an Office of Diversity and Human Rights, yet there is no involvement with the Office at this time. The SLC Police Department (SLCPD) has the Homeless Outreach Service Team or HOST program, which is a community outreach program designed to support the organizations that provide opportunities and services to Salt Lake City's homeless population. The SLCFD doesn't have any involvement in this program, as well.

The four goals of the Prevent stand of the UK CONTEST policy can easily be applied to any population, in an effort of avoid oppression and exclusion and the negative consequences that can follow suit.

2. Protect

Protection encompasses protecting and fortifying everything from critical infrastructure, border security and mass gathering places of assembly.²¹² The history with the IRA and the risks that accompanied the peak of that era drove much of the critical infrastructure protection planning. CPNI has developed a network of Sector Information Exchanges, which include representation from private and public sectors.²¹³ These relationships and communication pathways are vital in the dissemination and receipt of valuable information related to infrastructure protection.

²¹² Her Majesty's Government, *CONTEST: The United Kingdom's Strategy for Countering Terrorism, Annual Report* (London: Crown, 2013).

²¹³ Ibid.

Managing sensitive information, however, can be challenging. The CPNI system incorporates a ‘stoplight’ rating system to the sensitivity of the materials necessary to share with sector leaders.

- Red messages are those intended for the sector leaders only. They may not be shared with anyone and may only be used by the sector leaders in their decision-making processes.
- Yellow messages are those that can be shared on a need-to-know basis. If there are other decision-making members of the sector leader’s team who would benefit from the yellow messages, the sector leader can share the information, although judiciously.
- Green messages are those that can be widely shared among staff and employees. The stakes are high for those granted specific access to the various tiers of messaging. Those caught releasing messages outside of the scope of their authority will lose all access privileges to the stoplight information-sharing program.²¹⁴

The NaCTSO, the police-run counter terrorism security office, operates within the CPNI. This office is responsible for the Counter Terrorism Security Advisory Networks. Some of the notable work the office does involves tabletop exercises with local business owners to help them identify their vulnerabilities and responsibilities in an emergency response. The NaCTSO has also produced several useful documents and tools for business owners and local agencies to use in protecting crowded places, hazardous sites and assisting the CPNI in the protection of the nation’s critical infrastructure.²¹⁵

Additional *Protect* models include efforts like that of the Shropshire Fire Department. Utilizing online tools, they are able to enlist the participation of all members of the community in the fire prevention effort. The program, called ‘Operational Intelligence,’ solicits information from the community via an email portal on the brigade’s web page. Concerns, including undocumented construction, suspicious activity and other non-emergent issues are directly routed to the Shropshire Operational Intelligence Team. The fire department then has documentation of the event and can

²¹⁴ Paul Smith, interview by Presentation CHDS, *Counter Terrorism Contingency Planning* (January 2014).

²¹⁵ National Counter Terrorism Security Office, *NATSO*, 2024, <http://www.nactso.gov.uk/our-services> (accessed March 9, 2014).

follow up on the complaints, potentially intercepting illegal activity that would have gone undetected without the assistance of the citizen.

The fire departments throughout the UK are also involved in the Sub Regional and Local Resilience Forums. These forums are designed to give emergency services, local authorities, government agencies, the health department, public utilities, voluntary organizations, businesses and the military an opportunity to share information and ideas. Forum participants are also encouraged to plan and organize local activities, including training and exercising, in support of the regional emergency plan.

The UK concepts are driven by the desire to develop trust and inclusion within all of the communities within the districts being served. As the trust, sense of belonging and community are strengthened, the end result is inset cultures and native residents of the community becoming more willing to work toward preserving the peace and prosperity of the community as a whole.

Information sharing is key to the success of the *Protect* strand of CONTEST. The integration of the agencies through continued reaffirmation of common purpose drives the multidirectional flow of information in the UK. There are several areas within the current SLCFD model where information sharing could be enhanced by integrating components of the UK model. Salt Lake City Local Emergency Planning Committee (LEPC) was created under the guidelines of the Emergency Planning and Community Right to Know Act (EPCRA). The idea is to mobilize local government officials, businesses, and other citizens to plan ahead for possible chemical accidents in their communities.”²¹⁶ The LEPC is central to sharing information regarding the storage, use, and transportation of hazardous materials in the City. Further enhancing the quality of information sharing by incorporating the ‘stop light’ method of rating the messages from the city to industry leaders could be very helpful in taking the LEPC platform to the next level.

²¹⁶ Linda-Jo Schierow, *The Emergency Planning and Community Right to Know Act (EPCRA): A Summary* (Washington, DC: Congressional Research Service, 2012).

SLCFD also needs to provide a better, technologically driven method for the citizens to submit information on non-emergent concerns or notifications. Moving to a more collective and organized methodology, such as that of the Shropshire Fire and Rescue service could provide a more succinct way of soliciting and managing input from the citizens.

3. Prepare

Key components of the *Prepare* strand of the CONTEST policy are developing relationships between key response agencies with counter terrorism roles and responsibilities, continuing training for response personnel and developing response policies and procedures. In doing so the UK will build its response capabilities, improve preparedness for assets identified as ‘high impact risks,’ improve collaborative emergency response, and realize improved communication and information sharing related to terrorist attacks.²¹⁷ The Joint Emergency Services Interoperability Program trains frontline staff on preparing for large-scale, high impact events. Developing the continuity within operations and communications is critical to the successful outcome of a catastrophic emergency.²¹⁸ The JTAC is the conduit for intelligence analysis, dissemination and the terrorism alert system and also a component of Prepare and Pursue. Collecting information, putting it into the right hands for analysis and assuring proper and effective dissemination are key components to connecting the dots and assuring all parties are prepared for the potential outcomes.

The UK has not only successfully bridged the gap between various intelligence and law enforcement agencies and the courts; it has also effectively invited the fire and emergency services into its model. Because Salt Lake City’s FD and PD respond to a number of calls in tandem, either fire supporting PD or visa versa, it makes sense to prepare in sync. As stated earlier, Salt Lake City has had four mass casualty active-shooter incidences in the past 14 years. Traffic accident, working fire, drug overdose and

²¹⁷ Her Majesty’s Government, *CONTEST: The United Kingdom’s Strategy for Countering Terrorism, Annual Report* (London: Crown, 2013).

²¹⁸ *Ibid.*

psychological disorder calls all receive a collective FD/PD response. Successful development of relationships between key response agencies with counter terrorism roles and responsibilities starts with the trust. In Salt Lake City, personnel on the street have a strong working relationship. It is up to leaderships to drive the development of training exercises and joint response policies and procedures to further forge the relationship and advance the level of preparation at the street level.

THIS PAGE INTENTIONALLY LEFT BLANK

VI. FINDINGS, RECOMMENDATIONS AND CONCLUSION

A. FINDINGS

Creating a plan for developing, implementing and sustaining an intelligence program for the Salt Lake City Fire Department breaks down into three steps: establish or identify a need, define key relationships within the Fire intelligence mission network, and determine if trust-based program development can optimize collaboration within the network at all stages of program development.

1. Is There a Need?

The primary case study is the security success of the 2002 Olympics. Focusing on the Fire Department's involvement and the achieved desired outcome of the international event, the case is made that the successful outcome was due to all components of the Olympic collaboration network.²¹⁹ The research began with a review of operational plans for the Olympics to assess Fire's role; government, scholarly and popular literature that discussed the mechanics of implementing a Fire intelligence program in general; and relevant literature that evaluated the basic concept and value added of fire service involvement in the intelligence effort, both from the support and the opposition. While DHS, the International Association of Fire Chiefs and the International Association of Fire Fighters support the concept, others dispute the validity and legality of fire service involvement in the intelligence effort.

The opposition comes from two primary positions; the firefighter's themselves and the civil rights, or citizen advocacy groups representing them. Firefighters leveraging their access into homes and businesses of the citizens, in the spirit of collecting information concerns these groups, and rightfully so. The perception that firefighters are conducting surveillance or spying on the citizens jeopardizes citizen's rights to privacy;²²⁰ and an extreme interpretation or a poorly implemented program could appear

²¹⁹ D, Jensen,. (March 9 2002). "Oly Security Effort 'Model for Nation'". *Deseret News*.

²²⁰ American Civil Liberties Union. (2013). *More About Fusion Centers*. Retrieved July 10, 2013 from ACLU.org: <http://www.aclu.org/spy-files/more-about-fusion-centers>

that way. This revelation will be a strong driver to greater understanding in the laws and the scope and implementation of the program in an effort to build and sustain the trust of these citizens' rights groups.

Firefighters tend to be more concerned with their safety and the preservation of their reputations. Firefighters are reluctant to engage in any activity that could be perceived as law enforcement because they do not want to be mistaken for the police²²¹ – that could make them more vulnerable out on the streets. Firefighters are not typically armed, like law enforcement officers are. Illegal activity openly revealed by the fire department IC effort could have dire consequences if terrorists, gangs, or any other groups are involved in illegal behavior or engaged in retaliatory actions. This can manifest in several different ways, but primarily aggression toward the fire department or unwillingness to call if there is an emergency would be considered negative impacts of a poorly implemented program.

Those in favor of the concept identify the role, sheer number and existing relationships of the firefighters as prime reasons why they are tailor-made for this expanded role into the IC.²²² As counterterrorism efforts move into the community, first responders take on more responsibility in protecting their communities. Prevention, protection and response all fall under the job description of firefighters. The core skill sets firefighters develop throughout their careers provide a unique perspective into preventing terrorist or illegal activity in their communities. Enhanced training is available, focusing specifically on indicators of activity that could be considered suspicious and potentially malicious, and what to do in the event firefighters come across such activities.

It is important to identify whether there's a need for a Fire intelligence program within Salt Lake City, as well. Considering components of the City and the valley's infrastructure, in addition to potential within private industry and the University of Utah, and the Church of Jesus Christ of the Latter-day Saints, vulnerabilities were identified

²²¹ Dabruzzi, D. G. (2008 August). Firefighters' Developing Role in Counterterrorism. *Manhattan Institute for Policy Research*.

²²² Ibid.

that, if compromised could have catastrophic impact on the community. Some of those include major railways, hundreds of facilities housing hazardous materials and a nuclear reactor, housed at the University of Utah.

Salt Lake City also has had several fatal active shooter incidents, intentionally set church fires and ALF activity that resulted in a fire at a local Tandy Leather store. Recent bulletins distributed by the ALF discussed continued activity in the urban and rural areas within the State of Utah. This history supports the need within the community for a more comprehensive intelligence effort by all first responders.

The conflicting perspectives of the supporters and the opponents create a tension that provides an opportunity for analysis. Could these stresses be addressed through thoughtful, trusted process and relationships? The collaboration constructs and trust, essential to the process, were analyzed in order to identify solutions to potential conflict within the network.

2. Who are the Key Stakeholders?

When developing a Fire intelligence program, identifying the key stakeholders that will be necessary for success, is paramount. Advocate and adversary alike, must be identified early into the program development process. Part of that procedure happened when evaluating the need, as discussed in the pro and con literature.

Further assessment into all necessary components of the Salt Lake City Fire intelligence mission network revealed six key partnerships that would provide the framework of the program. The SLCFD would need to develop and maintain good working relationships with the police department, the SLIC, the SIAC, the City and State administrations and the ACLU during all stages of development and implementation. There are also specific dynamics within the Fire Department that will need attention and development. Each node contributes in its own way to the advancement of the program. Although the relationships will vary and represent different needs, all are equally important to the success of the plan. City and State administrators and representatives provide legislative and financial support, the fusion centers and the SLCPD provide the

mechanism to exchange and analyze information and the ACLU assures actions are within the scope of the laws protecting the citizens of the United States.

3. Optimizing Collaboration

Analyzing the network needs of the Fire intelligence program identified the stakeholders and their contributions to the effort. Also central to the analysis was the motivation behind each of the nodes in the stakeholder network. Knowing the interests helps program developers forecast the potential showstoppers before they come to fruition. If those showstoppers can be predicted through analysis, mechanisms to avoid them can be put in place early in the process.

Because collaboration is critical and the Fire Department will need to engage multiple network components, the constructs of successful collaboration were identified. Hocevar et al. developed a model for collaboration by identifying what they determined were key constructs of successful partnerships.²²³ The constructs central to collaboration success are: purpose and strategy, structure, lateral mechanisms such as social capital, incentives and the people themselves.

Bertram conducted a survey specific to the relationships developed during the 2002 Olympics. He analyzed feedback from law enforcement leadership, trying to identify factors specific to the success and failure of partnerships after the Olympics were over.²²⁴ Similarities can be identified between Bertram's results and the model developed by Hocevar et al. Bertram's findings identified four key enablers to collaboration development and endurance: trust or social capital, felt need, strategic planning and mandated systems.²²⁵ The consistency between Hocevar et al. and Bertram's findings provided validation to the collaboration constructs and identified a starting point for analyzing their relationship to trust.

²²³ Hocevar, S. P. Jansen, E. & Thomas, G. F. (2011). Inter-Organizational Collaboration: Addressing the Challenge. *Homeland Security Affairs*, 7 (The 9/11 Essays).

²²⁴ Bertram, C. (2008). *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*. Monterey: CHDS.

²²⁵ Ibid.

Each construct was evaluated against the need for trust. Work by Burt, Bertram, and Bellavita was utilized to effectively demonstrate the nexus between the collaboration constructs and trust.²²⁶²²⁷²²⁸ Distilling the constructs down to the single issue of trust simplifies the framework for program development.

Mayer et al's organizational trust model was the framework central to the program development.²²⁹ This model was selected because its focus was trust between organizations. It provides a succinct set of components within the definition of trust that allows targeted attention to the areas program developers have influence. The components are the trustee, risk, context and the trustor. Program developers, as the trustee within the model, must exhibit ability, benevolence and integrity as core traits. It is also critical to minimize risk by providing a well thought out plan with input from all affected parties.

B. RECOMMENDATIONS

There are ten steps identified in this recommendation, however, leadership and organizers must be willing to assess the process throughout the development, implementation and sustainment periods of the program. Agility will be required as varying perspectives and priorities are brought to light through the development process. Each of these steps has been created with the primary consideration of collaboration endurance and the development and sustainment of trust within the Fire intelligence mission Network.

Ten Steps of Recommended Implementation:

1. Initiate meetings with decision makers for each collaboration partner
2. Establish consensus on need and degree of involvement

²²⁶ Burt, R. S. (2001). *Structural Holes versus Network Closure as Social Capital*. Retrieved July 10, 2013 from Chicagobooth: faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf

²²⁷ Bertram, C. (2008). *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*. Monterey: CHDS.

²²⁸ Bellavita, C. (2007). Special Event Security. *Homeland Security Affairs* , III (3), 13.

²²⁹ R.C, Mayer, J.H. Davis, J. H. and F.D. Schoorman”An Integrative Model of Organizational Trust.” *The Academy of Management Review* , 20 , no. 33 (1995): 711.

3. Develop unified proposal options to secure funding
4. Develop strategic plan based on current and potential funding
5. Draft policies, procedures and MOU's between agencies
6. Establish specific channels of communication for collection and dissemination of information
7. Develop expectations and training program
8. Deliver training to fire personnel
9. Leverage existing assets
10. Continue planning, evaluating and adjusting as needed

1. Initiate Meetings with Decision Makers for Each Collaboration Partner

The key agencies have been identified. The first step will be to reach out to each operational organization, namely the SLCPD, SLIC and SIAC and begin initial discussions on a more detailed vision of the desired outcome. Consistent with the findings on the role of trust during this process, the individuals selected to represent each organization will be critical. Making sure the right people are on the development and implementation team will be a function of the organization's leadership and the team itself as it takes form. Effort should be made to reach out to influential contacts in the administrative offices, as well. Including the administration early in the process might afford insights into funding options that could drive initial program development. This is also an opportunity to develop the idea with administrators and invite feedback and involvement.

Questions that should be answered:

- What are your organization's desired outcomes from this program?
- Is there anything the Salt Lake City Fire Department has done in the past that has been problematic in maintaining open trustworthy relations?
- What can we do to avoid that in the future?

- What can the Salt Lake City Fire Department do to best earn your trust throughout this process?
- Who are your key players?

Identifying the concerns of each component in the mission network early in the process will develop a sense of continuity in the process.

2. Establish Consensus on Need and Degree of Involvement

It is important that all of the key operational stakeholders are in agreement on the need and the basic development and implementation plan. Doing so will minimize the opportunity for scope creep, reassure those concerned with the mission strategy and tactics, and provide a mechanism to develop the necessary relationships. One of the first priorities of breaking into the intelligence field is recognition of the value of the partnerships and assuring that leadership of the organization understand the value of their efforts to the citizens, themselves and public safety as a whole. From that point all parties concerned have to acknowledge their vulnerabilities and reciprocal value to the partnership and build well-defined, cooperative directives.²³⁰ According to Chief Pfeifer, FDNY, the value of sharing information and “harnessing the knowledge of a team including fire, police, airport and Coast Guard officials under the pretense of counterterrorism was key in the successful outcome of the Hudson River crash of the U.S. Airways commercial jet.”²³¹ Many of these key relationships in Salt Lake City will be forged through participation in the SIAC or independently, but it starts with the initial conversation.

3. Develop Unified Proposal Options to Secure Funding

DHS has identified three possible models for integrating Fire into the IC. In Salt Lake City, evaluating which option is the most viable will be a topic of discussion between the stakeholders. The DHS proposals are a good starting point and should be utilized when weighing out the options available in Salt Lake City.

²³⁰ Caudle, S. (2006). Basic Practices Aiding High-Performance Homeland Security Regional Partnerships. *Homeland Security Affairs*, 2 (3).

²³¹ Rice, L. (2010). Raising the Alarm. *Harvard Kennedy School Magazine*.

Those options include:

- Develop the ILO position into specific roles and responsibilities in the SIAC and SLIC. This will include decreasing the current job responsibilities within the fire department to afford greater attention to the intelligence needs.
- Integrate a SLCFD employee more deeply into the program by creating a new full-time position in the SIAC for a person with fire department background.
- Create a hybrid of the two by splitting the expense of the employee.²³²

4. Develop Strategic Plan Based on Current and Potential Funding

Three key factors that have led to the growing success in integrating fire department involvement into the intelligence arena nationwide are value driven partnerships, relevant training and thoughtful implementation. Keeping those key factors in the forefront while developing the strategic plan will take utilizing all the assets at SLCFD's disposal to best heighten awareness and contribute to a safer community.

Incorporating a SLCFD employee into the fusion center full-time is equivalent to the commitment the fire department has made to the Utah Urban Search and Rescue Task Force One. (USAR) That position is filled by a captain-level employee at a cost of approximately \$100,000 per year including benefits. The City bills USAR annually for that position.²³³ That employee is dedicated fulltime to the USAR team and does not assume any other fire department responsibilities outside of the scope of that role. Funding for that position would require approval from the Fire Chief, the Mayor and at least four of seven votes from the Salt Lake City Council, even though the cost for the USAR position is ultimately passed on to USAR.²³⁴

²³² Department of Homeland Security and the Department of Justice. *Fire Service Integration for Fusion Centers*. (Washington, DC: DHS & DOJ, 2012)

²³³ J. Vuyk (2013 8-July). Financial Manager, SLCFD. (M. Ellis, Interviewer)

²³⁴ Cindy Gust-Jensen, interview by Martha Ellis, *Executive Director, Salt Lake City Council* (July 10, 2013).

Roughly 80 percent of the funding for the SIAC in Utah comes from the state. The remaining 20 percent comes from DHS grants.²³⁵ Developing a position under the State DPS will require support from the governor. The position funding will go in as a line-item budget increase for his approval. Legislative support will also be necessary, as the final budget approval will rest with the legislative vote.²³⁶

Either of these models will require a strong argument for the program and the necessary position(s). The national trend to increase fire department involvement in intelligence management as demonstrated through analysis by agencies like the DHS, the International Association of Fire Chiefs, Department of Justice, and the fusion centers across the country will lend strong support to the effort.²³⁷²³⁸²³⁹

5. Draft Policies, Procedures and MOUs between Agencies

By formalizing the policies and procedures, and the roles and responsibilities, the partnership will be less vulnerable to communication gaps and mission failure.²⁴⁰ Within these guiding documents and contracts expectations will be defined including a clear definition of the agency roles and responsibilities, specific procedures for collecting, disseminating and using information or intelligence, and strict adherence to federal laws protecting citizens' rights.

²³⁵ Major Jeff Carr, interview by Martha Ellis, *State Deputy Homeland Security Advisor* (July 9, 2013).

²³⁶ Jennifer Seelig, interview by Martha Ellis, *Utah State Representative, Democratic Minority Leader, Dist 23* (July 13, 2012).

²³⁷ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

²³⁸ International Association of Fire Chiefs, "IAFC Terrorism and Homelands Security Committee," *International Association of Fire Chiefs*, 2012, <http://www.iafc.org/committees/content.cfm?itemnumber=4648&navitemnumber=4439> (accessed June 26, 2013).

²³⁹ Department of Homeland Security, *State and Major Urban Area Fusion Centers*, 2013, <http://www.dhs.gov/state-and-major-urban-area-fusion-centers> (accessed July 7, 2013).

²⁴⁰ Ibid.

6. Establish Specific Channels of Communication for Collection and Dissemination of Information

Operational roles and responsibilities within the network must be clearly defined. No task should be left open for interpretation. Specific names and back-up personnel should be identified to enhance accountability. Knowing whom to talk to on specific topics or information exchanges will provide an element of predictability, as well.

Within the Fire Department that would include creating support roles within Operations. Identifying platoon coordinators for collection and dissemination of information will create a clear focal point for crews looking for guidance and direction at all hours of the day. It would also add to the tiering concept of information distribution. Intelligence that may serve a purpose for the leadership of the Fire Department, but may not be suited or necessary for the private ranks, would be the responsibility of the Platoon Coordinators.

7. Develop Expectations and Training Program

Identifying terminal and enabling objectives for the training program will be critical. Leadership within Police, Fire and Fusion must develop the roadmap that will best serve the Salt Lake City community's needs. Some of the curriculum may have to be developed specifically for the jurisdiction; however, DHS, DOJ and the IAFC have produced training materials designed for universal use. In her NPS Masters Thesis, *Terrorism Awareness and Education as a Prevention Strategy for First Responders*, Alicia Welch cites Malcolm Nance, author of *The Terrorist Recognition Handbook*, as stating, "The single best method of defeating terrorism is educating our first responders, law enforcement personnel, military and security professionals (as well as the public) how to recognize the roles and motivations of individual terrorists, their cell systems, and the street-level mechanics of terrorist operations."²⁴¹ Why? Because the more eyes you have trained to the awareness level, the better the odds of catching something pre-

²⁴¹ Alicia L. Welch, "Terrorism awareness and Education as A Prevention Strategy for First Responders," Thesis, Naval Postgraduate School (Monterey, CA: NPS, 2006), 76.

catastrophe. This concept has been embraced with the Department of Homeland Security's "If You See Something, Say Something" campaign.²⁴²

Integrating the fire service into the fusion center network requires educating personnel on "criminal/terrorism indicators and warnings and providing protocols on appropriate mechanisms for reporting suspicious activities to the fusion center, in accordance with appropriate privacy and civil rights/civil liberties protections."²⁴³ Training will be necessary for the ILO position and the end user and observer. The end user and observer will include all fire department personnel.

The expectations for a messaging methodology will also be critical. In an effort to avoid sensitive information from being released to unintended readers, a color coding system, much like that of the CONTEST program in Britain, should be implemented. Providing a clear distinction between messages that should stay in the control of the recipient and those that can be shared will maintain the integrity of the messages and foster confidence in the FD's ability manage the information.

8. Deliver Training to Fire Personnel

Training is the least cost-prohibitive aspect of implementing this program. The DHS has several options for training fire personnel to the operations and awareness level in anti-terrorism tactics that are free to the participants. *Emergency Response to Terrorism Self Study* can be downloaded directly off the Internet, and the Anti-Terrorism Intelligence Awareness Training Program (AIATP) is a course that can be delivered on site in Salt Lake City.²⁴⁴

Given the sensitivity of involving fire personnel in the structured effort of intelligence gathering, attention must be given to training in the legal implications of civil liberties. According to the SIAC web page,

²⁴² Department of Homeland Security, *See Something, Say Something*, 2013, <http://www.dhs.gov/if-you-see-something-say-something-campaign> (accessed July 9, 2013).

²⁴³ Department of Homeland Security and the Department of Justice, *Fire Service Integration for Fusion Centers* (Washington, DC: DHS & DOJ, 2012).

²⁴⁴ Department of Homeland Security, *Federal Law Enforcement Training Center*, 2013, <http://www.fletc.gov/about-fletc/> (accessed July 11, 2013).

All intelligence activities carried out at the SIAC are to be performed within the boundaries established by the United States Constitution, and all Federal, State, Local, and SIAC policies and procedures; all information collected, researched, stored, analyzed, and shared must be done in such a way as to vigilantly uphold the privacy rights and civil liberties granted to United States citizens.²⁴⁵

Along the same line, it is crucial to stress the importance of preventing abuse of privilege in the spirit of gathering intelligence. This can include purposely exceeding the scope of an inspection by looking specifically for evidence of possible terrorism activity, violating an individual's civil liberties or taking sensitive information to the media when it is not appropriate.²⁴⁶ Having the means to address these issues will be pivotal to the success of the relevant training and thoughtful implementation.

The training should also include promoting the understanding that “partnership[s] should only be used when the partnership produces more in value than can be achieved by working alone.” This will help firefighters see that they are not simply doing police work in addition to their regular duties.²⁴⁷ Supporting documents and the successful collaborations demonstrated in Orange County, FDNY and Britain should be continually cited as sound justification that the program is mutually beneficial.

Training will also be necessary on the messaging procedures for the program. Firefighters will need a clear understanding of sensitivity classifications for incoming intelligence, as well as what to do with specific suspicious activity witnessed in the field. Points of contact must be established and shared with the operations personnel and their leadership. Continually updating contact lists to assure accuracy and specificity will also be part of the ongoing training.

²⁴⁵ Statewide Information and Analysis Center (SIAC), *Utah Department of Public Safety*, 2013, <http://publicsafety.utah.gov/investigations/siac.html> (accessed July 9, 2013).

²⁴⁶ Daveed Gartenstein-Ross and Kyle Dabruzzi, “Firefighters’ Developing Role in Counterterrorism,” *Policing Terrorism Report* no. 3 (New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008): 1.

²⁴⁷ Sharon Caudle, “Basic Practices Aiding High-Performance Homeland Security Regional Partnerships,” *Homeland Security Affairs* (Naval Postgraduate School) 2, no. 3 (October 2006).

9. Leverage Existing assets

Assets both within and outside the SLCFD should be leveraged to optimize success of the program. SLCFD has three key assets that should be included in the planning and implementation phases. The FD Office of Emergency Management (FDOEM), the Law Enforcement Inspector/Investigator Unit (LEOI/IU) and the LEPC, run from within the Fire Prevention Bureau. The FDOEM plays an integral role in the operation of the Emergency Operations Center (EOC). The emergency management position is relatively new to the SLCFD, however, current development of the position and the EOC will provide support to the mitigation component of the Fire intelligence program. The LEOI/IU is responsible for fire investigations and code enforcement and compliance. This unit has built strong relationships with the SLCPD through initial and recurring LEO training. These relationships can be leveraged to expand the depth of the Fire/PD training and response protocols into the active shooter and Mumbai-style response model development.

Utah is one of 47 states and U.S. territories that is a Nationwide SAR Initiative (NSI) state and Salt Lake City is home to one of 76 NSI Operational Sites.²⁴⁸ The SIAC is the critical link for the State of Utah to the national fusion center network. Having the SIAC within 10 miles of the core of the metropolitan center for Salt Lake is a significant benefit. With existing network infrastructure already in place, plausible arguments can be made in favor of expanding to include Fire. Integrating the Salt Lake City Fire Department into existing networks and enhancing the national intelligence network will assure accurate, timely and relevant dissemination of information.

The LEPC will provide a platform to collect, share and knit critical information related to hazardous materials into emergency planning and response. The committee of over 800 participants will be used to collect, share and analyze information related to hazardous materials sites.

²⁴⁸ Department of Homeland Security, *State and Major Urban Area Fusion Centers*, 2013, <http://www.dhs.gov/state-and-major-urban-area-fusion-centers> (accessed July 7, 2013).

10. Continued Training, Evaluating and Adjusting as Needed

The domestic and international threats are dynamic. To allow a program to remain static, while technology, vulnerabilities and the threat itself change, would likely result in missed opportunities and eroded trust in the program. Structured evaluations must be in place. Evaluating the program can be accomplished through surveying end-users, measuring specific tangible impacts and feedback from supporting agencies.

Evaluating the program is a continuum. Scheduled face-to-face meetings with network leadership provide opportunity for face-to-face dialogue and open discussion on all parties' observations of the program's efficacy. Formal and informal feedback mechanisms need to be encouraged from within all tiers of the information chain. Annual refresher training for operations personnel must be utilized to solicit feedback and maintain skills and engagement. All comments, concerns and suggestions should be thoroughly reviewed by program leadership.

The program must also be evaluated on a regular basis from a civil liberties perspective. Audits of information gathering tactics should be performed to assure that operations personnel maintain the highest standard in collecting information. Any procedures that deviate from the established policies and procedures must be addressed.

Only through unbiased and honest evaluation can the program be assessed. The constructs of trust must be at the forefront of any evaluation. The program must demonstrate the ability to produce useful intelligence and disseminate it to the appropriate end users. Through strict adherence to policies, procedures and MOUs, the integrity of the program will be established. The final component of evaluating the program is to continually assess intent. The core interest of the program is the greater good of the community. This cannot be established at the expense of civil liberties. Benevolence is defined as compassion or goodwill. It will take benevolence, strong leadership and continual dialogue to assure the core driver of trust within program development is maintained.

C. ADDITIONAL RESEARCH AND CONSIDERATIONS

This research has been focused on finding the most effective means to assure a successful and sustainable intelligence program for the Salt Lake City Fire Department. The mechanics of incorporating other fire departments from neighboring jurisdictions was not a primary consideration. The inevitability, however, of other fire departments engaging in and benefiting from Salt Lake City's efforts needs to be considered. Keeping the task at hand manageable was a concern of this effort, but the firefighting community in the Salt Lake area is a close-knit group. Consideration for keeping interested parties apprised of the SLCFD efforts and sharing any information, either on the topic of developing a like program or resulting intelligence, would have widespread benefit to the entire community. Additional research in the specifics of each individual jurisdiction's needs, resources and development strategy would need to take place. The concepts developed within this thesis would be a useful foundation in that effort.

D. CONCLUSION

The 2014 DHS Quadrennial Report focuses on the greater need for information sharing and community involvement. Resources must be engaged at all tiers of our government and communities to assure a safe and prosperous country.²⁴⁹ The support of national organizations like the International Association of Fire Chiefs, the Department of Homeland Security and the Department of Justice are strong indicators that the fire service has a place in the national security effort.

As a developing concept, it is critical to identify pro and con positions for fire service participation in the national security effort. Addressing the concerns with a thoughtful inclusive implementation plan will have a positive impact on the sustainability of the program. Seeking out the opposition early in the process will allow an immediate effort to address the concerns.

It is also critical to address the causes leading to the decrease in the SLCFD involvement post-2002 Olympics. Although leadership in the SLCFD has changed, the

²⁴⁹ Department of Homeland Security. (2014). *2014 Quadrennial Homeland Security Review*. Washington, DC: The Department of Homeland Security.

complete lack of trust previous administrations had in the program cannot be overlooked. Demonstrating added value to the Department, City and the citizens served will be a challenge overcome by leveraging nationally recognized agency support and case study documentation from both fire- and law enforcement-centric models.

Having identified trust as the cornerstone to success in the development, implementation and sustainment of the Fire intelligence program model within Salt Lake City, it will be important to assure that all necessary steps are taken to promote inclusion, ownership and added value to all parties within the network. Parties driving the effort must recognize their responsibility, as the trustees within the trust framework, to demonstrate ability, benevolence and integrity throughout the process. Presenting compelling evidence supporting the effort will be key to minimizing the perceived risk of the endeavor with other essential parties that may not necessarily be drivers of the development.

The true take-away of this research is the recognition of our humanity and those we interact with throughout our lives. Trust flourishes where equality, value and inclusiveness are primary considerations. An environment that fosters safety in dialogue invites the creativity this county is going to need to maintain security and peace.

LIST OF REFERENCES

- 9/11 Commission. *The 9/11 Commission Report*. New York: W.W. Norton & Company, 2004.
- American Civil Liberties Union. "More About Fusion Centers." *ACLU.org*. 2013. <http://www.aclu.org/spy-files/more-about-fusion-centers> (accessed July 10, 2013).
- Andrus, Dan. Interview by Martha Ellis. *Fire Marshal, 1998–2003* (August 25, 2014).
- The Arbinger Institute. "Arbinger History." 2014. <http://arbinger.com/history/> (accessed August 23, 2014).
- . *Leadership and Self Deception*. San Francisco: Berrett-Koehler Publishers, 2010.
- . *The Anatomy of Peace; Resolving the Heart of Conflict*. San Francisco: Berrett-Koehler Publishers, 2006.
- Axelrod, Robert. *The Evolution of Cooperation*. Cambridge: Perseus Books Group, 1984.
- Baker, Abdul Haqq. *Counter-Terrorism: Community-Based Approaches to Preventing Terror Crime*. Edited by Basia Spalek. Vol. Chapter 4. Palgrave Macmillan, 2012.
- Barry Buzan, Ole Waever, Jaap de Wilde. *Security: A New Framework for Analysis*. Boulder/London: Lynne Rienner.
- Bates, Michael. "Fusion Centers Don't Help Counterterrorism, Senate Report Says." *Batesline Tulsa Straight Ahead*. 2012 2-October. <http://www.batesline.com/archives/2012/10/fusion-centers-dont-help-counter.html#comments> (accessed July 10, 2013).
- Becker, Jo. Interview by POV Public Broadcasting System. *Child's Rights Advocacy Director, Human Rights Watch*, 2005. http://www.pbs.org/pov/nomoretears/special_hrw.php#.UeeQWOIInrE.email.
- Behunin, Scott A. *Homeland Security Advisory System*. Master's thesis, Center for Homeland Defense and Security, Naval Postgraduate School, 2004.
- Bellavita, Chris. "Changing Homeland Security: A Strategic Logic of Special Event Security." *Homeland Security Affairs*. 2007 September. <http://www.hsaj.org/?fullarticle=3.3.1> (accessed August 23, 2014).
- Bertram, Christopher. *Factors the effect interagency collaborations: lessons during and following the 2002 Winter Olympics*. Thesis, Naval Postgraduate School, 2008.

- Bewig, Matt. *NSA Violated U.S. Privacy Laws at Least 2,776 Times...In One Year*. August 19, 2013. <http://www.allgov.com/news/top-stories/nsa-violated-us-privacy-laws-at-least-2776-timesin-one-year-130819?news=850897> (accessed August 19, 2013).
- Bhattacharji, Preeti. *Council on Foreign Relations*. May 20, 2009. <http://www.cfr.org/terrorist-organizations/liberation-tigers-tamil-eelam-aka-tamil-tigers-sri-lanka-separatists/p9242> (accessed June 18, 2013).
- Bondarchuk, Katerina. "Hear Us Out: Radical Activism or "Eco-Terrorism" in Canada." *Academia.edu*. 2011 April. http://www.academia.edu/6415201/_Hear_Us_Out_Radical_Activism_or_Eco-Terrorism_in_Canada (accessed August 20, 2014).
- Bueno De Mesquita, Bruce, and Alastair Smith. *The Dictator's Handbook: Why Bad Behavior is Almost Always Good Politics*. New York, NY: Public Affairs, 2011.
- Burnette, Lisa. Interview by M. Ellis. *SLC 911 Dispatch Senior Supervisor* (October 14, 2013).
- Burt, Ronald S. "Structural Holes versus Network Closure as Social Capital." *Chicagobooth*. 2001. [Http://faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf](http://faculty.chicagobooth.edu/ronald.burt/research/files/SHNC.pdf) (accessed July 10, 2013).
- Carr, Major Jeff. Interview by Martha Ellis. *State Deputy Homeland Security Advisor* (July 9, 2013).
- Carter, Chelsea J. & Yellin, Jessica. "CNN Read More." Aug 10, 2013. <http://www.wtae.com/news/politics/obama-wants-you-to-feel-better-about-surveillance/-/9680976/21401140/-/3a5dw2z/-/index.html#ixzz2cTC2a8fJ> .
- Caudle, Sharon. "Basic Practices Aiding High-Performance Homeland Security Regional Partnerships." *Homeland Security Affairs*2, no. 3 (October 2006).
- Collins, Jim. *Good To Great*. New York: HarperCollins Publishers, 2001.
- Colonelli, Captain Nick. Interview by Martha Ellis. *TLO Coordinator, Orange County Intelligence Assessment Center* (July 15, 2014).
- Colonelli, Captain Nick. Interview by Martha Ellis. *TLO Coordinator, Orange County Intelligence Assessment Center* (July 16, 2013).
- Counter Terror Business. *Counterterrorbusiness.com*. <http://www.counterterrorbusiness.com/index.php/features/74-counter-terrorism-strategy/752-protecting-crowded-places> (accessed March 9, 2014).

- Covey, Stephen R. *The Speed of Trust, The One Thing That Changes Everything*. New York: Free Press, 2006.
- Currao, Thomas. "A New Role for Emergency Management fostering trust to enhance collaboration in complex adaptive emergency response systems." *Calhoun Library*. 2009 December. <http://calhoun.nps.edu/public/handle/10945/4460> (accessed September 28, 2013).
- Dabruzzi, Kyle and Daveed Gartenstein-Ross, "Firefighters' Developing Role in Counterterrorism," *Policing Terrorism Report* no. 3. New York, NY: Center for Policing Terrorism at the Manhattan Institute, August 2008.
- Department of Homeland Security. *Federal Law Enforcement Training Center*. 2013. <http://www.fletc.gov/about-fletc/> (accessed July 11, 2013).
- Department of Homeland Security. *2014 Quadrennial Homeland Security Review*. Government, Washington, DC: The Department of Homeland Security, 2014.
- Department of Homeland Security and the Department of Justice. *Fire Service Integration for Fusion Centers*. Washington, DC: DHS & DOJ, 2012.
- Department of Homeland Security. *National Emergency Communications Plan*. Comm Plan, Homeland Security, U.S. Federal Government, Washington, DC: DHS, 2008.
- . *See Something, Say Something*. 2013. <http://www.dhs.gov/if-you-see-something-say-something-campaign> (accessed July 9, 2013).
- . *State and Major Urban Area Fusion Centers*. 2013. <http://www.dhs.gov/state-and-major-urban-area-fusion-centers> (accessed 2013 7-July).
- Deseve, Edward G. "Governing, The States and Localities." *Governing.com*. December 21, 2011. <http://www.governing.com/columns/mgmt-insights/public-trust-government-six-factors-change-perception.html> (accessed September 29, 2013).
- Eilperin, Juliet. "The Washington Post Health and Science." *Washington Post*. March 10, 2012. http://www.washingtonpost.com/national/health-science/as-eco-terrorism-wanes-governments-still-target-activist-groups-seen-as-threat/2012/02/28/gIQAA4Ay3R_story.html (accessed August 20, 2014).
- Environmental Protection Agency. "Cameo." *EPA.Gov*. 2014. <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed 2014 Aug).
- . "Tier II Inventory Form." *EPA.Gov*. June 27, 2014. <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed August 23, 2014).
- FDNY. *FDNY Counter Terrorism and Risk Management Strategy*. NY: FDNY, 2011.

- FEMA. *National Incident Management System*. Washington, DC: FEMA, 2008.
- Firescope California. *Incident Command System for Fire Department Structure Fire Operations*. Riverside, CA: OES Firescope OCC, 1994.
- Flynn, Jennifer D. *Fire Service Performance Measures*. Statistical, Fire Analysis and REsearch Division, National Fire Protection Association, Quincy: NFPA, 2009, 8.
- German, Mike. "National Security, Washington Post." *Washington Post*. September 16, 2013. http://www.washingtonpost.com/world/national-security/aclu-calls-on-obama-congress-to-rein-in-power-of-the-fbi/2013/09/16/64481b6e-1bf1-11e3-8685-5021e0c41964_story.html (accessed September 16, 2013).
- Government Accountability Office. *Practices That Can Help Enhance and Sustain Collaboration Among Federal Agencies*. Government, Government Accountability Office, Washington, DC: United States Government, 2005.
- Gust-Jensen, Cindy. Interview by Martha Ellis. *Executive Director, Salt Lake City Council* (July 10, 2013).
- Heifetz, Ronald A, and Linsky Marty. *Leadership on the Line*. Boston: Harvard Business Review Press, 2002.
- Heirston, Bryan. "Firefighters and Information Sharing: Smart Practice or Bad Idea?" *Homeland Security Affairs* 6, no. 2 (May 2010).
- . *Terrorism Prevention and Firefighting: Where are the information-sharing boundaries*. Thesis, Naval Postgraduate School, Monterey: Naval Postgraduate School, 2009.
- Her Majesty's Government. *CONTEST: The United Kingdom's Strategy for Countering Terrorism, Annual Report*. Annual, London: Crown, 2013.
- Hocevar, Susan Page, Erik Jansen, and Gail Fann Thomas. "Inter-Organizational Collaboration: Addressing the Challenge." *Homeland Security Affairs* 7, (September 2011).
- Hoffman, Bruce. *Inside Terrorism*. New York: Columbia University Press, 2006.
- . *Inside Terrorism, Revised and Expanded Edition*. New York: Columbia University Press, 2006.
- International Association of Fire Chiefs. "IAFC Terrorism and Homelands Security Committee." *International Association of Fire Chiefs*. 2012. <http://www.iafc.org/committees/content.cfm?itemnumber=4648&navitemnumber=4439> (accessed June 26, 2013).

- Iowa State Fire Marshal's Office. *History of Fire and Fire Codes PDF*.
www.dps.state.ia.us (accessed June 22, 2013).
- Jensen, Derek. "Oly Security Effort 'Model for Nation.'" *Deseret News*, 2002 9-March.
- Kiefner & Associates, Inc. *Final Report on Leak Detection Study - DTPH56-11-D-000001*. Leak Study, Delivered to the U.S. Department of Transportaiontion Pipeline and Hazardous Materials Safety Administration, Worthington: Kiefner & Associates, 2012.
- Kinnvall, Catarina. "Globalization and Religious Nationalism: Self, Identity, and the Search for Ontological Security." *Political Psychology*, 2004 October: 741–767.
- KSL News Agency. *KSL.com*. Feb 13, 2007. <http://www.ksl.com/?nid=148&sid=888784> (accessed July 8, 2013).
- . *KSL.com*. April 15, 1999. <http://web.ksl.com/dump/news/cc/b-ldshot.htm> (accessed July 8, 2013).
- Landauer, Jeff, and Joseph Rowlands. "Importance of Philosophy, Ethics_Benevolence." *Importance of Philosophy*. 2001. http://www.importanceofphilosophy.com/Ethics_Benevolence.html (accessed Aug 20, 2014).
- . "Importance of Philosophy, The Trader Principle." *Importance of Philosophy*. 2001. http://www.importanceofphilosophy.com/Ethics_TraderPrincliple.html (accessed August 23, 2014).
- Lawrenson-Smith LLC. *Fire Fighters counter Terrorims Awareness Course*. Syllabus, Lawerson-Smith LLC, 2013.
- Lichtblau, Eric. *The New Yor Times*. 2013 6-july. http://www.nytimes.com/2013/07/07/us/in-secret-court-vastly-broadens-powers-of-nsa.html?pagewanted=all&_r=0 (accessed Aug 18, 2013).
- The Markle Foundation Task Force on National Security in the Information Age. *Nation At Risk: Policy Makers Need Better Information to Protect the Country*. Security, The Markle Foundation, New York: The Markle Foundation, 2009.
- . *Privacy and Civil Liberties*. Brief, New York: Markle Foundation, 2009.
- Mayer, Roger C. James H. Davis, and f. David Schoorman. "An Integrative Model of Organizational Trust." *The Academy of Management Review* (Academy of Management) 20, no. 3 (July 1995): 711.
- Merton, Robert K. "The Unanticipated Consequences of Purposive Social Action." *American Sociological Review* (American Sociological Association), 1936: pp 894–904.

- Messner, Thomas M. "The Heritage Foundation research reports." *Heritage.Org*. October 22, 2009. <http://www.heritage.org/research/reports/2009/10/the-price-of-prop-8> (accessed August 23, 2014).
- Miller, Les. "Principles for Moving Toward Interoperability." *Supplemental Resources* 29.
- Moore, Mark H. "Public Value as the Focus of Strategy." *Australian Journal of Public Administration* 53, no. 3 (1994): 297.
- Moyer, Jennifer. *Trust and PR Practice*. January 14, 2011. <http://www.instituteforpr.org/trust-and-pr-practice/> (accessed June 26, 2014).
- Mueller, John, and Mark G. Stewart. "Terror, Security and Money: Balancing the Risks, Benefits, and Costs of Homeland Security." *Annual Convention of the Midwest Political Science Association*, 2011.
- National Counter Terrorism Security Office. *NaCTSO.Gov*. 2014. <http://nactso.gov.uk/> (accessed 2014 3-March).
- . *NaTSO*. 2024. <http://www.nactso.gov.uk/our-services> (accessed March 9, 2014).
- National Fire Protection Association. *National Fire Protection Association*. 2012. http://www.nfpa.org/itemDetail.asp?categoryID=955&itemID=23688&cookie_test=1 (accessed June 22, 2013).
- Nationwide SAR Initiative. *National Criminal Intelligence Resource Center*. 2012. http://nsi.ncirc.gov/training_online.aspx (accessed Uly 9, 2013).
- Naval Postgraduate School Center for Homeland Security and Defense. *FDNY and CHDS: More than a Decade of Homeland Security Education Partnership*. Statistical, Center for Homeland Defense and Security, Naval Postgraduate School, Monterey: CHDS, 2014.
- Neubert, Michele, Alastair Jamieson, and Sarah Burke. "NBC News Storyline, Iraq Turmoil." *NBC News*. June 29, 2014. www.nbcnews.com/storyline/iraq-turmoil/rise-isis-heightens-threat-terrorism-west-experts-warn-n141661.
- O'Donoghue, Amy Joi, and Josh Smith. "Deseret News Utah Page." *Deseret News*. June 12, 2010. <http://www.deseretnews.com/article/700039797/Oil-spill-in-Red-Butte-Creek-threatens-waters-wildlife.html?pg=all> (accessed August 20, 2014).
- Office of the President of the United States. *National Security Strategy*. Strategy, Washington, DC: The White House, 2010.

- Ogata, Wendy. *KSL.com*. February 13, 2007. <http://www.deseretnews.com/article/660195182/Infamous-shooting-incidents-in-Salt-Lake-County.html?pg=all> (accessed July 8, 2013).
- Orange County Sheriff's Department. *Orange County Intelligence Assessment Center*. 2013. <http://ocsd.org/divisions/fieldops/security/iac> (accessed June 25, 2013).
- Patterson, Kerry, Joseph Grenny, Ron McMillan, and Al Switzler. *Crucial Conversations; Tools for Talking When Stakes are High*. New York: McGraw-Hill, 2002.
- Pedahzur, Ami. *Suicide Terrorism*. Cambridge: Ami Pedahzur, 20078.
- Penty, Rebecca & Lee, Mike. Keystone "XL Pipeline Shuns High-Tech Oil Spill Detectors." June 18, 2013. <http://www.bloomberg.com/news/2013-06-17/keystone-xl-pipeline-shuns-high-tech-oil-spill-detectors.html>.
- Pfeifer, Assistant Chief Joseph W. interview by Martha Ellis. *FDNY* (2014, 27-August).
- Pfeifer, Joseph. "Fire as a Weapon in Terrorist Attacks." *Combating Terrorism Center*. West Point. July 23, 2013. <https://www.ctc.usma.edu/posts/fire-as-a-weapon-in-terrorist-attacks> (accessed 2014 2-August).
- . "Network Fusion: Information and Intelligence Sharing for a Networked World." *HSAJ.ORG. HOMELAND SECURITY AFFAIRS*. 2012 October. <http://www.hsaj.org/?fullarticle=8.1.17> (accessed 2013, 8-July).
- Police Executive Research Forum. *The Police Response to Active Shooter Incidents: Critical Issues in Policing Series*. Research, Washington, DC: Police Executive Research Forum, 2014, 22.
- Pratt, Franklin D. Paul E. Pepe, Steven Katz, and David Persse. "Prehospital 9-1-1 Emergency Medical Response: The role of the United States Fire Service in Delivery and Coordination." *www.iaff.org*. International Association of Fire Fighters. 2007 July. <https://www.iaff.org/tech/PDF/FB%20EMS%20Whitepaper%20FINAL%20July%205%202007%20.pdf>.
- Putnam, Robert D. *Making Democracy Work*. Princeton, NJ: Princeton University Press, 1993.
- Reavy, Pat. "KSL.Com Home." *KSL.com*. July 1, 2013. <http://www.ksl.com/?sid=25826529>.
- . *Quarter-mile radius evacuated due to chemical leak*. June 30, 2013. <http://www.deseretnews.com/article/865582449/Quarter-mile-radius-evacuated-due-to-chemical-leak.html?pg=all>.

- Reinhard Kauffmann. "Letter of acceptance to the Olympic JTTF." *Letter from the office of the Chief*. SLC: SLCFire Department, April 21, 2000.
- Rice, Lewis. "Raising the Alarm." *Harvard Kennedy School Magazine*, 2010.
- Rollins, John and Connors, Timothy. *State Fusion Center Processes and Procedures: Best Practices and Recommendations*. Policy, The Manhattan Institutd, New York: The Manhattan Institute, 2007.
- Rotter, J. B. "A new Scale for the Mearsuement of Interpersonal Trust." *Journal of Personality* 35 (1967): 651.
- Rudolph, Thomas J & Evans, Jillian. "Politcal Trust, Ideology, and Public Support for Government Spending." *American Journal of Political Science* 49, no. 3 (July 2005): 660.
- Salt Lake City. *Fire Data-Management (FDM)*. Records Management, SLC: Salt Lake City Fire Department, 2013.
- Salt Lake City Fire Department. *Salt Lake City Fire Department Annual Report 2012*. Statistical, SLC: Salt Lake City Fire Department, 2012.
- Salt Lake City Fire Prevention Bureau. *SLCFPB.com*. 2013. <http://www.slcfpb.com/go/doc/3687/1334907/> (accessed July 9, 2013).
- Salt Lake City LEPC. *Salt Lake City Local Emergency Planning Committee*. 2013. <http://www.slclepc.com/go/doc/3687/1608399/> (accessed July 9, 2013).
- Salt Lake County. *Salt Lake County*. 2013. <http://www.slco.org/bydepartments/yourcounty/govWithinSLCo.html> (accessed July 10, 2013).
- Salt Lake Valley Training Alliance. *Salt Lake Valley Training Alliance*. 2013. <http://saltlakevalleyfirealliance.wordpress.com/about/> (accessed July 10, 2013).
- Schelling, Thomas. *The Strategy of Conflict*. Cambridge: President and Fellows of Harvard College, 1960.
- Schierow, Linda-Jo. *The Emergency Planning and Community Right to Know Act (EPCRA): A Summary*. Congressional Summary, Washington, DC: Congressional Research Service, 2012.
- Schwendiman, David. "2002 Winter Olympic Games, Utah Olympic Public Safety Command." *Olympic Intelligence Center Operational Plan*. SLC: David Schwediman, 2002 8-February.
- . "Utah Olympic Public Safety Command." *An Introduction to Olympic Intelligence*. SLC: David Schwendiman, March 7, 2001.

- Seelig, Jennifer. Interview by Martha Ellis. *Utah State Representative, Democratic Minority Leader, Dist 23* (July 13, 2012).
- Seto, Laura P. Eng. Ross, Tim P. Eng. *Development of a Long Duration, Free Swimming, Inline Acoustic Leak Detection Inspection Tool*. Pipeline Integrity Department, Enbridge Pipelines Inc., Calgary: Enbridge Pipelines, 2013.
- Shropshire Fire and Rescue Service. *Shropshire Fire Operational Intelligence*. March 7, 2014. <https://www.shropshirefire.gov.uk/the-emergency-service/operational-intelligence>,
- SLC Fire Prevention Bureau. *FDM Records Management System*. Hazdous Materials Permiting Records, Salt Lake: Salt Lake City Fire Department, 2013.
- Smith, Paul. *CHDS Moodle Learning Platform*. January 28, 2014. https://www.chds.us/coursefiles/comp/lectures/comp_CT_in_the_UK_mod02_ss/player.html (accessed February 20, 2014).
- Smith, Paul. Interview by Presentation CHDS. *Counter Terrorism Contingency Planning* (2014 January).
- Smith, Paul. Interview by CHDS Presentation. *Counter Terrorism in the UK* (2013 Spring).
- Southern Poverty Law Center. *SPLC Souther Poverty Law Center*. 2002 Fall. <http://www.splcenter.org/get-informed/intelligence-report/browse-all-issues/2002/fall/from-push-to-shove/eco-violence-the-rec>.
- Stafford, James. *Breitbart*. Feb 16, 2013. <http://www.breitbart.com/Big-Government/2013/02/16/Could-a-New-Technology-Developed-for-Space-End-the-Pipeline-Debate> (accessed August 17, 2013).
- Statewide Information and Analysis Center (SIAC). *Utah Department of Public Safety*. 2013. <http://publicsafety.utah.gov/investigations/siac.html> (accessed July 9, 2013).
- Stindberg, Anders. "Social Identity Theory and the Study of Terroism" (Draft). 2013.
- Tenner, Edward. "Unintended Consequences." 2011, March. http://www.ted.com/talks/edward_tenner_unintended_consequences.html (accessed June 10, 2013).
- Timmons, Ronald P. "Interoperability: Stop Blaming the Radio." *Homeland Security Affairs*, Volume III, no. 1: (Feb 2007).
- Timmons, Ronald P. *Radio Interoperability: Addressing the Real Reasons We Don't Communicate Well During Emergencies*. Thesis, Monterey: CHDS, 2006.

- Trevor Tallon, Val Thometz, Scott Basket, Jeff Clark. Interview by M Ellis. *COM-S Communication Specialist* (October 10, 2013).
- Tuohy, Amy Danahue and Robert. "Lessons We Don't Learn: A Study of the Lessons of Disasters, Why We Repeat them and How We Can Learn Them." *Homeland Security Affairs* (Naval Postgraduate School) II, no. 2 (July 2006).
- U.S. Census Bureau. "State and Local Quick Facts." July 8, 2014. quickfacts.census.gov/qfd/states/49/49035.html (accessed July 11, 2014).
- U.S. Department of Transportation. *U.S. Department of Transportation*. July 31, 2013. http://primis.phmsa.dot.gov/comm/reports/safety/AllPSI.html?nocache=5677#_liquid (accessed August 17, 2013).
- U.S. Environmental Protection Agency. *Local Emergency Planning Committees*. July 25, 2014. <http://www2.epa.gov/epcra/local-emergency-planning-committees> (accessed August 23, 2014).
- Utah Department of Natural Resources. *Utah Oil and Gas*. 2013. <http://oilgas.ogm.utah.gov/index.htm> (accessed July 10, 2013).
- Utah Olympic Public Safety Command. *Utah Olympic Public Safety Command After Action Report*. AAR, SLC: UOPSC, 2002.
- Vainuku, Roxeanne. *KUTV.com*. June 18, 2013. http://www.kutv.com/news/top-stories/stories/vid_5368.shtml (accessed July 9, 2013).
- Vandongen, Cristal. Interview by Martha Ellis. *Fire Investigator/Deputy Director, Fire and EMS Branch of UOPSC/Team Leader, Criminal Intelligence Collection and Dissemination Unit* (August 24, 2014).
- Vuyk, John. Interview by Martha Ellis. *Financial Manager, SLCFD* (2013 8-July).
- Wallenchinsky, David. *AllGov*. August 19, 2013. <http://www.allgov.com/news/top-stories/nsa-violated-us-privacy-laws-at-least-2776-timesin-one-year-130819?news=850897> (accessed August 22, 2013).
- Wasserman, Robert. *Guidance for Building Communities of Trust*. Guideline, Office of Community Oriented Policing Services, U.S. Department of Justice, Washington, DC: U.S. Department of Justice, 2010.
- Welch, Alicia L. "Terrorism awareness and Education as A Prevention Strategy for First Responders." Thesis, Naval Postgraduate School, 2006.
- Whitehurst, Lindsay. *ABC News*. August 13, 2014. <http://abcnews.go.com/US/wireStory/probation-suspect-utah-mall-shooting-plot-24968409> (accessed August 20, 2014).
- Winder, Jim. Interview by Martha Ellis, Sheriff, Salt Lake County (May 14, 2014).

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California