Theses and Dissertations   1. Thesis and Dissertation Collection, all items

2019-09

THERE ARE NO MONSTERS IN THE CLOSET: WHY FIRE DEPARTMENTS ARE NOT IMPLEMENTING BEST CONCEPTS FOR ACTIVE ASSAILANT INCIDENTS

Sabat, David

Monterey, CA; Naval Postgraduate School

http://hdl.handle.net/10945/63500

NAVAL
POSTGRADUATE
SCHOOL

MONTEREY, CALIFORNIA

THESIS

**THERE ARE NO MONSTERS IN THE CLOSET:
WHY FIRE DEPARTMENTS ARE NOT
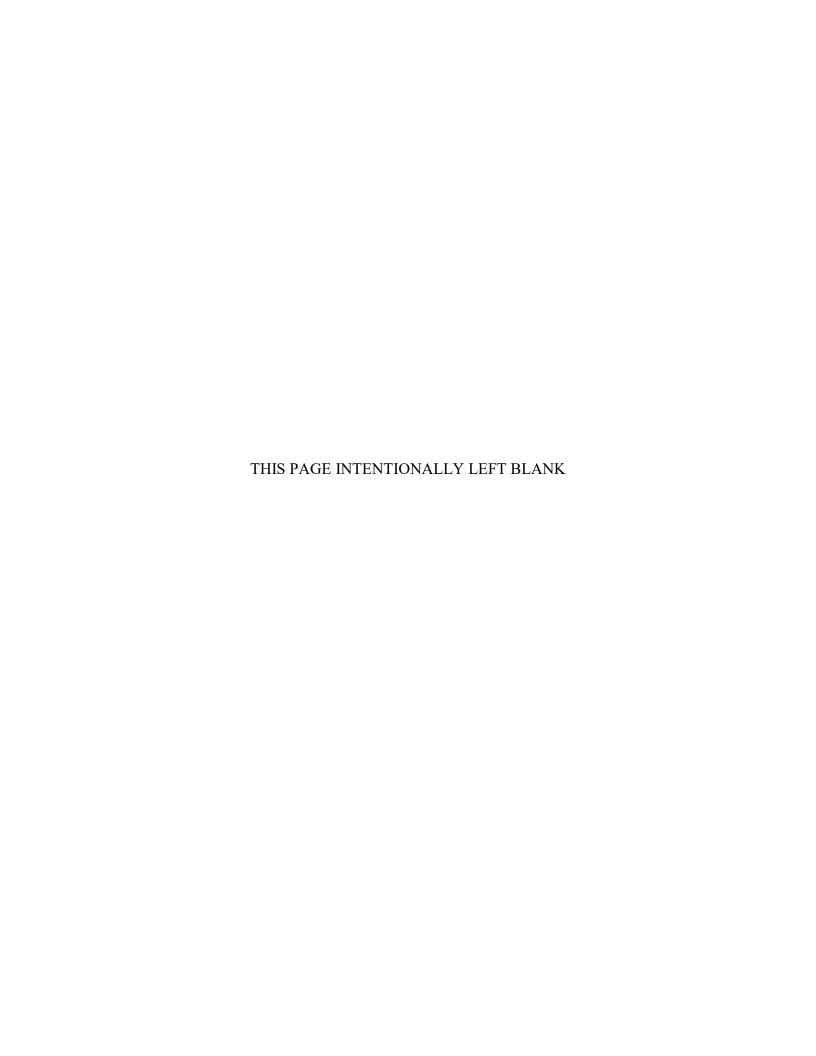IMPLEMENTING BEST CONCEPTS FOR ACTIVE
ASSAILANT INCIDENTS**

by

David Sabat

September 2019

Thesis Advisor:	Gail F. Thomas
Second Reader:	Matthew Levy, Howard County Fire and Rescue

THIS PAGE INTENTIONALLY LEFT BLANK

13. ABSTRACT (maximum 200 words)

Despite literature that recommends fire departments in the United States implement best concepts to more rapidly access victims during active assailant incidents, the adoption of such concepts languishes. As the number of active assailant incidents in this country increases, fire fighters will be increasingly called to respond to incidents involving active shooters, vehicle ramming, and fire used as a weapon, regardless of policy implementation.

For this thesis, representatives of seventeen fire departments across the country were asked to describe challenges and facilitators of success when developing or implementing recommended best concepts. When describing challenges, the representatives pointed to the tradition-bound culture of the fire service, lack of senior leadership support, lack of trust between fire and law enforcement agencies, and the logistics of training all personnel. Factors that facilitate best practices include the ability to secure funding for ballistic protection equipment and training, preexisting relationships between fire and law enforcement agencies, joint fire-police training exercises, and the availability of best concepts.

Because the resources available for fire departments around the United States vary, a one-size-fits-all approach to best concepts is difficult to implement. However, the recommendations provided in this thesis can help all fire departments adapt best concepts for active assailant incidents to encourage implementation.

14. SUBJECT TERMS active assailant, active shooter, rescue task force, best concepts, best practices, warm zone, policy implementation	**15. NUMBER OF PAGES** 77
	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

THERE ARE NO MONSTERS IN THE CLOSET: WHY FIRE DEPARTMENTS ARE NOT IMPLEMENTING BEST CONCEPTS FOR ACTIVE ASSAILANT INCIDENTS

David Sabat
Captain, Howard County Fire and Rescue
BS, University of Maryland Baltimore County, 2004

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 2019**

Approved by: Gail F. Thomas
Advisor

Matthew Levy
Second Reader

Erik J. Dahl
Associate Chair for Instruction
Department of National Security Affairs

iii

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Despite literature that recommends fire departments in the United States implement best concepts to more rapidly access victims during active assailant incidents, the adoption of such concepts languishes. As the number of active assailant incidents in this country increases, fire fighters will be increasingly called to respond to incidents involving active shooters, vehicle ramming, and fire used as a weapon, regardless of policy implementation.

For this thesis, representatives of seventeen fire departments across the country were asked to describe challenges and facilitators of success when developing or implementing recommended best concepts. When describing challenges, the representatives pointed to the tradition-bound culture of the fire service, lack of senior leadership support, lack of trust between fire and law enforcement agencies, and the logistics of training all personnel. Factors that facilitate best practices include the ability to secure funding for ballistic protection equipment and training, preexisting relationships between fire and law enforcement agencies, joint fire-police training exercises, and the availability of best concepts.

Because the resources available for fire departments around the United States vary, a one-size-fits-all approach to best concepts is difficult to implement. However, the recommendations provided in this thesis can help all fire departments adapt best concepts for active assailant incidents to encourage implementation.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

LIST OF FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

Fire departments are encouraged to implement best concepts to rapidly access casualties during active assailant events.[1] Despite these recommendations, fire services across the country are not consistently developing and implementing policies that reflect best practices. Furthermore, the best concepts offered in the extant literature indicate that rapid access to victims requires the coordination of law enforcement and fire department personnel at active assailant events, yet the adoption of such practices languishes for unknown reasons. Examples of these discrepancies in current operations can be seen when comparing responses to the June 12, 2016, Orlando shooting and the May 31, 2019, Virginia Beach shooting. When an active assailant began firing his weapon at patrons in Orlando's Pulse nightclub in 2016, police quickly arrived on the scene and engaged the shooter. With the shooter barricaded in a bathroom, police asked fire department units staging on the scene to assist with the evacuation of victims. However, the fire department incident commander refused to allow fire personnel to assist, despite the Orlando Fire Department's three-year effort to develop an active assailant policy. Forty-nine people were killed at the Pulse nightclub, and a 2018 study concluded that sixteen victims "had potentially survivable wounds [and] a coordinated public safety approach to rapidly evacuate the wounded may increase survival in future events."[2]

In stark contrast, Virginia Beach Fire Department's response to an active assailant incident demonstrated how the adoption of best concepts could improve the chances of victim survival. During the active shooter incident in 2019, Virginia Beach police arrived

---

[1] Lenworth M. Jacobs et al., "Active Shooter and Intentional Mass-Casualty Events: The Hartford Consensus II," *Bulletin* 98, no. 9 (September 2013), http://bulletin.facs.org/2013/09/hartford-consensus-ii; InterAgency Board, "Active Shooter/Hostile Event Guide" (guide, InterAgency Board, July 2016), https://www.interagencyboard.org/sites/default/files/publications/IAB%20Active%20Shooter%20&%20Hostile%20Event%20Guide.pdf; Department of Homeland Security Office of Health Affairs, "First Responder Guide for Improving Survivability in Improvised Explosive Device and/or Active Shooter Incidents" (guide, Department of Homeland Security, June 2015), https://www.dhs.gov/sites/default/files/publications/First%20Responder%20Guidance%20June%202015%20FINAL%202.pdf.

[2] E. Reed Smith, Geoff Shapiro, and Babak Sarani, "Fatal Wounding Pattern and Causes of Potentially Preventable Death following the Pulse Night Club Shooting Event," *Prehospital Emergency Care* 22, no. 6 (November 2, 2018): 662–68, https://doi.org/10.1080/10903127.2018.1459980.

quickly on the scene and exchanged gunfire as the shooter retreated farther into the building.[3] While police were actively engaging the shooter, law enforcement and Virginia Beach Fire Department personnel simultaneously created small rescue teams and entered the building to begin rapidly removing victims for treatment and transport. The collaborative efforts taken by law enforcement and fire fighters that day were the result of joint training, and they demonstrate how responders can increase the chances of victims surviving active assailant events.

Ultimately, fire fighters will be called to respond to active assailant events, whether or not their agency has a policy to guide their actions. Paul Atwater points out in his master's thesis that "the absence of such policies and training places a tremendous burden on the first-in officers, as they will be required to make life or death decisions without guidance or instruction."[4] Without policy and training to coordinate efforts between fire and law enforcement personnel, fewer victims may survive active assailant events. The factors hindering policy development and the implementation of best concepts in guiding fire department responses are not understood. This thesis therefore asked the question: What are the barriers for fire departments to implementing best concepts in active assailant incidents?

Research for this thesis focused on interviewing representatives from seventeen fire departments that are representational of the larger fire service in the United States. These representatives discussed the challenges and facilitators for implementing recommended best concepts for active assailant incidents. Interviews were transcribed and then coded according to common themes. The interviews confirmed that there are barriers currently preventing fire departments from implementing policies that reflect best practices for active assailant events. However, perhaps more importantly, research confirmed that facilitators for success also exist. After coding themes found in the interviews, it was found that a

---

[3] Christina Maxouris, "Shooter Had a Long Gunbattle with 4 Officers. They Helped Prevent More Carnage, Police Chief Says," CNN, June 1, 2019, https://www.cnn.com/2019/06/01/us/virginia-beach-officers-shooter-gunbattle/index.html.

[4] Paul Atwater, "Force Protection for Fire Fighters: Warm Zone Operations at Paramilitary Style Active Shooter Incidents in Multi-Hazard Environment as a Fire Service Core Competency" (master's thesis, Naval Postgraduate School, 2012), 83.

common set of barriers were encountered by all participating fire departments, regardless of policy outcome. Generally, representatives from the fire departments described the conservative culture of the fire service, a lack of leadership support, difficulty in establishing trust to support the collaborative response effort between fire and law enforcement departments, and difficulty in completing training exercises.

These barriers are not insurmountable. All of the representatives interviewed for this research also described facilitators of successful policies, which have the potential to help departments overcome barriers. These facilitators of success include the ability to secure funding for ballistic protection equipment and training, preexisting relationships between fire and law enforcement agencies, joint fire-police training exercises, and the availability to learn best concepts.

This thesis provides several recommendations that fire departments can implement to overcome barriers to implementing active assailant response policies. The differing amount and availability of resources for fire departments around the United States makes a one-size-fits-all approach to best concepts difficult to implement. Resultantly, these recommendations identify factors that fire departments can maximize to adapt best concepts to encourage implementation.

Now that the existing barriers are better understood, fire service and government leaders have a responsibility to address them. Victims of future active assailant incidents will be expecting that the fire fighters called to rescue them are trained, equipped, and ready.

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

The conventional training and practice of waiting for a scene to be safe before medical personal [sic] enter the scene conflicts with the need for rescuers to access those victims who have potentially survivable injuries before they die.

—Dr. Matthew Levy, Hartford Consensus Compendium, 2015

Fire departments are encouraged to implement best concepts to rapidly attain access to casualties during active assailant events.[1] Despite past recommendations, fire services across the country are not consistently developing and implementing policy and practices that reflect such best concepts. Further, the best concepts offered in the extant literature indicate that rapid access to victims during active assailant events requires the coordination of law enforcement and fire department personnel, yet such coordination languishes in some jurisdictions for unknown reasons.

Examples of discrepancies in current operations can be seen when comparing responses to the June 12, 2016, Orlando shooting and the May 31, 2019, Virginia Beach shooting. When an active assailant began firing his weapon at patrons in Orlando's Pulse nightclub, police quickly arrived on the scene and engaged the shooter. With the shooter barricaded in a bathroom, police asked fire department units staging on the scene to assist with the evacuation of victims. Despite the Orlando Fire Department's three-year effort to develop an active assailant policy, the fire department incident commander refused to allow fire personnel to assist. Forty-nine people were killed at the Pulse nightclub that night, and a 2018 study concluded that sixteen victims "had potentially survivable wounds [and] a coordinated public safety approach to rapidly evacuate the wounded may increase survival

---

[1] Lenworth M. Jacobs et al., "Active Shooter and Intentional Mass-Casualty Events: The Hartford Consensus II," *Bulletin* 98, no. 9 (September 2013), http://bulletin.facs.org/2013/09/hartford-consensus-ii; InterAgency Board, "Active Shooter/Hostile Event Guide" (guide, InterAgency Board, July 2016), https://www.interagencyboard.org/sites/default/files/publications/IAB%20Active%20Shooter%20&%20Hostile%20Event%20Guide.pdf; Department of Homeland Security Office of Health Affairs, "First Responder Guide for Improving Survivability in Improvised Explosive Device and/or Active Shooter Incidents" (guide, Department of Homeland Security, June 2015), https://www.dhs.gov/sites/default/files/publications/First%20Responder%20Guidance%20June%202015%20FINAL%202.pdf.

in future events."[2] In stark contrast, Virginia Beach Fire Department's response to an active assailant incident demonstrated how the adoption of best concepts can improve the chances of victim survival. During the active shooter incident in 2019, Virginia Beach police arrived quickly on the scene and exchanged gunfire as the shooter retreated further into the building.[3] While police were actively engaging the shooter, law enforcement and Virginia Beach Fire Department personnel simultaneously created small rescue teams and entered the building to begin rapidly removing victims for treatment and transport. The collaborative efforts taken by law enforcement and fire fighters that day were the result of joint training, and they demonstrate how responders can increase the chances of victims surviving active assailant events.

Ultimately, fire fighters will continue to be called upon to respond to active assailant events, whether or not their agency has a policy to guide their actions. Paul Atwater points out in his master's thesis that "the absence of such policies and training places a tremendous burden on the first-in officers, as they will be required to make life or death decisions without guidance or instruction."[4] Without policy and training to coordinate efforts between fire and law enforcement personnel, fewer victims may survive active assailant events. The factors that are hindering policy development and the implementation of best concepts for fire departments, however, are not understood.

A. SIGNIFICANCE OF THE RESEARCH

This research aims to address one primary question: For fire departments in the United States, what are the barriers and facilitators to developing a policy and implementing recommended best concepts for response to active assailant incidents? This

---

[2] E. Reed Smith, Geoff Shapiro, and Babak Sarani, "Fatal Wounding Pattern and Causes of Potentially Preventable Death following the Pulse Night Club Shooting Event," *Prehospital Emergency Care* 22, no. 6 (November 2, 2018): 662–68, https://doi.org/10.1080/10903127.2018.1459980.

[3] Christina Maxouris, "Shooter Had a Long Gunbattle with 4 Officers. They Helped Prevent More Carnage, Police Chief Says," CNN, June 1, 2019, https://www.cnn.com/2019/06/01/us/virginia-beach-officers-shooter-gunbattle/index.html.

[4] Paul Atwater, "Force Protection for Fire Fighters: Warm Zone Operations at Paramilitary Style Active Shooter Incidents in Multi-Hazard Environment as a Fire Service Core Competency" (master's thesis, Naval Postgraduate School, 2012), 83.

research contributes to the fund of knowledge related to public safety planning and preparedness for response to active assailant events. Prior studies have evaluated the value of better coordination between police and fire departments during active assailant responses and how victim survival can be impacted by the effectiveness of that coordination. There are also numerous studies on the best concepts for responding to an active assailant incident. However, a paucity of information exists surrounding the barriers that may prevent fire departments from implementing recommended best concepts.

This thesis builds upon work by previous researchers that attempts to identify how a better response can be coordinated between fire departments, emergency medical services, and law enforcement. In 2012, Atwater researched various models for integrating public safety agencies during active assailant events. His research concluded that the fire service needed to change its culture of staging at active assailant events and adopt policies that allow for "warm zone" operations.[5] In 2014, Keith Johnson researched how public safety agencies can better coordinate responses to active assailant events through cross-disciplinary teams. His research focused on select active assailant incidents, and, to determine best practices for emergency response, he polled participants at a large-scale tabletop hostile event exercise that incorporated cross-disciplinary teams. However, Johnson's study was limited because the exercise participants were from only one geographical area.[6] Cynthia Vargas researched Houston Fire Department's approach, which is to deploy cross-trained teams of law enforcement and fire fighters that can enter hostile scenes together, regardless of incendiary or ballistic hazards. However, Vargas noted that her intentional decision to only review written documentation and not conduct interviews limited her ability to understand the "more complete picture of the thought processes and implementation challenges that rarely make it into reports."[7] This thesis

---

[5] Atwater.

[6] Keith H. Johnson, "Changing the Paradigm: Implementation of Combined Law Enforcement, Fire and Emergency Medical Services (EMS) Cross-Disciplinary Response to Hostile Events" (master's thesis, Naval Postgraduate School, 2014).

[7] Cynthia M Vargas, "Tactical Firefighter Teams: Pivoting toward the Fire Service's Evolving Homeland Security Mission" (master's thesis, Naval Postgraduate School, 2016), 5.

aims, in part, to pick up where Vargas left off and gain a more complete picture of those challenges through participant interviews.

It is the intent for this research to further aid public safety agencies by identifying barriers that prevent implementation of an active assailant policy. Through a better understanding of these barriers, strategies to overcome them can be crafted. Ultimately, policy implementation can be enhanced and, resultantly, chances of victim survival during these incidents can be improved.

B. ORGANIZATION OF THESIS

This thesis is organized into five chapters that present the purpose, significance, methodology, research results, and discussion on the findings. Chapter II provides background information and a literature review on fire department responses to active assailant incidents. Chapter III details the framework for conducting the research. Chapter IV presents the results found during the participant interviews. Chapter V analyzes and discusses the results before making recommendations to fire department senior management on overcoming challenges to developing and implementing best concepts in responding to active assailant incidents.

II. BACKGROUND AND LITERATURE REVIEW

> The reality is there hasn't been an active shooter mass-casualty incident in the United States in the past 20 years that hasn't ended without a fire truck parked in front. You're gonna go, so you might as well be prepared to go.
>
> —Interview with fire department Representative A, March 15, 2019

The term *active assailant* extends beyond situations where the perpetuator is using a firearm as a weapon, to more broadly include attempts to stab or ram people with a vehicle. Regardless of the weapon used, these incidents are *active* because the perpetrator or perpetrators typically continue their efforts to kill people within an area until they are engaged by law enforcement or a bystander, or commit suicide.[8] The persistence demonstrated by active shooters, in particular, makes it difficult to simultaneously engage the shooter and remove the victims for treatment. Traditionally, fire department and emergency services personnel are staged at a safe distance from the incident until law enforcement ensures the entire building is free of any threats. This tedious process delays victim access, the timely delivery of life-sustaining care, and the victims' transport to surgical treatment. Research that evaluated injury survival during combat compared to active assailant incidents in the United States proposed a new model for how fire departments should respond. The authors of the Hartford Consensus point out "that long-standing practices of law enforcement, fire/rescue, and EMS responses are not optimally aligned to maximize victim survival."[9] Overarchingly, these best concepts recommended that fire department and law enforcement personnel should more closely work together when preparing and responding to active assailant incidents.

---

[8] Federal Bureau of Investigation (FBI), "Active Shooter Incidents in the United States in 2018" (report, U.S. Department of Justice, 2019), 2, https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2018-041019.pdf/view.

[9] Lenworth M. Jacobs et al., "Initial Management of Mass-Casualty Incidents Due to Firearms: Improving Survival," *Bulletin* 98, no. 6 (June 2013): 33, http://bulletin.facs.org/2013/06/improving-survival-from-active-shooter-events/.

Active shooter incidents, specifically, continue to plague the United States. According to the Federal Bureau of Investigation (FBI), there were 250 active shooter incidents between 2000 and 2017; 799 people were killed and 1,418 people wounded during these incidents.[10] Although yearly variation occurs, the trend line for active shooter incidents moves upward: from one incident in 2000 to thirty incidents in 2017.[11] A review of active shooter data during 2016 and 2017 showed incidents took place in twenty-one different states.[12] The increasing frequency of active shooter incidents continued in 2018, with twenty-seven incidents occurring in sixteen different states.[13] In 2018 alone, eight-five people were killed and 128 wounded.[14] The number of active shooter incidents across the United States indicates the likelihood of continued violence and the continued need for public safety agencies to prepare.

A.   RECOMMENDED BEST CONCEPTS

The existing literature recommends fire departments implement best concepts that focus on integrating the response among all public safety agencies and improving victim survival. These concepts are not isolated to just active shooter incidents but also relate to incidents where explosives, fire, or vehicles are used with the intent to cause casualties.[15] These concepts have evolved to reflect civilian lessons learned and combat injury studies from the wars in Iraq and Afghanistan. As one of the first documents to propose changes to existing response frameworks to active assailant incidents, The Hartford Consensus says that we underutilize what we already know works to improve victim survival.[16] The best

---

[10] "Quick Look: 250 Active Shooter Incidents in the United States from 2000—2017," FBI, accessed August 18, 2019, https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-incidents-graphics.

[11] FBI.

[12] FBI, "Active Shooter Incidents in the United States in 2016 and 2017" (report, U.S. Department of Justice, 2018), https://www.fbi.gov/file-repository/active-shooter-incidents-us-2016-2017.pdf/view.

[13] FBI.

[14] FBI.

[15] InterAgency Board, "Active Shooter/Hostile Event Guide" (guide, InterAgency Board, July 2016), https://www.interagencyboard.org/sites/default/files/publications/IAB%20Active%20Shooter%20&%20Hostile%20Event%20Guide.pdf.

[16] Jacobs et al., "Initial Management of Mass-Casualty Incidents," 33.

concepts of what fire departments should be doing on the scene of active assailant incidents are not being implemented, despite the fact that they are known. The recommended best concepts can be grouped as: 1) the response of fire fighters and law enforcement should be integrated; 2) entry into the warm zone should be made if victims are present; and 3) fire fighters and law enforcement should train together.

1.   Integrate the Response

The idea of agencies responding to a scene of active violence and operating within their own silos is no longer appropriate or acceptable. All organizations that may respond to an active assailant incident should plan ahead of time for joint operations on scene. Joint operations allow each agency to coordinate their resources, share information, and react collectively to evolving threats. On the scene of an incident, a unified command should be established at one location that allows all of the agencies to coordinate their efforts.

2.   Get the Victims

If victims are present, small teams of fire fighters or emergency medical providers under the direct protection of law enforcement should be formed. When appropriate, these small teams, known as a rescue task forces (or RTFs), should enter the building with the intent to control hemorrhagic bleeding and then remove the victims to safety. This effort may happen while the active assailant is still engaging other law enforcement teams. Common terminology should be used to identify the location of the assailant and where RTFs can enter, such as the terms *hot*, *warm*, and *cold*. Think of these areas as shifting concentric circles, shown in Figure 1: the assailant is in the hot zone, surrounded by the warm zone where there is no active engagement, and further surrounded by a cold zone that has no threats at all. The zones can shift depending on where the assailant is being engaged.

Figure 1.   Hot, Warm, and Cold Zones

3.   Train Together

Planning for active assailant incidents should include training exercises among agencies that will most likely respond. The high level of collaboration needed during these incidents can only be accomplished through exercises and should "look at realistic capabilities of participating agencies resources and be based on high probability events."[17]

B.   LITERATURE REVIEW

This focused literature review examines documents, policies, and published guidance that suggest how fire departments should implement policy to guide responses to active assailant incidents. No arguments in the literature endorse the idea that properly trained and equipped fire departments should only wait outside of the perimeter at active assailant incidents. While there are national databases that aggregate active shooter statistics, no national databases exist that track fire departments' implementation of recommended best concepts for responding to active assailant incidents. Several governmental and private organizations have published recommendations and position papers; however, until the publication of the National Fire Protection Association's NFPA 3000 in April 2018, no single national standard existed to guide active assailant policies for fire departments. The literature review examined the practice of waiting to enter an

---

[17] InterAgency Board, "Active Shooter/Hostile Event Guide."

active assailant scene, the variety of response guidance available, and potential implementation barriers.

1. Stage and Wait

Contrary to the legacy practice of fire fighters staging at a distant, safe location, research and best concept recommendations show that waiting for law enforcement to completely secure the scene before entering to remove victims is no longer an appropriate tactic.[18] However, the concept of scene safety is ingrained early on in basic firefighter training. Michael Marino et al. point out that the default idea is that all tasks are second to scene safety.[19] The authors go on to point out that first responders remain safe at the expense of the victims.[20] As a result, the tedious process of securing an entire building during an active assailant incident means that victims may die from otherwise survivable injuries. Lenworth Jacobs et al. point out that because of this response mismatch, which favors responders and not the victims, "it is no longer acceptable to stage and wait for casualties to be brought out to the perimeter."[21] This statement is based on research that shows that most victims of active shooter incidents suffer from penetrating injuries, and the most effective treatment is rapid control of bleeding and rapid evacuation to surgical care.[22] Thus, the longstanding practice of fire department personnel staging and waiting has been challenged for its cautious approach which protects responders but not victims.

Atwater researched various approaches for the fire service to adopt when responding to paramilitary-style attacks, similar to the Mumbai, India, attacks in 2008. Atwater acknowledged in his thesis that the fire service as a whole still adopts a policy of staging in the cold zone until law enforcement has entirely secured the scene. This policy

---

[18] Jacobs et al., "Active Shooter and Intentional Mass-Casualty Events," 19.

[19] Michael Marino et al., "To Save Lives and Property: High Threat Response," *Homeland Security Affairs* 11 (June 2015), https://www.hsaj.org/articles/4530.

[20] Marino et al.

[21] Jacobs et al., "Active Shooter and Intentional Mass-Casualty Events," 20.

[22] Jacobs et al., "Initial Management of Mass-Casualty Incidents."

of staging, Atwater contends, "is not, in practice, zero risk."[23] In an emergency, fire fighters who enter the warm zone despite lacking the needed knowledge and tools pose a greater risk.[24]

2. Evolving Guidance

Published literature promotes that fire departments should implement best concepts when responding to active assailant incidents. However, adaption of best concepts can be vague and could resultantly impede the ability of fire departments of various sizes and with differing resources to implement a best concept. This vagueness can be seen, for example, in the International Association of Fire Chiefs' March 2018 position statement, which contains recommendations for dealing with active shooter incidents. The document argues that fire departments and law enforcement should collaborate to ensure "effective responses" and "sufficient resources."[25] The problem is that neither term is defined. Although two towns may face the same potential threat from an active assailant incident, the financial and resource wealth of the individual fire departments may vary greatly. Without guidance on how best concepts can be adapted to the resources of various fire departments, implementation may languish.

The most authoritative guidance on best concepts for active shooter responses may be the NFPA 3000, titled "Standard for Active Shooter / Hostile Response," which was released in April 2018. The genesis of this document began when Orange County Fire Chief Otto Drozd requested that the National Fire Protection Association (NFPA) consider developing a standard for active shooter events after the Pulse nightclub shooting, given the varying guidance available at the time.[26] The NFPA responded by creating a cross-

---

[23] Atwater, "Force Protection for Fire Fighters," 75.

[24] Atwater, 75.

[25] International Association of Fire Chiefs, *IAFC Position: Active Shooter and Mass Casualty Terrorist Events* (Chantilly, VA: International Association of Fire Chiefs, 2013), https://www.iafc.org/topics-and-tools/resources/resource/iafc-position-active-shooter-and-mass-casualty-terrorist-events.

[26] "NFPA Releases the World's First Active Shooter/Hostile Event Standard with Guidance on Whole Community Planning, Response, and Recovery," National Fire Protection Association, May 1, 2018, https://www.nfpa.org/News-and-Research/News-and-media/Press-Room/News-releases/2018/NFPA-releases-the-worlds-first-active-shooter-hostile-event-standard.

disciplinary technical committee made up of stakeholders from law enforcement, fire departments, emergency medical services, and private industry. The product of their work is a consensus document intended to provide a holistic approach for an entire community to plan for, respond to, and recover from an active shooter incident.[27] NFPA 3000 changes the landscape of guidance because communities can legally adopt all or portions of NFPA standards. Also, as a consensus document, its publication means that the range of agencies that may otherwise individually hinder policy adoption locally have already come together to create a document adaptable to the entire country.

3.   Possible Barriers to Policy Implementation

Including standardized active assailant responses in fire department policy will establish important guidance for both the organization and its personnel. Anisur Rahman Khan, in describing the broader context of policy aimed at the larger public, says that policies provide a framework that translates an organization's vision into tangible programs and actions.[28] Although fire departments may recognize the importance of preparing for active assailant responses, the recognition is hollow without the implementation of a policy that ensures fire fighters are trained and equipped appropriately. Khan warns that "the success of an adopted public policy depends on how successfully it is implemented. Even the very best policy is of little worth if it is not implemented successfully or properly."[29]

The literature revealed few references to barriers that prevent fire departments from implementing best concepts for responding to active assailants. Anecdotal arguments attempt to explain reasons not otherwise researched. Marino et al. reference institutional culture within the fire service, and staging while law enforcement mitigates threats. The authors argue that a quickly evolving and interdependent world dictates that the fire service must adapt to present threats and be less tradition-bound.[30] Aside from barriers related to

---

[27] National Fire Protection Association.

[28] Anisur Rahman Khan, "Policy Implementation: Some Aspects and Issues," *Journal of Community Positive Practices* XVI, no. 3 (January 2016): 11.

[29] Khan.

[30] Marino et al., "To Save Lives and Property," 1.

institutional culture, the literature does not uncover evidence of specific implementation challenges.

The literature does, however, provide organizational models that may explain barriers to implementation on a broad level. The Inter-Organizational Collaborative Capacity Assessment proposed by Susan Hocevar, Erik Jansen, and Gail Thomas focuses on the organization's recognition that mission success depends on collaboration with others.[31] In a scene where wounded victims wait for rescue as a shooter roams at large, law enforcement and fire department response collaboration is essential. Such an effort requires a little give and take from both organizations, which could impede joint actions. However, Paul Marik makes an argument that law enforcement should consider saving the lives of victims just as important as stopping the threat. In arguing that law enforcement and fire fighters need to collaborate in creating rescue task forces, Marik says, "the goal is saving lives."[32] The International Association of Fire Chiefs' position statement reinforces this argument of collaborative effort and the need for common terminology and shared understanding of operational movements to ensure "seamless, effective operations" between fire departments and the police.[33]

Researchers have previously acknowledged the existence of barriers. Atwater proposed in his thesis that successful collaboration typically follows a crisis and drives the necessary organizational commitment.[34] Atwater went on to speculate that the barriers to collaboration are "politics, rivalries, cultural clashes, labor-relations disagreements, and competition for scarce resources."[35] However, Atwater's speculation was based on his professional knowledge of the fire service and not on evidence-based arguments.

---

[31] Susan Page Hocevar, Erik Jansen, and Gail Fann Thomas, "Inter-organizational Collaborative Capacity (ICC) Assessment" (faculty publication, Naval Postgraduate School, 2012), 4, https://calhoun.nps.edu/handle/10945/38477.

[32] Paul Marik, "How to Get a Rescue Task Force off the Ground," PoliceOne, November 2, 2016, https://www.policeone.com/police-products/tactical/tactical-medical/articles/237647006-How-to-get-a-rescue-task-force-off-the-ground/.

[33] International Association of Fire Chiefs, *IAFC Position*.

[34] Atwater, "Force Protection for Fire Fighters."

[35] Atwater.

A better understanding of the barriers to implementation is the next step in research after reviewing the existing literature on the necessity of best concepts. Cynthia Vargas's thesis argues that there is a need for more collaborative responses between law enforcement and firefighters during high-threat events such as active shooter events. Vargas points out, however, that so much background information is lost when only written policies are evaluated. She proposes that "future researchers should consider incorporation of surveys and interviews of industry leaders who have implemented tactical fire teams to provide a complete picture of the process and to offer valuable insight to the obstacles faced by other departments as they formed their programs."[36]

The gap that exists between identifying a needed change and achieving it can be directly related to human causes. Richard Clark and Fred Estes propose that "it is impossible for any real change to occur without diagnosing human causes and identifying appropriate solutions."[37] The authors contend that, based on their research, there are three primary hindrances to change:

- Workers' motivation to implement the change as compared to other change goals

- Organizational barriers

- The workers' knowledge and skills

Workers may lack the know-how and skills needed to implement change. The authors argue that "poor communication and withholding important information are very common sources of knowledge problems at work."[38] In the case of active assailant responses, the question remains as to whether or not firefighters have been trained to effectively work with law enforcement in high-threat situations. The authors say that workers' motivation

---

[36] Cynthia M. Vargas, "Tactical Firefighter Teams: Pivoting toward the Fire Service's Evolving Homeland Security Mission" (master's thesis, Naval Postgraduate School, 2016).

[37] Richard E. Clark and Fred Estes, *Turning Research into Results* (Charlotte, NC: Information Age Publishing, 2008).

[38] Clark and Estes, 44.

to achieve change is not only related to their willingness to start making progress toward a goal but also to the persistence and mental effort needed to achieve it. Organizational leadership may not allocate resources for active assailant policies and training if they do not first appreciate the threat. Organizational barriers can exist as either limited physical resources or dysfunctional workflows. Some fire departments with limited funding or equipment may not be able to adapt recommended best practices for policy development.

C.   CASE STUDY: THE PULSE NIGHTCLUB

The events that took place at the Pulse nightclub on June 12, 2016, serve as an unfortunate example of how a lack of policy implementation can impact fire department response and, ultimately, negatively affect victim survival. This section reviews how the hindrances to change proposed by Clark and Estes were encountered by the Orlando Fire Department more than three years into their attempts to implement an active assailant policy in collaboration with the Orlando Police Department.

The Orlando Fire Department began developing an active assailant policy in 2013, the same year a student at the University of Central Florida unsuccessfully attempted to kill fellow students with a firearm. Initial policy development was ambiguously delegated to both an assistant chief and a group of lieutenants, neither of whom were successful in making progress. Eventually, the stalled effort was tasked to an assistant chief, who drafted a policy and scheduled training for all department fire fighters. When the assistant chief was reassigned from the project, the effort again faltered under the new leader. Ballistic protective vests purchased for fire fighters were locked in a headquarters closet during the Pulse nightclub attack. Senior leadership provided little guidance throughout the project and components of the policy and implementation schedule were unknown even days before the attack.[39]

When the assailant walked into the Pulse nightclub and began shooting patrons, the Orlando Police Department quickly arrived on the scene and forced the shooter to barricade

---

[39] Abe Aboraya, "How the Orlando Fire Department's Active Shooter Policy Fell through the Cracks," text/html, ProPublica, September 26, 2018, https://www.propublica.org/article/orlando-fire-departments-active-shooter-policy-update-fell-through-the-cracks.

himself in a bathroom. Orlando Fire Department units arrived on scene and staged themselves a safe distance away from the nightclub. As the shooter was pinned in the bathroom, the police commander asked the fire department units to assist with the evacuation of victims. However, the fire department's incident commander refused because he felt his personnel were not sufficiently trained.[40] A unified command post was never established between the police and fire department commander. As a result, relevant information that may have affected that decision was not shared.[41]

The Orlando Fire Department's response illustrates how victim survival can be impacted when a fire department does not implement best concepts. A study in 2018 concluded that sixteen victims may have survived the injuries they sustained during the nightclub attack if transport to surgical care had not been delayed.[42] This conclusion could be difficult to quantify given the myriad of variables affecting both the incident and the individual victims. However, Dr. Reed Smith and his team analyzed the victims' autopsy results and injury patterns, and concluded that the sixteen victims "had potentially survivable wounds [and] a coordinated public safety approach to rapidly evacuate the wounded may increase survival in future events."[43] The Orlando Fire Department's challenges in implementing an active assailant policy correspond to the factors that Clark and Estes propose as barriers to change, summarized here as motivation to change, organizational barriers, and subject matter knowledge.

(1) Limited Motivation to Change

On March 18, 2013, a student at the University of Central Florida unsuccessfully attempted to kill his fellow students. The would-be attacker pulled the fire alarm in a dormitory and waited to shoot at the evacuating students; when the plan fell apart, however, he instead killed himself. Orange County Fire Rescue Chief Otto Drozd called the incident

---

[40] Abe Aboraya, "Orlando Paramedics Didn't Go in to Save Victims of the Pulse Shooting. Here's Why," ProPublica, September 26, 2018, https://www.propublica.org/article/pulse-shooting-orlando-tragedy-response-plan.

[41] Aboraya.

[42] Smith, Shapiro, and Sarani, "Fatal Wounding Pattern."

[43] Smith, Shapiro, and Sarani.

"a near miss and certainly a wake-up call that, for us, could happen anywhere."[44] Clark and Estes describe this type of event as the motivation for Orlando and Orange County—who both responded to the incident—to begin reevaluating their active assailant response practices. However, there seemed to be less motivation demonstrated by Orlando. The fire department in Orange County soon began conducting training exercises with the police department and began revising its policy. While the fire department in Orlando did begin to redraft its policy, the policy was not finalized and the department did not comprehensively train with local law enforcement before the Pulse nightclub attack.

(2)   Organizational Barriers

Organizational barriers prevented the Orlando Fire Department from implementing an active assailant policy. In assigning an assistant chief to update the policy, the department gave a high-ranking officer the authority to make decisions—somehow who also understood the change components needed. Despite being the only person initially assigned to the project, he had the authority to arrange for department-wide training and liaise directly with the fire chief. However, he stopped working on the project soon after it began because a group of lieutenants was also working on a parallel project, but with different goal.[45] The fact that the two parties were not working collaboratively on the same project hindered progress. Assigning such a project to a group of low-level supervisors that would ultimately need to liaise with senior management created inherent barriers to the project's success. Progress was stalled, also, by the transition of successive leaders charged with completing the implementation. Reassignments are not uncommon in the fire service; however, reassignments can stall progress as new leaders take time to understand the history and direction of the project. In the case of the Orlando Fire Department's active assailant policy, the project never regained traction.

---

[44] Aboraya, "Orlando Paramedics."

[45] Aboraya, "Orlando Fire Department."

(3)   Limited Subject Matter Knowledge

According to Orlando Fire Department emails published by ProPublica, only the assistant chief provided vision for the development and implementation of the active assailant policy. The senior staff were unsure of the concepts in the new policy, even asking in emails about what model was going to be used for the updated policy.[46] The new assistant chief in charge of the project did not understand the recommended best concepts and did not respond to the questions in the emails. Although a plan was developed for training and the draft policy completed, senior leadership seemed to be unaware of it. Three months before the attack, a special operations chief emailed senior staff and the fire chief to ask about the status of the updated policy, saying it was essential to know. No information was shared.[47]

D.   CHAPTER CONCLUSION

The number of active assailant incidents in the United States continues to rise. Fire fighters will be called to respond to these incidents whether or not they have a policy in place to address them. However, the lack of an implemented policy can prove detrimental to victim survival, as illustrated at Orlando's Pulse nightclub attack. The literature lacks research about specific barriers that are preventing fire departments from implementing policies that reflect recommended best concepts in active assailant incidents. Previous researchers have theorized about possible barriers while researching associated topics. Authors have written about broad concepts that, in general, may affect change within an organization. However, the factors that specifically hinder fire departments from actively removing victims from an active assailant scene, under law enforcement protection, have not been identified in the literature.

---

[46] Steve Gaston, Rich Wales, Keith D. Maddox, emails collected by ProPublica, accessed December 22, 2018, https://www.documentcloud.org/documents/4936758-P211.html.

[47] Aboraya, "Orlando Fire Department.

THIS PAGE INTENTIONALLY LEFT BLANK

III. RESEARCH METHOD

This thesis used a qualitative approach to identify barriers fire departments may face when attempting to implement active assailant policies. Open-ended questions during telephone interviews allowed the study participants to freely describe the story of their respective departments' efforts to implement policy. This chapter provides a detailed description of the research method used in this thesis.

A. RESEARCH DESIGN

A qualitative approach was chosen because of the opportunity to better understand a participant's perspectives through the words, stories, and expressions they choose. Qualitative research, in contrast to quantitative research, focuses on "understanding how people interpret their experiences."[48] Rather than merely surveying participants and asking them to circle answers that may have prevented them from implementing an active assailant policy, this research sought to allow participants to self-identify those factors, thus minimizing the potential for investigator bias.

In qualitative research, the researcher determines how data is collected and analyzed and must be highly aware of his own biases, which may drive the process. This method provided an opportunity for the researcher to observe nonverbal responses, clarify responses, and ask additional questions for better understanding. Qualitative research approaches are inductive in that general concepts are built on data from individual participants. Findings in qualitative research are derived from an analysis of direct participant responses that the researcher separates into "themes, categories, and concepts."[49] These findings are further characterized as fuller and more descriptive than quantitative research. Through the use of open-ended questions, the researcher can encourage participants to fully describe their experience and in return gain a better

---

[48] Sharan B. Merriam and Elizabeth J. Tisdell, *Qualitative Research: A Guide to Design and Implementation*, fourth ed. (San Francisco, CA: Jossey-Bass, 2016), 6.

[49] Merriam and Tisdell, 17.

understanding by the words used. Where appropriate, participants were quoted from their interviews to support the inductive reasoning discussed later in this thesis.

B. IRB DETERMINATION

The research for this thesis involved interviews with seventeen human subjects; although the purpose was to collect information on the fire department itself, a determination from the Naval Postgraduate School Institutional Review Board (IRB) was sought. On February 8, 2019, the IRB determined that because the research was designed to illuminate organizational processes rather than to collect data about particular individuals, a full review and approval were not needed. The IRB determination number for this thesis is 2019.0042-DD-N.

C. PARTICIPANTS

The participants for this research were representatives from seventeen fire departments who could speak to both the development and implementation of their department's active assailant policy. This section describes how the number of participants was decided upon and how the participants were recruited.

(1) Number of Participants

Twenty-one fire departments from around the United States were initially selected to provide a sample of fire departments that serve both a range of demographics and landscapes. The goal of twenty-one departments allowed for even categorization into three groups based on the progress of the departments' active assailant policies, from still being developed to fully implemented. However, very early in the research process, it became apparent that fire department definitions for policy implementation varied. All representatives said they had an active assailant policy, whether it was implemented or under development. Further, a saturation of common themes of information was apparent after seventeen interviews were conducted. For these reasons, interviews were then concluded. The names of the individual fire departments and representatives were anonymized in this research to encourage open and honest answers. Only the thesis

advisors and the interviewer know the true identities of the participants and their respective departments.

(2)   Participant Recruitment

Because there is no national database of fire departments that have active assailant policies, potential participants were initially solicited through the network of current and former Naval Postgraduate School students. Participants were recruited through an email, which included a description of the research and a request to participate. Initial participants often recommended another potential participant. This snowball style of sampling allowed the researcher to interact with fire departments around the country that otherwise would have been difficult to initiate contact with. Participation in the research was voluntary.

D.   DEVELOPMENT OF INTERVIEW QUESTIONS AND PROTOCOL

Research questions were developed with the guidance and input of the thesis advisors. This team worked to adapt questions for the most efficient use of time during the interview. Questions were intentionally written as open-ended to provide participants an opportunity to answer as broadly or specifically as they felt necessary. All participants were asked the same ten basic questions and then were asked follow-up questions as necessary to better understand the answers provided.

(1)   Overview Questions

Participants were asked to respond to the following prompts to begin the interview:

- Please briefly describe your fire department.

- Please describe your fire department's active assailant policy.

These two prompts allowed the participant to feel more comfortable speaking to an unfamiliar person and provided insight into potential follow-up questions needed.

(2)   Policy Development Questions

Participants were then asked the following series of questions:

- When did policy development first begin?

- Can you speak to what first prompted the development of the policy?

- Have any revisions been made to the policy since implemented? Were any revisions made to the policy after NFPA 3000 was published?

- Can you speak to specific standards, consensus documents, and stakeholder input that the policy references?

- Can you speak to external and internal support for the policy?

These questions were intended to help the interviewer understand the inputs involved from the inception of the policy, through its evolution.

(3)   Questions about Barriers to Policy Development and Implementation

Participants were asked to speak to challenges their fire department faced when trying to develop and implement an active assailant policy. These questions also asked participants how those challenges were overcome. The questions did not list specific challenges that may have been met so that potential answers could avoid bias. The following questions were asked as part of this section of the interview:

- Can you speak to any challenges that had to be overcome to develop the policy?

- Can you speak to any challenges that were faced in implementing the policy?

- How were these challenges handled?

(4)   Implementation Questions

To identify the level at which the policy had been implemented, participants were asked to discuss how their fire department trains and operates with law enforcement. Answers served as an indication of levels of implementation for the department's active assailant policy. Participants were asked the following questions in this final section of the interview:

- How often does your fire department train with a law enforcement agency to respond to an active assailant event?

- If training occurs, what training formats do your agencies use?

- During an active assailant event, does your fire department permit personnel to enter the warm zone under law enforcement protection?

(5)   Interview Protocol

Interviews were conducted over the telephone and recorded with the smartphone application TapeACall Pro. Participants were first read a script that informed them about the recording, the intent of the research, that participation was voluntary, and that responses would be kept anonymous.

E.   ANALYSIS OF INTERVIEW RESPONSES

The participant interviews were transcribed from the digital recordings, and both the audio and transcripts were saved to a Dropbox folder that only the thesis advisors, transcriptionist, and interviewer had access to. Digitally recording the interviews allowed the interviewer to focus on the participants and their reactions to questions during the interview. Original audio files of the interviews were maintained in the researcher's smartphone application as a back-up until the audio was transcribed. At that point, the original audio files in the smartphone application were deleted.

Common themes were identified in the responses. First, transcripts were coded based on the demographics of both the participants and their respective fire departments. Participant demographics included the person's rank, level of authority within the

organization, and relationship to law enforcement. Fire department demographics considered the population size served, urbanization of the area served, and the department's number of uniformed employees. The transcripts were then coded according to answers provided to the interview questions.

F.   SUMMARY

The use of qualitative interviews allowed the researcher to better understand the factors faced by participants in developing and implementing their active assailant policies. An initial categorization of policies was found to be impractical and so fire departments were sought for voluntary participation from a network of Naval Postgraduate School students that offered the most diverse demographics of fire departments. Representatives from each department were asked the same basic questions, with follow-up questions as needed. Interview transcripts were used to code responses based on common themes and allowed for inductive analysis. The next chapter presents the results of the interviews.

IV. INTERVIEW RESULTS

> You want a barrier to success? It's the perception of the risk is off. We believe there's a monster in the closet even though the evidence says there is no monster in the closet. So we addressed that. And we collaboratively developed the concept that is now called rescue task force.
>
> —Interview with fire department Representative F, March 22, 2019

This chapter presents the qualitative results collected from the interviews with representatives of each participating department. Representatives were interviewed about challenges their department encountered when developing or implementing an active assailant policy. Additional information, such as the genesis for policy development, factors that facilitated policy development, how challenges were overcome, and factors intrinsic to the department, are presented.

A. OVERVIEW OF PARTICIPANT INTERVIEWS

Interviews with the seventeen participants lasted approximately forty-five minutes each. For anonymity, the fire departments/participants were assigned a letter from A to Q in ascending order of the population served. Unless otherwise noted in this chapter, references to the representatives are synonymous with their respective fire department.

1. Participating Fire Departments

A diverse range of fire departments are represented in this study. The participating fire departments are representational of the fire service in the United States. Fire departments in this research include career and volunteer combination departments, career-only departments, some that serve a large population, and some that serve a small population. As shown in Table 1, participants represented a wide range of city populations and number of uniformed career members employed. The largest number of residents served is 8.6 million people and the smallest is 50,000 people. The median number of residents served by the participating fire departments is 854,000 people. When considering categorization of the population sizes, eight fire departments (47 percent) serve a population under 500,000 people, four departments (24 percent) serve a population

between 500,000 and 1 million, and five departments (29 percent) serve a population over 1 million.

Table 1.   Demographics of Fire Departments and Representatives Interviewed[50]

Fire Department	Population Served	Uniformed Career Members	Representative Rank	Representative Direct Involvement
A	50,000	120	Fire Chief	X
B	83,000	160	Assistant Chief	X
C	109,000	100	Battalion Chief	X
D	112,000	130	Fire Chief	X
E	227,000	280	Battalion Chief	X
F	235,000	320	Medical Director	X
G	276,000	550	Captain	X
H	320,000	500	Battalion Chief	X
I	647,000	750	Division Chief	X
J	854,000	580	Battalion Chief	X
K	884,000	1500	Lieutenant	X
L	900,000	720	Assistant Chief	X
M	1,100,000	1500	Battalion Chief	X
N	1,300,000	1800	Assistant Chief	
O	1,500,000	2700	Assistant Chief	X
P	1,600,000	1700	Assistant Chief	X
Q	8,600,000	11,000	Lieutenant	X

If a participating fire department utilized both career and volunteer members, only career members were captured for this research. The number of active and operational volunteers within a department at any one time can fluctuate, making the accuracy of the number difficult to establish. Uniformed career members are typically operational, meaning they respond to incidents and require training. Non-uniformed members were not captured in this research because they typically are civilian employees, do not respond to incidents, and would not need to be trained in active assailant responses. The number of uniformed career members ranges from 100 to 11,000. Based on the number of uniformed

---

[50] Data obtained through interviews with fire department representatives.

career members, 35 percent (six fire departments) employ less than 500 employees, 24 percent (four departments) employ between 500 and 1000 employees, and 41 percent (seven departments) employ over 1,000 employees.

1.   Fire Department Representatives

The interviews sought fire department representatives that understood the historical development and implementation of their department's active assailant policy, regardless of their rank. Except for Representative N, all of the representatives were directly involved in their department's active assailant policy. Representative N is an assistant chief who did not develop the policy; however, the representative has been tasked for the past year with finalizing the policy's implementation.

Although the rank of the representative is less important than his or her policy knowledge, rank was considered a possible factor of organizational influence. Fire departments assign varying levels of responsibility to a spectrum of rank titles. However, ranks of fire chief, assistant chief, and division chief are generally associated with senior leadership positions within a department. Eight representatives (47 percent) are considered senior leadership within their respective departments. Six representatives (35 percent) are considered middle management, at the rank of battalion chief and captain. The two lieutenants (12 percent) are considered first-line supervisors, generally the first rank of supervision within a fire department. The one medical director that participated in this research is not a uniformed member of the fire department, but played a pivotal role in developing and implementing the department's active assailant policy.

B.   PROMPTS FOR INITIATING POLICY DEVELOPMENT

Understanding what prompted or motivated a fire department to begin developing an active assailant policy is important because it is the first step in the implementation process. Participants were asked to name all of the motivations for their active assailant policy. Three common reasons were named: an active assailant incident occurred, there was a need to strengthen interagency relationships, and the policy was prompted by legislation. This section provides quotes and details from the interviews to support common themes found in the genesis of active assailant policies.

1. Prior Active Assailant Incident

Representatives identified an active assailant incident as the most common prompt for policy development. Eight representatives (47 percent) specifically identified this factor. The active assailant incident may have occurred within or nearby their jurisdiction, or may have been a highly publicized incident elsewhere. Representative O discussed an active assailant incident in which fire department personnel "went in with the contact team, without any ballistic protective gear, and they took their regular ALS [advanced life support] equipment with them. [However], they literally used nothing out of the bag, because they didn't have anything that was appropriate."[51] This incident prompted both the fire and police departments in this jurisdiction to immediately begin collaborating on a policy.

The unfortunate consequences of an active assailant incident were noted as an almost necessary prompt in two interviews. Representative Q said that the department's policy development had stalled until an active assailant incident in the department's jurisdiction. At that point, "tragedy and transition moved the ball."[52] Fire Department L has not suffered an active assailant incident within the jurisdiction, but the representative sounded frustrated during the interview when discussing the ten years during which the department has been trying to implement a policy. When discussing how active assailant events have impacted other fire departments, the representative bluntly noted, "I do think having a large-scale incident with a lot of destruction is a driver and, unfortunately, that's the way some people learn. And it's not exclusive to active shooter events."[53]

Timing of an active assailant incident was a critical factor for Fire Department A. An incident in a nearby jurisdiction—which occurred during the promotion of a new police chief—prompted the fire department to consider its own possible response. The representative said, "I think the leadership change in the police department made a huge

---

[51] Fire Department Representative O, interview with author, March 13, 2019.

[52] Fire Department Representative Q, interview with author, June 5, 2019.

[53] Fire Department Representative L, interview with author, April 2, 2019.

difference because the police chief before was wholly resistive to any of the sort of [active assailant] stuff."[54]

2. The Need to Strengthen Interagency Relationships

Many of the representatives described a positive relationship with their police department. The decision to collaborate on active assailant responses was a natural function of those positive relationships. Many of the departments were already supporting SWAT teams with either tactically trained medical personnel or field apparatus and personnel. These departments recognized that the existing relationship needed to evolve. That evolution was an effort that incorporated best response concepts, more effectively served victims, and better protected fire fighters. Fire Department I said this evolution occurred because, in the past, "[fire fighters and EMS personnel] would go on a tactical incident and they would park a fire engine and an ambulance on the street, and they'd sit there for hours and hours waiting."[55] The representative had been a tactical medic with local law enforcement for over twenty years and developed relationships with law enforcement counterparts as they promoted through the ranks. The representative went on to say "that [with] relationship-building came the recognition of all the shootings happening across the country, it's like we need to work better."[56]

This concept of incorporating active assailant best concepts into existing fire department responses in conjunction with law enforcement was echoed during several interviews. Representative A said the best concepts in active shooter responses go beyond just those specific incidents: "You can't have this magic plan that is separate from everything else you do and has all this special s*** in it that you never do. And it sits in a white binder on the shelf, and we're gonna pull it down when something especially bad happens. Well, that only sets you up for failure."[57]

---

54 Fire Department Representative A, interview with author, March 15, 2019.

55 Fire Department Representative I, interview with author, March 12, 2019.

56 Fire Department Representative I.

57 Fire Department Representative A, interview with author, March 15, 2019.

3. Mandate by Legislation

Four fire departments participating in this research reside in two states that have legislation that mandates fire departments and law enforcement must collaborate on active assailant responses. Two representatives specifically pointed to this legislation as being the primary prompt for policy development. The other two fire departments had already initiated policy development when the legislation was enacted. All four representatives felt that the legislation would be a necessary impetus for other fire departments in their state to begin developing a policy.

C. LENGTH OF DEVELOPMENT AND IMPLEMENTATION FOR AN ACTIVE ASSAILANT POLICY

All of the representatives said that their departments have an active assailant policy. However, representatives interpreted the meaning of *implementation* somewhat differently. For an active assailant policy to be considered implemented for this research, a policy needed to be in place, and fire and law enforcement personnel trained on common response procedures. Fourteen departments (82 percent) met those criteria. Three departments (18 percent) had not implemented a policy at the time of the interviews.

For the fourteen departments with an implemented policy, the average length of time from development to implementation was 2.5 years. However, the most common length of time was one year. The longest was six years to develop and implement a policy.

Of the three departments that do not have implemented policies, two started their programs at least ten years ago. Fire Department D, in particular, has been working on implementing its policy since 2006. Representative D said that "the actual policy has not officially formally been adopted, [but] we've gone through a lot of [fire department] retirements and things. And so we've just not come around to actually finalizing the policy."[58] Fire Department N is completing training with its law enforcement counterparts and feels confident that the policy will be fully implemented by the end of 2019. That would be the culmination of three years of effort. Representative L said, "It's taken about

---

[58] Fire Department Representative D, interview with author, March 13, 2019.

ten years to get to where we're at now…. [T]he reason it's taken so long is because we had to go from soup to nuts to build the operational capability."[59] That operational capability was described as knowledge in tactical medical care of victims and acquisition of ballistic protective equipment, which have allowed fire fighters and law enforcement to now train on rescue task force integration.[60]

D.   FACTORS HINDERING POLICY DEVELOPMENT AND IMPLEMENTATION

All of the representatives described challenges their departments faced when either developing or implementing an active assailant policy. The goal of the interviews was to more fully understand the circumstances of the challenges faced, which is why participants were encouraged to provide descriptions they felt were most appropriate. There were four common challenged found in the answers provided: fire department culture, lack of senior leadership support, lack of trust, difficulty in training all personnel.

1.   Fire Department Culture

Representatives most commonly described the challenge of cultural resistance to an emerging role of fire fighters. Twelve representatives (71 percent) described this factor as a challenge that had to be addressed when either developing or implementing an active assailant policy. The challenge was described as cultural because entering an active scene of violence is unlike other roles traditionally encountered by fire fighters. The inherent threats from active assailants or fighting fires are very similar, but the means of responding to them are very different. One scenario is a traditional role steeped in centuries of practice. The other scenario is emerging and still being fully understood.

The resistance described by the representatives ranged from uneasiness to complete disagreement. Representative C said, "A lot of people in our department had reservations about what we were doing."[61] Representative P described "the other end, [where] you have

---

[59] Fire Department Representative L, interview with author, April 2, 2019.

[60] Fire Department Representative L.

[61] Fire Department Representative C, interview with author, March 6, 2019.

the people who say, 'Screw that! That's the cop's job. I'm not going in there. They're [saying] I'm allergic to lead. I don't want any part of it.'"[62] Representative A said the resistance from fire fighters is because "we're very tradition-bound. It's very difficult to get people to look at things in a different way."[63]

Resistance is not limited to rank-and-file fire fighters. Representative D, when describing the initial reaction to an active assailant policy, said, "Our first struggle was actually internally because we had command staff members that were like, 'Over my dead body are we going to put fire fighters in harm's way.'"[64] Representative F described the resistance as really masking a mismatched perception of fear. When asked to describe challenges, the representative described the fear of fire fighters being shot by active assailants who are hiding and waiting to assault first responder.[65] This perception is mismatched because assailants remain active until they are intercepted by law enforcement or a bystander.

Resistance by fire fighter unions was noted by four representatives (24 percent). Representative Q described working with the fire fighters' union this way: "[The union first] doesn't wanna put anybody at risk without training. Two, the union doesn't really always wanna accept new job titles and job descriptions without increased benefits to them whether salary or special designation. And then, three, it was just, safety of their members."[66] The topic of union support for active assailant response equipment became uncomfortable during the interview with Representative K. The representative mentioned that the union had asked for a higher-rated ballistic vest than the department was originally going to purchase. When asked if the union would still support the policy if the higher-

---

[62] Fire Department Representative P, interview with author, March 11, 2019.

[63] Fire Department Representative A, interview with author, March 15, 2019.

[64] Fire Department Representative D, interview with author, March 13, 2019.

[65] Fire Department Representative F, interview with author.

[66] Fire Department Representative Q, interview with author, June 5, 2019.

rated vests were not purchased, the representative tersely replied, "I don't know. I wouldn't wanna speak to that."[67]

2.   Lack of Senior Leadership Support

The senior leadership of the fire or police departments were described by six representatives (35 percent) as a challenge to the implantation of active assailant policy. Representative Q explained that the fire department wrote an active assailant policy that the police chief would not approve until three years later, when the chief was about to retire. When asked what specifically changed to allow the policy to be implemented, the representative replied, "The transition of his [the police chief's] role, of that individual role."[68] Other representatives echoed the roadblock to any active assailant policy development until their local police chief retired. Representative A said that "the leadership change in the police department made a huge difference" in moving policy development forward.[69] Representative L expressed frustration with getting law enforcement leadership to understand the importance of collaborative efforts at an active assailant event; the representative was direct, stating, "I had to beat their heads in about this."[70]

Leadership support was identified as both an initial challenge and an ongoing challenge. Several representatives explained that the initial support of senior leadership for the policy quickly dwindled after implementation. For senior leaders, active assailant incidents are one more topic among many in modern society that require their department's time, resources, and funding. The list of mandatory annual training topics may include hazardous materials, confined space, blood-borne pathogens, and medical treatment. The length of time and resources needed per course can vary. Limited resources may be directed toward state- or federal-mandated courses. There is currently no federal mandate to train on active assailant responses and only two states have training mandates.

---

[67] Fire Department Representative K, interview with author, March 18, 2019.

[68] Fire Department Representative Q, interview with author, June 5, 2019.

[69] Fire Department Representative A, interview with author, March 15, 2019.

[70] Fire Department Representative L, interview with author, April 2, 2019.

Many of the representatives expressed that they must continuously reiterate to senior leadership the need to train personnel initially—and as they are promoted—on these perishable skills. Responsibilities change as a fire fighter is promoted from rescue task force member to higher positions, including potentially being the senior fire department officer at an incident. All ranks in the fire department must continuously train on the department's policy to remain prepared for a potential response.

3. Lack of Trust

Many representatives described a barrier related to trust between fire fighters and police officers. Effectively removing victims from a warm zone only works if fire fighters and police trust that they are not going to endanger one another. It is reasonable to think that trust may be difficult to forge between fire and law enforcement personnel. Both fire fighters and police officers are charged with protecting public safety. However, there are inherent cultural differences between the organizations that can be both a strength and, in this case, a weakness. Some representatives explained that their local police departments pride themselves in not needing assistance from other agencies to carry out their jobs. However, establishing rescue task forces requires both organizations to admit they are stronger together. Both lines of work establish a deep trust in their colleagues. Forged trust in their colleagues during high-stress situations can at the same time cause distrust of outsiders. An outsider can be anyone who is not another police officer or another fire fighter.

Other organizational differences described in the interviews further relay trust as a key factor affecting policy development or implementation. Participants commonly described differences in how fire departments and law enforcement agencies would respond to active assailants. For example, fire departments in the United States regularly use the National Incident Management System (NIMS) during incident responses. NIMS establishes a standardized framework for managing an incident and common terminology for all responders. However, law enforcement rarely uses NIMS, and so the idea of establishing a unified command to coordinate the response, for example, can be foreign.

The role of law enforcement at active assailant incidents has also shifted; whereas the officer's role was once to wait for SWAT, it is now immediate engagement. This aggressive tactic is necessary to stop the assailant but makes it challenging to report exact movements of the assailant for rescue task force entry. Representative E said that trying to determine the warm zone at an active assailant incident can be difficult because "calling in on the radio is tough for the officers because they're used to running and gunning and not reporting back to what their current location is inside the building."[71]

4. Training Difficulties

Training for both fire and law enforcement personnel is a challenge for departments of all sizes. There is a common desire among the representatives to have all operational fire and law enforcement trained on the policy before it was implemented. Many representatives reported training schedules that lasted months, or even years, before everyone was trained. Scheduling training exercises for all personnel can be difficult. Training exercises require knowledgeable instructors and simulated locations. Training off-duty personnel may require funding for overtime. For Fire Department N, the task of getting the entire police force trained has been the largest hurdle to implementing a policy, despite the fact that the entire fire department is already trained.

E. FACTORS FACILITATING POLICY DEVELOPMENT AND IMPLEMENTATION

Every representative described challenges to develop or implement an active assailant policy. No department was immune to the need to be creative or persistent in advocating for their policies. Representatives just as easily, however, described common factors that facilitated policy implementation. The five primary factors that facilitated active assailant policies are presented in this section. These factors are the ability to secure funding, combined training exercises, strong organizational relationships between fire and law enforcement departments, the integration of recommended best concepts into daily operations, and availability of information.

---

[71] Fire Department Representative E, interview with author, March 7, 2019.

1. The Ability to Secure Funding

None of the representatives described funding as a barrier to policy development or implementation. Funding is not automatic and time must be spent to secure it. All of the representatives said their departments were able to secure enough funding to purchase expensive ballistics gear or pay for training hours. Departments were able to secure funding through grants, local budgets, or their police departments.

2. Combined Training Exercises

Many representatives noted that training exercises with both law enforcement and fire fighters were a significant factor in reducing reluctance and building trust. Representatives described an almost instant breakdown of resistance among fire fighters when combined training exercises were conducted with law enforcement. Practical training allowed both fire fighters and police officers to better understand their new, interconnected roles. As a result, practical training exercises helped many departments to implement their policies.

Representative C, like many other representatives, reported "reservations" among fire fighters when the policy was being developed.[72] The representative said the department first tried to educate the fire fighters with active assailant statistics to reduce concerns and resistance. However, Representative C said that "what solved it for us, was when we actually implemented the training [and] actually had the interior tactics classes."[73] The representative also noted that "the biggest naysayer in our whole group is posting on our union Facebook page like, 'I never I'd thought I'd be doing this, but it's a great thing.'"[74] Fire Department E described a similar outcome after training exercises with law enforcement. Fire fighter resistance was reduced during training and "they

---

[72] Fire Department Representative C, interview with author, March 6, 2019.

[73] Fire Department Representative C.

[74] Fire Department Representative C.

realized that, 'Hey … it wasn't as bad as I thought it was. It wasn't like the movies. I'm not dodging bullets like Mumbai or some of these 'Die Hard' movies.'"[75]

A few representatives reported that the necessity and value of this training was institutionalized in their fire department and law enforcement academies. The concept was to provide the initial awareness of active assailant responses during recruit academies. This exposes best concepts to the employees from the beginning of their employment and increases acceptance of this nontraditional role.

3. Relationships between Fire and Law Enforcement Departments

The barrier of trust was further overcome with preexisting relationships between policy developers in fire departments and their law enforcement counterparts. Virtually all of the representatives led the initiative to implement their respective active assailant policies. Many representatives described themselves as SWAT medics and had worked with law enforcement for a number of years. Other representatives noted working with their law enforcement counterparts on other projects. When active assailant policies were being initiated, representatives reported those relationships allowed immediate access to their law enforcement counterparts and, resultantly, the support of those counterparts. This scenario allowed both organizations to at least begin collaborating on a policy.

This demonstrates that functional relationships between public safety organizations on one project can foster future success on others. The best concepts for active assailant responses depend on collaborative efforts between fire departments and law enforcement. If that collaborative relationship already existed, then representatives reported finding consensus for an active assailant policy easier.

4. Best Practices in Daily Operations

Many representatives noted that active assailant incidents, although a continued threat nationally, are an unlikely threat to any one particular jurisdiction. In other words, historical data show that the number of active assailant incidents are increasing across the

---

[75] Fire Department Representative E, interview with author, March 7, 2019.

country but the individual threat to any one town is relatively low.[76] Representative M said that too many fire departments are focusing on just the active shooter component and not on the larger picture. The representative said that a call to an active shooter event is unlikely to happen during most fire fighters' careers[77] As a result, the representative said that "you put a lot of time and effort, and you come up with this policy. And you may do a couple drills early on the policy, and then the policy becomes the SOP that sits on the shelf that is only studied for promotional exams. And no one really ever knows what the hell it is and would ever be able to implement it during a real event."[78] The department's solution was to create a policy that focuses on "how [fire fighters and law enforcement can] work together on every single call every single day and create some expectations that build toward active shooter."[79]

Representative P pointed out that their fire department responded to several hundred criminal shootings in 2017. Their approach to unlikely active assailant incidents was to incorporate all shooting-related responses in collaboration with law enforcement. Representative K had similar comments, saying that "we should be employing the same principles that you run on your shootings on the active shooter times too [and] there's nothing different between the shooting that they run on the street corner where you have five victims than the shooting that's an active shooter situation."[80]

5. Availability of Information

All representatives reported that the ability to find information on best concepts helped policy development. The approach to finding the information varied. Some representatives simply searched the internet for information. Some representatives used online forums to ask other fire departments for guidance. However, most of the departments asked at least one other department for a copy of its active assailant policy to

---

[76] FBI, "Quick Look."

[77] Fire Department Representative M, interview with author, March 19, 2019.

[78] Fire Department Representative M.

[79] Fire Department Representative M.

[80] Fire Department Representative K, interview with author, March 18, 2019.

review. Two departments participating in this research were specifically noted as subject matter experts and had provided guidance to other departments in this research.

Most representatives said that NFPA 3000 was still being reviewed for potential impact on their policies because they were developed prior to its publication. Future policy versions will most likely be affected by standards outlined in NFPA 3000.

F.   SUMMARY OF FINDINGS

After the seventeen interviews, common themes among the representatives could be found about factors that hindered and encouraged implementation of active assailant policies. All representatives described challenges that their respective departments faced in either developing or implementing policies. However, several factors also allowed most of the departments to overcome those challenges and fully implement policies. These factors ultimately related to the relationship between fire departments and their law enforcement counterparts because collaborative efforts are needed for success.

The next chapter discusses these results and their implications for the fire service, provides recommendations for senior leadership, and presents a conclusion on these findings.

THIS PAGE INTENTIONALLY LEFT BLANK

V. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

> The success of an adopted public policy depends on how successfully it is implemented. Even the very best policy is of little worth if it is not implemented successfully or properly.
>
> —Anisur Rahman Khan[81]

> Effective collaboration across organizational boundaries is important for achieving governance reform. But, given the complexities of both aligning and competing interests, collaboration is often a challenge.
>
> —Susan Hocevar, Erik Jansen, and Gail Thomas[82]

This thesis sought to bridge the gap in knowledge related to the challenges that fire departments in the United States face when developing and implementing best concepts for active assailant polices. The trend of active assailant incidents and number of victims continue to climb in the United States.[83] The public—and certainly victims—at the scene expect the fire service to implement recommended best concepts designed to save the lives of wounded victims. What stands in the way of fire departments implementing policies and best concepts, given the body of literature that recommends them? This thesis builds on previous research that solely evaluated written policies by investigating the history of fire departments' policies and through interviews.

The seventeen representatives interviewed are from departments that are representational of the fire service in the United States. The interviews revealed common factors that prompted policy development, hindered implementation of the policy, and facilitated successful implementation. The implications of those findings are discussed in this chapter, along with potential future research areas and recommendations for addressing challenges.

---

[81] Khan, "Policy Implementation."

[82] Hocevar, Jansen, and Thomas, "Inter-organizational Collaborative Capacity."

[83] FBI, "Quick Look."

A. DISCUSSION OF THE FINDINGS

Research for this thesis confirmed that there are barriers that prevent fire departments from implementing active assailant policies. However, perhaps more importantly, research confirmed that facilitators for success also exist. This thesis hypothesized that funding and limited awareness of the recommended best concepts are barriers, and that it is difficult for fire departments to find funding for the training and expensive ballistic protective equipment. The hypothesis, also, was that policy development is being hindered by an inability to find existing best concepts. This hypothesis was proven wrong during interviews. Every fire department interviewed was able to secure funding. The process was not guaranteed or easy, but funding was typically secured through grants or local budgets. Some departments had ballistic protective equipment provided by their police department so that funds could support training exercises. The interviews also revealed the prevalence of recommended best concepts; many representatives had asked another fire department for a copy of its active assailant policy as a reference, and departments use additional sources as they were published and made available. Shared policies were then adapted to the needs of the new department. The hypothesized barriers were only mentioned as footnotes to larger and more complex issues.

A common set of barriers was encountered by all the fire departments whose representatives participated in this research, regardless of policy outcome: the conservative culture of the fire service, a lack of leadership support, difficulty to establish the trust needed to support collaborative response efforts between fire and law enforcement departments, and difficulty in completing training exercises.

Each fire department's ability to implement, or attempt to implement, a policy was not equal. Although every representative reported challenges, the department's ability to maximize its facilitators impacted the success of its policy implementation. Departments that participated in this research could be stratified into three categories based on the implementation of their policy: very successful, successful, and not successful. Table 2 shows the barriers, and factors implemented to overcome those barriers, for the departments that fit into these three categories.

Table 2.   Factors of Successful Policy Implementation

	Barriers	Factors for Success
Very Successful	• Fire fighter resistance to new role • Law enforcement resistance for rescue task force • Trust between fire fighters and law enforcement officers • Knowledge base and standardized guidance	• Ability to secure funding for equipment or training • Leadership buy-in • Training to overcome resistance • Institutionalization of best concepts • Strong relationship with law enforcement counterparts • Subject matter experts • Organizational culture that promotes progressive practices
Successful	• Fire fighter resistance to new role • Law enforcement resistance for rescue task force • Difficulty in training all fire fighters and law enforcement officers • Trust between fire fighters and law enforcement officers	• Ability to secure funding for equipment or training • Leadership buy-in • Training to overcome resistance • Strong relationship with law enforcement counterparts • Subject matter experts • Legislated mandate
Not Successful	• Fire fighter resistance to new role • Law enforcement resistance for rescue task force • Difficulty in training all fire fighters and law enforcement officers • Leadership buy-in • Trust between fire fighters and law enforcement officers	• Ability to secure funding for equipment or training • Subject matter experts

Fire departments that have been very successful, successful, or not successful in implementing active assailant policies experienced the common barriers—and common methods for overcoming those barriers—shown in the corresponding rows.

1. Very Successful in Implementation

There were fire departments interviewed that not only successfully implemented an active assailant policy but were also trend-setting in their approaches. These departments started developing a policy before much of the existing literature was published on recommended best concepts. Their work became the foundation referenced by departments in future policy development. Fire Department K, for example, started working on its policy in 2008 and, although it took several years to finally implement, the department's work was referenced by several other representatives in this research as the foundation for their own departments' policies. There was limited guidance for fire departments in 2008 and Fire Department K spent a significant amount of time establishing the efficacy of the rescue task force model later adopted by other fire departments.

a. Barriers

For departments that were very successful in implementing policy, the largest barrier was finding standardized guidance or a template to start with. Much of the guidance in consensus documents, reports, and government guides was published in the last several years, well after these departments had already started trying to develop a policy. These departments had to motivate their fire fighters to embrace a new role that, at the time, was more a conceptual model than proven practice.

b. Factors for Success

Fire departments in this category have harnessed four key factors for success: a subject matter expert who advocated for the effort, strong preexisting relationships with local law enforcement, strong support from senior leadership, and policies that integrated into daily operations.

These departments have at least one advocate with a law enforcement or military background, which allows them to understand the tactics and culture of both law enforcement and the fire service. This is important because the limited published guidance available was overcome by advocates who understood how lessons learned from combat casualty care could be adapted to the active assailant attacks in this country. The experience

learned by these departments in establishing the efficacy of these best concepts in the fire service serves as points of reference for future departments.

The rank of the person charged with developing or implementing the policy is inconsequential to the project's success. This person was typically very knowledgeable in the subject area, which fostered senior leadership support. Some representatives began the project when they were a lower rank, and promoted through the years as the policy development continued.

Senior leadership from both the fire department and law enforcement saw value in successful implementation of best concepts. Senior leadership support translated into funding for training, policy development, and appreciation of collaborative efforts. The relationship between these fire departments and their law enforcement counterparts was already strong when they started developing an active assailant policy. The effective working relationship that already existed allowed for collaborative policy development. The groundwork of trust and communication had already been established.

The policies developed and implemented by these fire departments were adapted based on the resources available and integrated into daily operations. The adoption of best concepts was applicable to all acts of violence that resulted in multiple wounded victims, regardless of the act's intent (e.g., criminal or terrorist). Because the best concepts are incorporated into daily operations, they are less likely to be forgotten during an actual active assailant incident. These departments understand the value in how best concepts for active assailant incidents can be adapted into the more likely incidence of a criminal shooting.

After the initial training exercises for all personnel, large-scale exercises are replaced with single-company drills with law enforcement. The goals of the drills are to reinforce core concepts and continue strengthening the relationship with law enforcement. These departments found that large-scale training drills inversely affect skill retention. Fire fighters focused on the numerous drill observers and logistics of the exercise instead of the core concepts. Single-company drills are often held with little notice and at potential locations, after normal business hours. Fire fighters are given a brief refresher on the core

concepts, given a scenario to practice tactical movements with police, debriefed, and then return to duty.

These departments typically attempt to further institutionalize recommended best concepts by incorporating them into their new employee training. As with any new role, training initiated as early as possible increases acceptance and understanding.

2. Successful in Implementation

Fire departments in this category fully implemented a policy of recommended best concepts. Barriers similar to other departments were encountered; however, the departments were able to harness factors for success and overcome them. These departments were motivated, had at least one advocate with a strong knowledge in best concepts, and were able to minimize organizational barriers for success. These departments generally used the success of previous departments as a reference in their own policy development.

a. Barriers

Representatives in this category described the conservative culture of the fire service, reluctant leadership support, and difficulty in training personnel as barriers. Representatives described the conservative culture of the fire service and fire fighter reluctance to accept this new role. Multiple approaches were used to gain fire fighter support. Senior leadership support was not guaranteed for this group of departments. Reluctant leaders either outright resisted the idea of entering warm zones or were obtuse in understanding how best concepts could be implemented. It was difficult for these departments to schedule joint training exercises for all fire fighters and police officers. Funding was typically less of a factor than members' availability to attend the training.

b. Factors for Success

Fire departments in this category harnessed two key factors for success: a subject matter expert who advocated for the effort, and a strong preexisting relationship with local law enforcement.

Each department has at least one subject matter expert in current active assailant practices who worked on getting the department's policy implemented. Generally, they have a military or law enforcement background and understood the differences in organizational culture. Many of the representatives mentioned that their fire departments had already implemented an active assailant policy as points of contact and references.

Generally, these representatives described senior leadership support for implementing the policy. Although senior leadership may not have been very knowledgeable on the recommended best concepts, advocates for the policy were able to provide the necessary background and information to answer their questions. For many of these departments, additional guidance had been published for reference on recommended best concepts. After-action reports from active assailant events around the country were available also. Even with the published literature, nearly all of the representatives said they contacted at least one other fire department comparable to their department's size and requested a copy of their active assailant policy as a template.

Representatives from two of the departments in this category noted that development of a policy started after the passage of a mandate by state legislatures. The mandate was a key factor because it was the prompt to begin policy development, even if the department had other factors that supported implementation.

3. Not Successful in Implementation

a. Barriers

Fire departments in this category had not implemented an active assailant policy when their representatives were interviewed. The common barrier that has hindered their ability to fully implement policy is a lack of motivation from both key internal and external stakeholders to see best concepts implemented. The three departments in this category encountered overall challenges similar to other departments interviewed. However, these departments do not have an implemented policy because either senior leadership in their own department or the police department do not support the efforts to finalize the policy.

For Fire Department N, the local police department has stalled its efforts to train officers, which has stalled the entire implementation process as a result. This lack of

motivation is surprising, given that a previous active assailant incident directly impacted both departments. The interview with the representative from this department, which was short and monotone, may have been indicative of the lack of motivation. The representative had just recently been tasked with completing implementation of the policy and had limited knowledge of the recommended best concepts before being assigned. Furthermore, the representative was unable to describe any efforts by senior fire department leadership or local government officials to encourage the police department to finish training.

Similarly, Representative L mentioned that senior leadership in the police and fire departments showed little motivation to see a policy fully implemented—despite the fact that the representative has a strong knowledge of the best concepts and has been advocating for their adoption for over ten years. The inability of senior leadership to find overall value in the policy despite slow progress has stalled implementation.

b. *Factors for Success*

These departments, despite the outcome, are not without factors that would otherwise support implementation. Unfortunately, these factors have not been able to overcome the barriers encountered. Senior fire department leadership decides how funding and resources are allocated to achieve organizational goals. An interagency response is needed in respect to active assailant incidents, and buy-in from senior leadership of both the fire department and law enforcement agency is needed.

B. RECOMMENDATIONS TO IMPROVE IMPLEMENTATION OF BEST CONCEPTS

1. There Needs to Be a Carrot or a Stick

Every representative described a prompt that first began the policy development process. For most departments, the motivation to start the process was an active assailant incident in their area or somewhere in the country. However, it is not realistic for every fire department to wait for the next active assailant incident before figuring out how best to respond. Two departments in this research started their processes after their respective states legislated mandatory training between fire departments and law enforcement. As with other public policies considered important to our national interest, the only impetus

for true implementation of best practices may come from legislation that mandates it, and dedicated funding that supports it.

The modern-day fire service is saddled with continuously evolving responsibilities that consume budgets and involve training. As many of the representatives pointed out during their interviews, active assailant training, as important as it is, becomes one more thing that requires time and resources, which are both limited. State mandates and adequate funding may be necessary to keep this topic on the front burner. This recommendation, however, does not exist in a vacuum. The departments that were most successful in implementing best concepts had the motivation, knowledge base, and resources to support the effort. Any mandate would need to be specific about the tangible goals of implementation and measures of success to ensure quality.

2.   Be Practical

As several interview respondents noted, the best concepts for active assailant responses have to be adaptable to individual departments. The resources required to establish a rescue task force on the scene of an active assailant incident can be difficult to set up, which may prevent fire departments from even developing a policy. Other models that require fewer resources—such as law enforcement ensuring a safe corridor or area within a building—should be considered. Not every fire department across the country will have access to the same resources, but there are alternatives that should be considered so policy development is not sidelined.

3.   The Current Version of NFPA 3000 Is Only a Starting Point

When NFPA 3000 was published in April 2018, it became the first industry standard to address active assailant incidents from collaborative planning to post-incident recovery. The document provides a framework that can be adopted by fire departments around the country. Many representatives interviewed in this research mentioned that NFPA 3000 was being reviewed by their departments for implications to their existing policies. However, the full impact of the document is not yet understood because fire departments are still assessing its applicability and value.

Many representatives noted that their written policies were adapted from another department's policy already in place. The next version of NFPA 3000 could add a draft policy template for fire departments to reference when developing their own policies. Additionally, the next version of NFPA 3000 should attempt to include as much feedback as possible from fire department, government, and professional trade leadership.

Without a national database that compiles the efforts of fire departments around the country to prepare for active assailant incidents, progress on policies for best practices is hindered. This research included interviews with a small representational sample of the larger U.S. fire service. However, the full scope of the fire service's efforts, or lack thereof, would be further understood with more information. NFPA could be a trusted site to host and manage a national database on active assailant policies across the country as part of the NFPA 3000 initiative.

4.   Professional Trade Organizations Should Mind the Gap

The lack of support from senior fire or police department leadership is a key barrier that impacts policy development. Regardless of other facilitators for success, senior leadership reluctance stalls the process. This challenge is difficult to overcome within the fire department. It is even more difficult to overcome when fire departments are trying to motivate their police department counterparts. It is not reasonable for progress to be stalled until retirements in either department.

Professional trade organizations should work directly with senior leadership to encourage collaborative policy development. The International Association of Fire Chiefs (IAFC), for example, published a position statement that encouraged the adoption of best concepts. The International Association of Fire Fighters (IAFF) also has a position statement encouraging best concepts. The IAFF should continue to promote a culture among its constituents of embracing and adopting best concepts. The IAFC and IAFF should further that position by supporting initiatives that give fire department senior leadership the motivation and tools to successfully implement a policy. These initiatives could include lobbying for state and federal funding to support training exercises and ballistic protective equipment. Constructive input should be provided for the next version

of NFPA 3000 to better address how individual fire departments can apply the best concepts. Conferences should focus attention and provide direction for senior leadership attendees on how to facilitate policy implementation.

C.   FUTURE RESEARCH

This thesis has identified common barriers to and facilitators of success that fire departments encounter when implementing best concepts for responding to active assailant incidents. However, current recommended best concepts need to be continuously reviewed for their applicability to the actual threat. The recommended best concepts need to match the methods that active assailants use to operate. Future research should include how evolving best concepts can be adapted by fire departments of all sizes to meet the evolving threat. Fire departments around the country will need more guidance on how to turn the recommended best concepts into achievable practices given available resources.

D.   CONCLUSION

The barriers that fire departments in the United States face to implement best concepts for active assailant responses are not insurmountable. All of the commonly identified barriers found during the interviews were accompanied by facilitators of success that had the potential to prevail. Now that the existing barriers and facilitators of success are better understood, fire service, government, and professional trade leaders have a responsibility to address them. Victims of future active assailant incidents will be expecting the fire fighters undoubtedly called to rescue them to be ready for the task.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

Aboraya, Abe. "How the Orlando Fire Department's Active Shooter Policy Fell through the Cracks." ProPublica, September 26, 2018. https://www.propublica.org/article/orlando-fire-departments-active-shooter-policy-update-fell-through-the-cracks.

———. "Orlando Paramedics Didn't Go in to Save Victims of the Pulse Shooting. Here's Why." ProPublica, September 26, 2018. https://www.propublica.org/article/pulse-shooting-orlando-tragedy-response-plan.

Atwater, Paul. "Force Protection for Fire Fighters: Warm Zone Operations at Paramilitary Style Active Shooter Incidents in Multi-Hazard Environment as a Fire Service Core Competency." Master's thesis, Naval Postgraduate School, 2012.

Clark, Richard E., and Fred Estes. *Turning Research into Results*. Charlotte, NC: Information Age Publishing, 2008.

Department of Homeland Security Office of Health Affairs. "First Responder Guide for Improving Survivability in Improvised Explosive Device and/or Active Shooter Incidents." Guide, Department of Homeland Security, June 2015. https://www.dhs.gov/sites/default/files/publications/First%20Responder%20Guidance%20June%202015%20FINAL%202.pdf.

Federal Bureau of Investigation (FBI). "Active Shooter Incidents in the United States in 2016 and 2017." Report, U.S. Department of Justice, 2018. https://www.fbi.gov/file-repository/active-shooter-incidents-us-2016-2017.pdf/view.

———. "Active Shooter Incidents in the United States in 2018." Report, U.S. Department of Justice, 2019. https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2018-041019.pdf/view.

———. "Quick Look: 250 Active Shooter Incidents in the United States from 2000—2017." Accessed August 18, 2019. https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-incidents-graphics.

Hocevar, Susan Page, Erik Jansen, and Gail Fann Thomas. "Inter-organizational Collaborative Capacity (ICC) Assessment." Faculty publication, Naval Postgraduate School, 2012. https://calhoun.nps.edu/handle/10945/38477.

InterAgency Board. "Active Shooter/Hostile Event Guide." Guide, InterAgency Board, July 2016. https://www.interagencyboard.org/sites/default/files/publications/IAB%20Active%20Shooter%20&%20Hostile%20Event%20Guide.pdf.

International Association of Fire Chiefs. *IAFC Position: Active Shooter and Mass Casualty Terrorist Events*. Chantilly, VA: International Association of Fire Chiefs, 2013. https://www.iafc.org/topics-and-tools/resources/resource/iafc-position-active-shooter-and-mass-casualty-terrorist-events.

Jacobs, Lenworth M., Norman McSwain, Karyl Burns, and Wayne Carver. "Initial Management of Mass-Casualty Incidents Due to Firearms: Improving Survival." *Bulletin* 98, no. 6 (June 2013). http://bulletin.facs.org/2013/06/improving-survival-from-active-shooter-events/.

Jacobs, Lenworth M., Michael Rotondo, Norman McSwain, David S. Wade, William P. Fabbri, Alexander Eastman, Frank K. Butler, et al. "Active Shooter and Intentional Mass-Casualty Events: The Hartford Consensus II." *Bulletin* 98, no. 9 (September 2013). http://bulletin.facs.org/2013/09/hartford-consensus-ii/.

Johnson, Keith H. "Changing the Paradigm: Implementation of Combined Law Enforcement, Fire and Emergency Medical Services (EMS) Cross-Disciplinary Response to Hostile Events." Master's thesis, Naval Postgraduate School, 2014.

Khan, Anisur Rahman. "Policy Implementation: Some Aspects and Issues." *Journal of Community Positive Practices* XVI, no. 3 (January 2016): 3–12.

Marik, Paul. "How to Get a Rescue Task Force off the Ground." PoliceOne, November 2, 2016. https://www.policeone.com/police-products/tactical/tactical-medical/articles/237647006-How-to-get-a-rescue-task-force-off-the-ground/.

Marino, Michael, John Delaney, Paul Atwater, and Reed Smith. "To Save Lives and Property: High Threat Response." *Homeland Security Affairs* 11 (June 2015). https://www.hsaj.org/articles/4530.

Maxouris, Christina. "Shooter Had a Long Gunbattle with 4 Officers. They Helped Prevent More Carnage, Police Chief Says." CNN, June 1, 2019. https://www.cnn.com/2019/06/01/us/virginia-beach-officers-shooter-gunbattle/index.html.

Merriam, Sharan B., and Elizabeth J. Tisdell. *Qualitative Research: A Guide to Design and Implementation*, fourth ed. San Francisco, CA: Jossey-Bass, 2016.

National Fire Protection Association. "NFPA Releases the World's First Active Shooter/Hostile Event Standard with Guidance on Whole Community Planning, Response, and Recovery." May 1, 2018. https://www.nfpa.org/News-and-Research/News-and-media/Press-Room/News-releases/2018/NFPA-releases-the-worlds-first-active-shooter-hostile-event-standard.

Smith, E. Reed, Geoff Shapiro, and Babak Sarani. "Fatal Wounding Pattern and Causes of Potentially Preventable Death following the Pulse Night Club Shooting Event." *Prehospital Emergency Care* 22, no. 6 (November 2, 2018): 662–68. https://doi.org/10.1080/10903127.2018.1459980.

Vargas, Cynthia M. "Tactical Firefighter Teams: Pivoting toward the Fire Service's Evolving Homeland Security Mission." Master's thesis, Naval Postgraduate School, 2016.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1.   Defense Technical Information Center
          Ft. Belvoir, Virginia

2.   Dudley Knox Library
          Naval Postgraduate School
          Monterey, California