

CALIFORNIA BAPTIST UNIVERSITY

Riverside, California

Toward a Theory of Action Definition for Homeland Security:
A Case Study of Federal, State, and Local Leadership Actions
During the *Deepwater Horizon* Oil Spill

A Dissertation Submitted in Partial Fulfillment of the
Requirements for the degree
Doctor of Public Administration

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Division of Online and Professional Studies
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March 2019

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has been approved by the


Division of Online and Professional Studies at California Baptist University

in partial fulfillment of the requirements

for the degree Doctor of Public Administration



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ABSTRACT

Toward a Theory of Action Definition for Homeland Security:
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During the *Deepwater Horizon* Oil Spill
by Mark Gerhard Moland, DPA

Homeland security lacks a consensus definition for the discipline. Government leaders and scholars have proposed a range of definitions that describe the threats, activities, and outcomes of the discipline, but because of changing administrations and changing threats, a consensus definition has yet to emerge. The purpose of this study was to explore the shared understanding of what constitutes “homeland security” as expressed through the actions of federal, state, and local officials during the *Deepwater Horizon* oil spill response of 2010. The theoretical framework of this research was developed from Argyris and Schon’s (1992) articulation of action theory and the double-loop learning model. Action theory suggests that through the observation and analysis of the value-infused behaviors (actions) of a discipline’s practitioners, one can identify a theory of action.

This qualitative research employed case study method to analyze the actions of federal, state, and local leaders during the *Deepwater Horizon* oil spill response. The federal, state, and local leaders’ actions were identified from official reports, Congressional testimony, press conference, and news broadcast transcripts and action themes were coded and analyzed. The case study details the challenges faced by federal, state, and local leaders in securing and cleaning up the spill. The study describes the actions of responding leaders and events where federal, state, and local leaders

experienced conflict over the right course of action. This research found positive action themes of coordination, communication, sensemaking, leadership, and trust building in the leaders' actions. This study concludes with a proposed definition of homeland security constructed from the action themes identified in the case study and makes recommendations for the practice and future research.

Keywords: Action Theory, Deepwater Horizon, Homeland Security, Homeland Security Enterprise, and Unity of Effort

ACKNOWLEDGEMENTS

The theologian Stephen Grabill observed that “the fruit of our labor is fellowship. It’s community. It’s relationship.” While much of writing a dissertation is done alone, the document itself grows from the fellowship and the support of family, friends, fellow scholars, and colleagues. In presenting this dissertation, I owe a debt of gratitude to the following:

To my committee, thank you for your guidance and insight. I am especially grateful to my chair, Dr. Provance for helping me sharpen my insights through his penetrating questions and wise observations.

To my classmates in the second California Baptist DPA cohort, you have been an encouraging and supportive academic family since the first residency.

To my colleagues at LeTourneau University, your encouragement, prayers, and support throughout this process strengthened me along this journey.

To Ruthanne, Sophia, Tabitha, and Josiah, thank you for being my “secret study buddies” and encouraging me with drawings and treats through the writing of this dissertation. We will have many more adventures together now that this season has passed.

To Shana, my beloved wife, thank you for loving and supporting me throughout this process. I could not have made this journey without you.

Soli Deo Gloria.

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CHAPTER 1: DEFINING HOMELAND SECURITY

On a cold March evening in 1783, General Washington assembled his officers in a church in Newburgh, New York, to address a potential mutiny that threatened the colonists' newly won freedom. Just 2 years prior, the British had surrendered at Yorktown. In Paris, American ambassadors were busy negotiating the treaty to officially end the war (Flexner, 1968). The new Articles of Confederation had created a federal system whereby states held the power to tax while a weak Congress handled national affairs (Flexner, 1968). The Congress had promised to pay the Army officers their 4 to 6 years of back pay as well as a pension, but the Congress was constrained from authorizing any taxes to fund the army (Flexner, 1968). The state legislators did not want to set a precedent of funding the army they wanted to disband, so each state waited to see whether another state would contribute first (Flexner, 1968). While the Congress negotiated with the states and sought new funding sources, Washington and his troops remained camped in Newburgh to monitor the remaining British garrison in New York City.

By March 1783, an unidentified cabal of officers stirred up their compatriots to take drastic action. The officers, disgruntled by the new Congress' inability to pay their promised pensions and salary, circulated a speech demanding the cash-strapped Congress pay the amount owed the officers immediately or face a mutiny (Flexner, 1968; Kohn, 1970). To quell the movement, Washington gathered his officers to express his disapproval of "these actions inconsistent with the rules of propriety" (Bacevich, Dunlap, Kohn, Luttwak, & Wasik, 2006; Gilder Lehrman Institute of American History, n.d.). As Washington began to read his notes, he reached for his spectacles and asked the men to

excuse his delay since he had “not only gone grey but almost blind in service to [his] country” (Bacevich et al., 2006, p. 43). As Washington said this, the officers, who deeply admired their general, began to openly weep (Bacevich et al., 2006). In his address that followed, Washington laid the foundation of American Civil-Military relations. He asked for their patience:

While I give you these assurances, and pledge myself in the most unequivocal manner, to exert whatever ability I am possessed of in your favour, let me entreat you, gentlemen, on your part, not to take any measures, which, viewed in the calm light of reason, will lessen the dignity, and sully the glory you have hitherto maintained. Let me request you to rely on the plighted faith of your country, and place a full confidence in the purity of the intentions of Congress; that, previous to your dissolution as an army, they will cause all your accounts to be fairly liquidated, as directed in their resolutions which were published to you two days ago; and that they will adopt the most effectual measures in their power to render ample justice to you for your faithful and meritorious services. And let me conjure you, in the name of our common country, as you value your own sacred honor, as you respect the rights of humanity, and as you regard the military and national character of America, to express your utmost horror and detestation of the man, who wishes, under any specious pretences, to overturn the liberties of our country; and who wickedly attempts to open the flood-gates of civil discord, and deluge our rising empire in blood. (Gilder Lehrman Institute of American History, n.d., p. 1)

The Newburgh affair not only emphasized the imperative of the military being subordinate to civil authorities, but it also arose in the context of a struggle between federal and state governments struggling to define their respective responsibilities in the security regime for the new nation without jeopardizing their newly won freedom. To ensure the security of the new nation, Washington defined the nature of the Army's relationship with Congress, their ongoing mission, and the nation's expectation of how they were to serve.

Homeland Security today exists in a similarly undefined state. Since 9/11, the federal government has led coordinated efforts to keep the nation safe from terrorism and later, other threats and hazards. States and local governments are expected to serve as a critical part of this effort but often do not share the federal government's priorities, or they must fund the local level implementation costs for federal mandates without ongoing federal support (Jain, 2006). Whereas the resolution of the challenges faced by Washington's army were short-term and clearly understood, modern Homeland Security is an ongoing endeavor to define federal, state, and local actions to address an increasing array of threats and hazards to the homeland. The need to clearly understand how powers are distributed and shared in the missions and the roles of the federal, state, and local governments is necessary to ensure the continued separation of powers within the American government.

The conundrums from the lack of a clear homeland security definition were experienced in 2010 as the United States struggled to address the oil spill from the sunken *Deepwater Horizon* mobile offshore drilling unit. As the largest oil spill in American history began to leak from the bottom of the Gulf of Mexico, Homeland

Security Secretary Janet Napolitano declared the incident a “Spill of National Significance” and appointed Coast Guard Admiral Thad Allen to serve as the National Incident Commander over the spill response (Allen, 2010). Prior to this response, oil spills were managed under the Oil Pollution Act of 1990 with the Environmental Protection Agency (EPA) or the U.S. Coast Guard leading the response effort depending upon whether the spill occurred on land or coastal waterways (Allen, 2010). According to existing federal regulations, the response organization would follow the National Contingency Plan under the oversight of the multiagency National Response Team (Allen, 2010). However, Napolitano, citing her designation as Principal Federal Official (PFO) for domestic incident management under Homeland Security Presidential Directive -5, declared this spill to be a Homeland Security incident under the department’s oversight (Allen, 2010; Randle, 2010). This transition from existing oil spill response regulations to a homeland security response combined with the unprecedented spill area raised numerous challenges related to how the federal, state, and local officials were to cooperate, who was in charge, what role state and local officials should play in the response, and what should be considered the measure of success. These are the same issues in contention when attempting to define homeland security.

Background of the Problem

In the aftermath of the 9/11 terrorist attacks, the national domestic response focused on a collection of counter terrorism security activities dubbed “homeland security” (Bullock, Haddow, & Coppola, 2013). A variety of law enforcement, intelligence and security endeavors were launched or redirected to protect the American people from future attacks (Committee on Homeland Security of the House of

Representatives, 2008). Over the next year, Congress officially relocated several *homeland security* agencies into a single federal department, while the actual definition of what constitutes homeland security was little more than an expanding collection of actions and objectives designed to keep America safe (Reese, 2013). Congress, Homeland Security officials, practitioners, and scholars have cataloged a variety of definitions of what homeland security should be, yet a consensus definition has not yet been identified (Bellavita, 2012; Comiskey, 2018; Kettl, 2003; Kiltz & Ramsay, 2012; Reese, 2012, 2013). This study contributes to the ongoing effort to identify a consensus definition of “homeland security.”

This study arose from the researcher’s experience first as a street-level homeland security practitioner during the department’s first dozen years and now as a college professor teaching homeland security curricula. On 9/11, the researcher was serving as a Coast Guard operations officer overseeing the Eastern Great Lakes. In the days that followed the attacks, he participated in planning and coordinating border security operations and intelligence collection. As the new security regime began to coalesce into homeland security, the operational emphases began to expand and shift from focused security operations to include emergency management while the strategic emphasis shifted from protection to resilience (Reese, 2012). Now as a college professor, the researcher develops and teaches several courses under the general category of homeland security, yet the boundaries of what should be taught remains unclear.

The Department of Homeland Security encompasses a variety of policy areas and disciplines including counterterrorism, border security, immigration management, emergency management, human security, transportation security, and the protection of

critical infrastructure and key resources. Homeland security as a governmental activity is not constrained to the department that shares its name. Congress appropriates funding for homeland security operations to thirty different departments outside of the Department of Homeland Security (DHS) with over half of all Homeland Security funding directed to Defense and other departments (Reese, 2013). The wide range of activities that fall under homeland security frustrates attempts to define the discipline (Comiskey, 2015). From both the perspective of a practitioner and an educator, the researcher seeks to advance the development of homeland security theory through furthering the development of a homeland security definition.

Homeland security lacks a conceptual definition and an undergirding theory to demarcate the conceptual limits of what is encompassed by homeland security, to professionalize the discipline, and to accredit academic programs. Homeland security as a discipline continues to develop through national level crises, such as Hurricanes Katrina & Rita, the *Deepwater Horizon* oil spill, and the 2017 Hurricanes (Bellavita, 2005; Comiskey, 2018). DHS has expanded from its initial counterterrorism focus to include responsibility for disasters, maritime oil spills, immigration, and cybersecurity (DHS, 2010b, 2014). Practitioners have struggled with defining a theoretical underpinning for this nascent discipline (Bellavita, 2012). Some scholars have suggested that homeland security may not need its own theory but could draw upon those in related disciplines (Bellavita, 2008, 2012; Kettl, 2003, 2014; Kiltz, 2012). Echoing Simon (1946), Bellavita (2011b) recognized that homeland security has already developed a list of unquestioned “proverbs” that inhibit both the understanding of the new discipline as well as defining achievable security objectives. Kiltz (2012) argued for expanding beyond the

counterterrorism focus of homeland security to include a greater role of emergency management as an essential part of the discipline. Other scholars have suggested that homeland security may be a “meta-discipline” or umbrella that draws in a variety of subdisciplines with a shared security focus (Bellavita, 2012).

The lack of a consensus homeland security definition inhibits the establishment of conceptual boundaries and operational parameters and thus serves as foundation for a broader theoretical framework. Bellavita (2008, 2012) noted that the discipline of homeland security is continuing to form, and a widely recognized theory has yet to arise. Kettl (2003) identified an essential element of Homeland Security as “contingent coordination” of resources to address problems (p. 253). However, Kiltz and Ramsay (2012) suggested that there are at least four different *perceptual frames* for defining homeland security, including public administration, criminal justice, international relations, and the nexus of environmental, political, social, and economic issues. Legislative and executive branch definitions have focused on homeland security as countering terrorism, *all threats and all hazards* readiness and response, resilience, and other approaches (Reese, 2012). These definitions vary from identifying a particular threat or group of threats, to describing the desired governmental action (coordination), to the desired end state of activity (resilience and readiness). The definitions have a degree of overlap; however, the key difference is the central organizing principle, whether a threat, action, or outcome. The central organizing principle of the definition will shape how the resulting organization is structured, budgets, plans, and prioritizes actions (Reese, 2012; U.S. Government Accountability Office [GAO], 2014) For example, an organization that is focused on countering terrorism prioritizes its activities differently

than one that is seeking to build resilience. Understanding what homeland security *is* aids good governance.

Homeland security policies exist at the federal and state level, but these policies do not always address the same concerns. The federal nature of American domestic governance security necessitates a shared definition of homeland security. The *Quadrennial Homeland Security Review* of 2010 introduced the concept of the *homeland security enterprise*, which is envisioned as a cooperative effort, under federal DHS leadership, across all levels of government to achieve homeland security (DHS, 2010b). However, the states have a different understanding of what homeland security encompasses. Across the 50 states, individual state governments operate from a variety of definitions of homeland security that range from counter terrorism to various forms of all hazard emergency response (Robinson & Mallik, 2015). Five states were even found to have multiple conflicting definitions of homeland security in their own laws and regulations (Robinson & Mallik, 2015). Not only are definitions different, but priorities also differ. A study of state priorities found terrorism to be the fifth highest priority, behind natural disasters, other crimes, and infrastructure improvements (Jain, 2006). Practicing homeland security at the local level can potentially have a negative impact on the community. Thacher (2005) observed that federal priorities for homeland security surveillance by local police can undermine both the community's perception of police legitimacy and the force's reputation in a diverse community.

The differences of homeland security definitions and priorities across the three levels of American governments are a result of the nation's governance structure. In Federalist Paper 10, Madison explained that the Constitution "extends the sphere" of

government across a wide diversity of people and regions as a protection against interest groups (both ideological and regional) of dominating the government (Hamilton, Madison, & Jay, 1787). With 50 states encompassing thousands of local communities, achieving a unified vision of what constitutes a secure homeland is frustrated by the diversity of local and regional opinions on what constitutes security for that community or state. A priority at the federal level may very well conflict with the expressed homeland security needs of a local community in the bayous of Louisiana. A consensus definition embraced by the homeland security enterprise would assist in achieving unity of effort during Homeland Security incidents.

Purpose of the Study

The specific aim of the study is to identify a theory of action through a case study of a critical homeland security event, the *Deepwater Horizon* oil spill response. The purpose of this study was to explore the shared understanding of what constitutes “homeland security” as expressed through the actions of federal, state, and local officials during the *Deepwater Horizon* oil spill response of 2010. A theory of action describes a professional community’s view of the actions required to achieve certain desired results based upon experience and practice (Argyris & Schon, 1992). In this study, the federal, state, and local officials as leaders in the homeland security enterprise are understood to serve as the community whose actions represent their own practice of homeland security and suggest a collective understanding of the concept.

This study investigates the types of decisions homeland security leaders address during the oil spill response to address that challenges that arose from the unprecedented response, engineering, social and political challenges faced by the leaders. Efforts to

produce a theory of homeland security tend to focus on viewing homeland security as an independent discipline, a meta-discipline, or suggest it must be viewed from a variety of disciplines. One scholar has quipped that the discipline is still “waiting for homeland security theory” (Bellavita, 2012, p. 1). While the discipline waits, homeland security professionals continue to search for reasonable standards and objectives to guide and evaluate education for future homeland security professionals. This study focuses on how leaders make decisions when the nature of the event is beyond the scope of routine training and contingency planning to identify the types of decisions made and suggest a theory of action that will assist in intergovernmental cooperation, Congressional decision-making, and professional education.

This study’s aim examined the operational, organizational, communications, and political challenges that were beyond the scope of the National and Area Contingency Plans and other related plans during the *Deepwater Horizon* oil spill response, from the sinking of the *Deepwater Horizon* until the completion of the *static kill* operation (August 4, 2010). Challenges are defined as issues beyond existing contingency plans or standing orders that require a decision or review by senior response officials at the National Incident Command or the Unified Area Command (Coast Guard Training Center Cape May, 2012).¹ In view of developing a theory of action, this study addressed the following two specific aims:

¹A general principle followed by all military services is to follow the established standing operating procedures, orders, or operational or contingency plan; however, when situations occur outside those previously described situations, the approval of a higher authority is required (Coast Guard Training Center Cape May, 2012).

The first aim is to identify strategies utilized by homeland security officials to facilitate unified action when political officials challenged longstanding legal requirements. Homeland security responses are based upon the idea of *unity of effort* where all levels of government work together toward a single end. However, policy preference at the federal, state, local, and tribal level can vary widely and lead to a lack of cooperation and at times competition between leaders at various levels of the government. The same lack of cooperation can be found in the interagency as well as the intergovernmental. For example, in the years leading to the 9/11 attacks, the CIA and FBI did not always share information even when required to do so by law (National Commission on Terrorist Attacks on the United States, 2004). In the *Deepwater Horizon* response, Admiral Thad Allen remarked that the response was complicated by the “political and social nullification of the National Contingency Plan” (Randle, 2010, p. 355). The first aim of this study was to identify the strategies employed to foster unified action when interests diverged.

Second, this study aimed to identify the underlying theoretical themes from the actions (both desired and enacted) requested by the federal, state, and local leaders. These themes were developed into a unified theory of action to serve as a practical definition of “homeland security.”

Research Question

This research study focused on exploring one research question:

What do political leaders’ priorities and actions at each level of the response (federal, state, local) indicate about the definition of homeland security?

In this question, priorities are to be understood as the actions requested by federal, state, and local leaders to be implemented by the response organization to address the impacts of the oil spill. Actions should be understood to include any orders or direction provided by a leader to individuals or groups under their authority and jurisdiction to address impacts from the spill.

Significance of the Problem

The lack of a widely accepted homeland security definition and theory limits efforts to further professionalize the discipline, accredit academic programs, and identify the conceptual limits of what is encompassed by homeland security. Homeland security professionals are well trained for their various duties within the homeland security enterprise. However, training prepares one to accomplish tasks and not envision the unexpected. The 9/11 Commission stated it plainly as a “failure of imagination” by officials across the federal government (National Commission on Terrorist Attacks on the United States, 2004, p. 336). One cannot train for every possible hazard or threat, but one can develop the imagination to envision new levels of readiness, resilience, and response. The need for a theory-driven homeland security education has never been greater. Comiskey (2015), in describing his efforts to identify how well homeland security undergraduate and graduate students were prepared for the field noted,

Academics must come to a consensus about what homeland security actually is and the discipline must be seen as a profession. Definitions underpin theories that provide conceptual precision and help determine what has to be done. A consensus definition of homeland security would help provide criteria for competent homeland security professional practice. (Comiskey, 2015, p. 34)

A homeland security definition is necessary to educate professionals who “understand the times” and know what they ought to do (1 Chronicles 12:32).

This study also addresses the political-administration dichotomy, a fundamental principle of public administration. The lack of homeland security theory has significant implications for the political-administration dichotomy. Wilson’s (1887) original conception of the dichotomy was that political principals would lead and provide direction while administrators would execute that direction. However, as contemporary scholars have noted, current practice should be understood as a continuum, collaboration, or degrees of discretion allotted to administrators by political leaders (Svara, 1998). As Reese (2012) explained, Congress, the department, and the president have provided multiple conflicting, diverging, and vague definitions of what constitutes homeland security. Additionally, homeland security leaders have offered up strategic and operational definitions of homeland security that differ from the legislative language developed by Congress. With the myriad of legislative and executive directions along with administrative strategic planning, it is unclear the degree to which the dichotomy exists in homeland security or whether it is a collaborative effort based upon the *law of the situation* (Follett, 2008, p. 60). A clear understanding of what constitutes homeland security allows for universities and other institutions to develop educational programs that shape future homeland security professionals (Ramsay, 2013). A clearly defined understanding of what homeland security *is* empowers political principals to oversee efforts to develop professional qualification standards and evaluate future homeland security nominees for their ability to lead the organization effectively.

Theoretical Framework

The aim of this study was to produce a theory of action to define homeland security. In action theory, actions are value-infused behaviors that reflect the social construction of the situation (Catron & Harmon, 1981). Actions by administrators have a subjective meaning to the administrator who has acted as well as to those individuals and groups who receive the effects of the action (Catron & Harmon, 1981). The shared meaning of the action is essential to determining the effectiveness of the administrator's action. A theory of action then must identify actions based upon shared values that will achieve a shared vision of the end. To approach a shared vision of the meanings (and thus required actions) for homeland security response, this study focused on the interactions of the members of the homeland security enterprise, specifically the federal, state, and local leaders and their interactions with the *Deepwater Horizon* response organization. It is through these interactions and the resulting prioritization of response actions that the underlying priorities and values for the leaders begin to emerge. In the pursuit of unity of effort, the leaders' differing visions of homeland security bring opportunities for cooperation and conflict.

To this end, this study's conceptual model was adapted from Argyris's (1976; Argyris & Schon, 1992) double-loop learning model as shown in Figure 1. In action theory, a practitioner's actions evidence the underlying assumptions that shape her choice of action in any given situation; this represents her *theory-in-use* (Argyris & Schon, 1992, pp. 6–7). For the purpose of this study, the theories-in-use represent the actions prescribed by current operational doctrine and contingency plans. From the existing theories-in-use, the response leaders act; however, the action is not merely informed by

one theory-in-use but the various theories-in-use at each governmental level and the input from the federal, state, and local leadership. The federal, state, and local leaders' have different perspectives on the actions required to respond effectively and thus have different initial theories-in-use. These actions would either lead to an alignment of actions or conflict among the various leaders. After the operational action occurs, one evaluates how the consequences (or outcomes) align with the expected outcome under the theory-in-use. The resulting evaluation can lead to a revision of the operational plans of the response but can also influence the revision of the underlying theory-in-use as illustrated in Figure 1. For this study, the case study illustrates how the federal, state, and local leaders modified response operations based upon these feedback loops. The analysis of the patterns of those actions were utilized in this study to suggest a theory of action as a definition of homeland security.

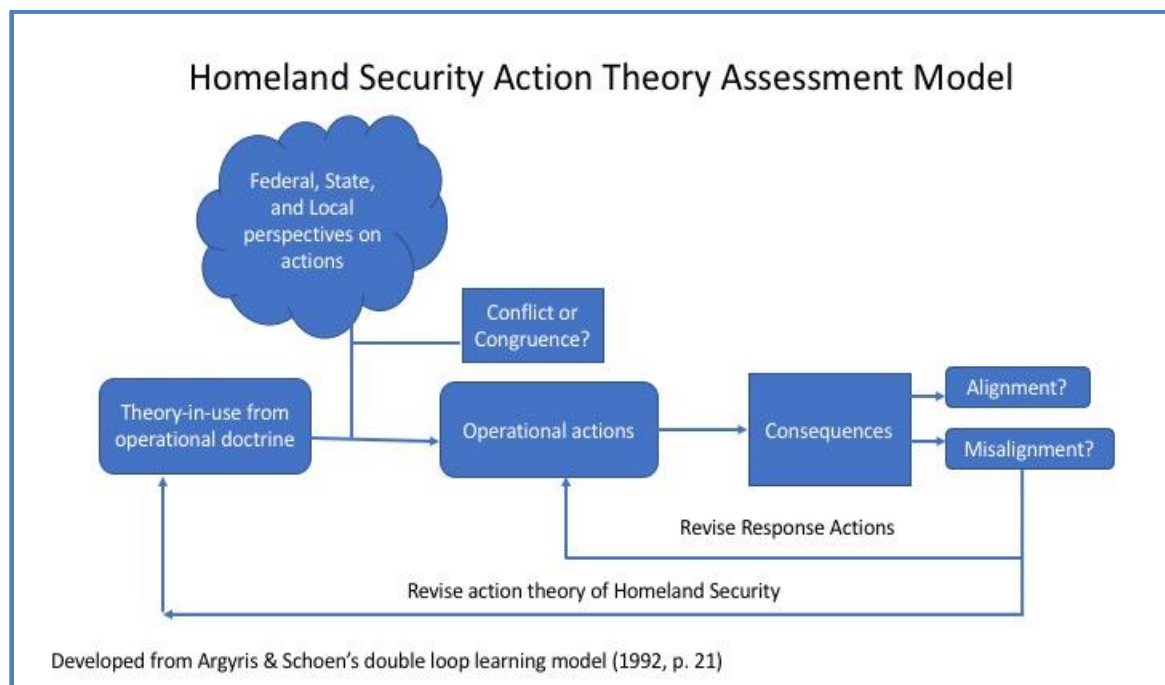


Figure 1. Homeland security action theory assessment model.

Definitions of Terms

The following is a list of terms and how they are defined within this study (A glossary of acronyms can be found in Appendix A):

Action. Behavior infused with meaning (Harmon, 1981).

Black swan event. An unexpected and highly improbably event with catastrophic consequences (Taleb, 2010).

Deepwater Horizon. The name of the mobile offshore drilling unit after an explosion in the Gulf of Mexico in area Macondo Canyon 252 (MC252) resulted in a Spill of National Significance in 2010. By practice, oil spills are generally named for the source of the spill.

Federal On Scene Coordinator (FOSC). Individual designated by the Coast Guard or EPA with regulatory authority to direct action for cleanup of an oil spill (National Oil and Hazardous Substances Contingency Plan, 40 CFR § 300.5, 2011).

Federal On Scene Coordinator Representative (FOSCR). Trained and certified official of Coast Guard or EPA with authority to direct cleanup action on behalf of the FOSC (40 CFR § 300.5, 2011).

Homeland Security Enterprise. Federal, state, local, tribal governments, community organizations, families, and individuals (DHS, 2014).

Homeland Security incident. Threat- or hazard-based event requiring multijurisdictional action to respond and recover from the event² (Federal Emergency Management Agency [FEMA], n.d.).

²FEMA, as part of DHS, has been delegated leadership and ownership of the National Incident Management System and all of the related National Emergency Management Frameworks.

Incident Commander (IC). Individual with overall authority for leading an incident response. When multiple agencies are involved, the individual leader from the agency with jurisdiction and authority most relevant to the incident and ICS command training³ will be appointed the leader. When multiple agencies are required by statute or regulation to lead a response, a unified command is established with multiple individuals serving together as the unified command (FEMA, n.d., 2017).

Incident Command System (ICS). A standardized organizational structure and planning system for coordinating a response to a Homeland Security incident. ICS provides a standardized structure, common vocabulary, and coordinated planning system. The system is able to expand or contract based upon the size of the incident response required. ICS is the response organization system required under NIMS (FEMA, n.d., 2017).

National Contingency Plan (NCP). The National Contingency Plan refers to the “National Oil and Hazardous Substances Pollution Contingency Plan” codified in 40 CFR Part 300. The NCP describes the national plan for responding to oil spills and chemical releases. The NCP designates the EPA and U.S. Coast Guard as the lead agencies for response operations and describes necessary organizational structures, relationships, and techniques for responding to oil spills within the United States (30 CFR § 300).

³Incident Command training is available through FEMA’s Emergency Management Institute as a series of both online independent study, online courses, and federally funded residence training courses. FEMA also provides standards for state-sponsored emergency management training as well as training offered by private contractors.

National Incident Command (Commander; NIC). During a Spill of National Significance, the Coast Guard Commandant may appoint a National Incident Commander and supporting organization to assist the FOSC through communicating with the public and affected parties, strategic coordination of federal, state, local and international resources, and serve as a senior liaison to corporate leadership of the RP (40 CFR § 300.323).

National Incident Management System (NIMS). FEMA-developed framework for coordinating federal, state, local government and nongovernmental organization cooperation to respond to Homeland Security incidents (FEMA, 2017).

Response. Coordinated governmental action to address the short term impacts of a Homeland Security incident (FEMA, n.d.).

Responsible Party (RP). The entity identified by the FOSC as responsible for the spill of oil into the environment. The RP may be a corporation, vessel, port, individual, or other legal entity (40 CFR § 300.5, 2011).

Spill of National Significance (SONS). Legally defined in the National Contingency Plan:

A spill that due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge. (40 CFR § 300.5, 2011, p. 18)

Type I incident. The most complex type of Homeland Security incident that involves multiple jurisdictions, multiple incident command (FEMA, n.d.)

Unified Area Command (UAC). During a Homeland Security incident that is highly complex or geographically dispersed, a Unified Area Command is established to oversee multiple local incident commands during a multijurisdictional response. The UAC leads the development of strategies and priorities for the incident response and allocating critical resources to the local incident commands (FEMA, n.d.)

Whole-of-government. Coordinated government actions across agency boundaries for response to highly complicated, multijurisdictional, multiagency problem (Christensen & Lægreid, 2007),

Organization of the Study

Chapter 1 of the study presented the introduction, the statement of the problem, the purpose of the study, the question to be answered, the significance of the study, the theoretical framework, the conceptual framework, and the definitions of terms.

Chapter 2 is a review of relevant literature. It addresses the following topics: the lack of a consensus definition of homeland security; the development of the homeland security concept; the multiple proposed definitions including threat and hazard-based definitions, activity-based definitions, and outcome-based definitions; a discussion of the importance of definitions and their necessity for political accountability; and a discussion of action theory as the theoretical framework for this study.

Chapter 3 presents the methodology used in the study, including the research design; population and sampling procedure; and the instruments and their selection or development together with information on validity and reliability. Each of these sections concludes with a rationale, including strengths and limitations of the design elements.

The chapter goes on to describe the procedures for data collection and the plan for data analysis.

Chapter 4 presents the results of the study through a discussion of the events of the *Deepwater Horizon* response with a focus on how federal, state, and local leaders sought unity of effort in containing and cleaning up the spill. Chapter 5 discusses and analyzes the results and proposes an action-based definition for homeland security. Chapter 6 looks forward to the future of homeland security with a discussion of this study's limitations, recommendations for the practice, and recommendations for future research.

CHAPTER 2: REVIEW OF THE LITERATURE

This chapter explores the development of the homeland security concept, the search for a definition, and the theoretical and conceptual frameworks for this study. This chapter explores the academic and professional literature related to homeland security definitions and theory. The challenges stemming from the lack of a consensus definition of homeland security are discussed. The chapter describes the development of homeland security from the late 1990s until 2017 with an examination of how the president and Congress formulated homeland security as an operational mission and how then it was implemented by a new department. The chapter then explores the various definitions that have been proposed by scholars. The chapter discusses the importance of a homeland security for political accountability between the separate federal powers, the federal and state governments, and between the political principals and administrative officials. The chapter concludes with a discussion of action theory as the theoretical framework for this study.

Documentation

This study explored the growing literature on homeland security. In identifying documents relevant to the development of a definition, the following key terms were initially utilized: homeland security, homeland security definition, and homeland security theory. From the initial literature identified through these searches, key terms were expanded to include homeland security enterprise, federalism, political-administration dichotomy, collaboration, cooperation, disaster response, emergency management, and whole-of-government. Initial searches utilized the Google Scholar and the California Baptist University Library's OneSearch. The Homeland Security Digital Library

(HSDL.org), sponsored by the Naval Postgraduate School with support from DHS and Federal Emergency Management Agency (FEMA), served as a source for the majority of government documents, reports, congressional legislation and hearing transcripts, and DHS strategic plans. The Homeland Security Digital Library is also the depository for the thesis produced by federal, state, and local homeland security leaders during the Center for Homeland Defense and Security's Master's program. Subsequent searches were conducted with ProQuest Dissertation and Theses Global database, JSTOR database, EBSCO host, Wiley, and Sage journal databases. The researcher also searched for newer homeland security journals identified in other articles and dissertations that did not appear in database searches. These additional journals include the *Homeland Security Affairs Journal*, the *Journal of Homeland Security Education*, and the *Journal of Homeland Security and Emergency Management*.

Lack of a Consensus Definition

In the 2014 *Quadrennial Homeland Security Review* (QHSR), Secretary Jeh Johnson observed that the majority of the American people have some level of contact on a daily basis with the Department of Homeland Security ([DHS], 2014). Although Homeland Security, as a department, impacts the majority of the citizenry, academics and government officials still lack consensus on exactly what *is* homeland security (Bellavita, 2012; Bynum, 2016; Kahan, 2013b). Reese (2012, 2013) identified seven different conceptual and strategic definitions of "homeland security" across DHS's existing strategy, budget, and policy statements. The definitions, to be analyzed in the following sections, propose a range of strategic objectives from countering terrorism to emergency management and preparedness, to immigration administration, to customs and border

security (Reese, 2012). In the 2014 QHSR, DHS added cybersecurity as an additional essential objective in securing the homeland. Some researchers have expressed concern that the inconsistency in definitions will impact attempts to oversee DHS and ensure operational efficiency and mission focus (Bellavita, 2008; Bynum, 2016; Reese, 2013). However others, most notably Bellavita (2008), have suggested that lacking a unified definition allows for the necessary flexibility to address threats, or as Bellavita quipped, “If you don’t know where you are going, you may end up someplace interesting” (p. 2).

Although flexibility during the “evolution” of the homeland security concept could conceivably allow for greater agility in addressing emerging threats and hazards, the American governance structure arising from the Constitution implements a separation of powers between the various branches of government that leads to accountability between the branches of government (Hamilton et al., 1787). When Congress creates an agency, the Executive Branch must develop the agency in accordance with the requirements set forth by Congress in the authorizing legislation. As implemented through the Government Accountability Office’s “Green Book,” the Executive Branch requires all federal agencies to define their missions and objectives as a foundation for strategic planning (Reese, 2012; U.S. Government Accountability Office [GAO], 2014). This research proceeds from the view that a clearly defined homeland security concept is required by not only current GAO procedures but also the Constitutional separation of powers. Before further exploring the challenge and necessity of developing a homeland security definition, it is necessary to explore the origins of the homeland security concept and how a national tragedy became the crucible that transformed an abstract idea into a new and expansive federal department.

Development of Homeland Security Concept

Homeland Security Before 9/11

While homeland security gripped the American view of domestic security after the 9/11 attacks, the concept was first suggested to address the increased domestic challenges experienced during the last decade of the 20th century. In 1998, Secretary of Defense William Cohen chartered the United States Commission on National Security/21 Century [sic] to develop a new national security strategy to address the post-Cold War security environment (Hart & Rudman, 1999b). The commission, known as Hart-Rudman, identified terrorism as an increasing threat against American cities that would challenge the existing view that national security occurred outside U.S. borders. According to Hart and Rudman (1999a),

Traditional distinctions between national defense and domestic security will be challenged further as the new century unfolds, and both conventional policies and bureaucratic arrangements will be stretched to and beyond the breaking point unless those policies and arrangements are reformed. (p. 3)

This new area of domestic policy challenges was initially identified as *homeland defense* in their initial or Phase I report (Hart & Rudman, 1999a, 1999b). This idea was further explored in the Hart-Rudman Commission's *roadmap* to address these concerns released in early 2001 as their Phase 3 report and renamed the concept as *homeland security*. Hart-Rudman specifically recommended the creation of a "National Homeland Security Agency" with FEMA at its core, combined with three border security agencies, specifically the U.S. Coast Guard, Customs, and Border Patrol, to provide domestic security coordination along with critical infrastructure and information security (Hart et

al., 2001). Hart-Rudman recommended that the National Guard be reassigned to primarily conduct homeland security, including domestic protection against missile attacks (Hart et al., 2001).

Shortly after the report was released, Congressman Mac Thornberry introduced H.R. 1158 (National Homeland Security Agency Act, 2001) to create the National Homeland Security Agency with the intention this new agency would be responsible for border control and emergency response, coordinate with the states, local governments, and other government agencies to improve security and readiness and conduct contingency and exercise planning. Although Hart-Rudman cited a domestic terrorist threat as the need for “homeland security,” the first proposed agency was designed to act primarily as an agency focused on emergency management and border control. H.R. 1158 was never acted upon by Congress after its March 2001 introduction (National Homeland Security Agency Act, 2001). A few months later, the terrorist attacks and national response would refocus the homeland security concept on counter terrorism.

Emergency Management Before Homeland Security

As noted above, Hart-Rudman recommended that FEMA form the core of the proposed National Homeland Security Agency. A brief review of American disaster response policies prior to 2001 is necessary to illustrate the reason FEMA was initially offered as the core of a Homeland Security agency. Emergency management is a local response to a crisis that may or may not have regional or national impacts (Haddow, Bullock, & Coppola, 2014; Kiltz, 2012). Until the mid-20th century, disasters were handled at the local and state level although on 128 occasions in the early 20th century, Congress sent national condolences and sometimes nominal federal funding for

rebuilding (Clary, 1985; Platt, 1999). The apparent (from contemporary standards) lack of Congressional action did not stem from a lack of compassion but a view that such *acts of God* were to be addressed by friends, neighbors, and communities and were not a federal government responsibility under the Constitution (Platt, 1999).

In 1950, Congress passed two acts that shaped this discussion: The Federal Disaster Response Act and Civil Defense Act (Platt, 1999; Sylves, 2008). The Federal Disaster Response Act of 1950 created the first recurring program providing federal funding to communities impacted by disaster. The Civil Defense Act of 1950 created a voluntary, local civil defense force and provided federal grants to fund community bomb shelters (Sylves, 2008). These acts laid the foundation for FEMA and the future involvement of emergency management disciplines in homeland security. The full history of federal emergency management after 1950 is beyond the scope of this discussion. This section briefly discusses four key aspects of its development: the Stafford Act, the role of FEMA in civil defense and counterterrorism, the incident management system, and the whole community concept.

The Robert T. Stafford Act of 1988 ([Stafford Act] 42 U.S.C. § 5121, 1988) is the key legislation for national emergency response and a foundational piece of the homeland security enterprise. In the Stafford Act, Congress authorized FEMA to manage federal disaster assistance funding to assist states, local governments, and their constituents in mitigating, responding to, and recovering from natural and man-made disasters (McCarthy, 2011). To obtain federal support under the Stafford Act, the impacted state's governor must request a disaster declaration from the president. Once granted, FEMA funding and federal assistance is offered to the states with a portion of federal costs borne

by the states (McCarthy, 2011). The structure of the Stafford Act funding protocol is in keeping with the federal principle: disaster response is primarily a state and local concern, and federal assistance is provided upon request (Lindsay, 2015; McCarthy, 2011; Platt, 1999).

For the purposes of this discussion, the key issue is the initiation of action. Under the Stafford Act, the local and state leaders are the ones who act first with the federal government providing a supporting role in the response effort. With the cost share, states theoretically would invoke federal assistance only when the costs and resources necessary to deal with the crisis are far beyond the state's capabilities. However, studies of federal disaster declarations show a continual increase in requests. According to the Congressional Research Service, federal disaster declarations were around 19 per year in the 1960s, but by the 2000s the average jumped to 56 per year and then were near 100 by 2011 (Lindsay, 2015). Although the program was intended to strengthen state and local disaster response, scholars have noted an increasing reliance on federal aid for disaster response and decreasing response capability pre-9/11 based upon the assumption of federal support (Platt, 1999). While state and local leaders desire to lead the response and invoke federal funding to support their own efforts, a negative externality from the legislation may have resulted in localities being less ready to respond to disasters. However, the Stafford Act brings to homeland security established relationships for coordinating crisis management, a system based upon local response first, and an increasing reliance on federal support to address crises.

FEMA has played an ongoing role in first civil defense and most recently counterterrorism since its inception. As mentioned above, the 1950 Civil Defense Act

created a voluntary civil defense force and established a baseline for community defense readiness. While states established their own emergency management offices, federal emergency management functions were seen as part of civil defense operations (Office of Inspector General, 2009). Even after the creation of FEMA in 1979, the agency's resources were often redirected to support civil defense activities (Haddow et al., 2014; Sylves & Cumming, 2004). Notably, during the Clinton administration, James Lee Witt served as FEMA's administrator and established a focus on both "all hazards" readiness and bringing the "whole community" together to increase readiness for natural disasters (Office of Inspector General, 2009). From the establishment of the DHS in 2002 until after Hurricane Katrina in 2005, FEMA once again was directed to shift their attention toward countering terrorism and specific readiness activities to support response to a terrorist attack (Office of Inspector General, 2009). Some scholars and practitioners have recognized this shift as a factor in FEMA's early struggles in responding to Hurricane Katrina (Office of Inspector General, 2009; Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). FEMA's threat or policy focus influences its readiness to address other threats and hazards.

Emergency management brings to homeland security a robust understanding of coordination and collaboration in response to a crisis. Since the emergency management disciplines arose from addressing local emergencies, emergency management tends to begin with a local response and scale to include higher levels of government when the disaster exceeds local and regional capabilities (FEMA, 2017; Haddow et al., 2014; Sylves, 2008). In determining who has authority to respond to an incident, Burton (2008) noted that the necessary emergency function, scope of response, and cause of incident

impact which layer of government responds first. The vast majority of natural and man-caused disasters start with the local level of government. For example, terrorist attacks, which are under federal jurisdiction, start local but quickly scale up to full federal involvement and control (Burton, 2008).

When incidents impact regions, states often look to mutual aid agreements with other states first. Local and state leaders established cooperative cross-jurisdictional cooperative agreements since larger scale incidents would quickly exhaust the resources of smaller and rural jurisdictions (Haddow et al., 2014). The interstate Emergency Management Assistance Compact (EMAC), officially sanctioned as an interstate agreement by the U.S. Congress, facilitates regional planning and sharing of resources for disaster response (Waugh, 2007). The state of national emergency management prior to 9/11 demonstrated a significant degree of inter-jurisdictional cooperation and readiness. The response to the 9/11 attack on the Pentagon demonstrated the sophistication of the National Capitol Regions' fire and rescue collaborative agreements (Kettl, 2014). As Waugh (2007) found in his study of the Hurricane Katrina response, the struggles Louisiana experienced in effectively requesting and incorporating assistance from other states was not due to a lack of a cooperative mechanism (EMAC), but the state leadership's level of familiarity with assistance agreements and ability to integrate other states' resources with their response hindered their own efforts. Although FEMA struggled to coordinate resources during Hurricane Katrina, other federal agencies (particularly the U.S. Coast Guard) along with their own established network of state and local partner agencies were able to effectively coordinate emergency response (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane

Katrina, 2006; Townsend, 2006). As one scholarly duo noted, the failures in Hurricane Katrina response were not necessarily due to federalism but primarily due to decreased emphasis on FEMA's natural disaster response in the newly established DHS (Birkland & Waterman, 2008). Whether included as only post terrorist event consequence management or an *all hazards* approach, the established emphasis on coordination and collaboration made emergency management an essential part of the newly developed homeland security concept.

FEMA's whole community approach is a model for the homeland security enterprise concept. In 1996, FEMA established the "Project Impact" initiative focused on creating disaster resistant communities through engaging all members of the community in identifying ways to mitigate potential disaster impacts (Armstrong, 2000; Haddow et al., 2014). Project Impact sought to include not just local leaders but also local business, nonprofit groups, educational institutions, medical facilities, owners of critical infrastructure, and citizens in the process of planning and preparing a community for future disasters (Armstrong, 2000). FEMA's effort to engage the whole community in mitigating future disasters was heralded as a success after retrofitted homes survived an earthquake in a "Project Impact" community (Perrow, 2005). However, the project was cancelled in 2001 (a few months before 9/11) because of plans to privatize disaster response (Perrow, 2005). The establishment of the whole community approach in 2011 expanded the focus beyond mitigation to include planning, readiness, and response to a catastrophic "maximum of maximum" disaster (Caudle, 2012, p. 1; FEMA, 2011). Scholars rightly expressed concerns about the emphasis on preparing all communities for the "maximum of maximum" scenario, noting that this level of preparedness was

impossible for most communities (Caudle, 2012, p. 1). However, both Project Impact and the whole community approach emphasized that achieving homeland security is a community project that requires all levels of government as well as all community members to actively participate in its realization.

The emergency management disciplines notably bring to Homeland Security a robust legislation, experience in coordinating and collaborating across intergovernmental networks, a historical emphasis on civil defense and counterterrorism, and an emphasis on engaging the whole community to achieve a more secure community. Notably, emergency management is more effective when the emphasis is on disaster preparedness in general rather than a narrowed focus on preparing for terrorism. The literature suggests the emphasis on engaging the whole community for preparedness is an essential element of what emerges as homeland security. Yet in emergency management and disaster response, local and state governments are the predominant actors. Although scholars and practitioners have asserted that all terrorist attacks are local emergencies, the federal government asserts primacy in terrorist related response and preparedness. A federal overemphasis on countering terrorism post 9/11 negatively impacted federal disaster response during Hurricane Katrina. Federal, state, and local leaders must work within the homeland security enterprise to balance between each level's priorities to achieve readiness, but how that balance is negotiated is a function of the organizational design of the homeland security department and the federal structure of the United States.

Formulating Homeland Security

In the days after the 9/11 terrorist attacks on the World Trade Center and Pentagon, the president and Congress began implementing the new concept of homeland

security. In October 2001, President Bush initially created a White House Office of Homeland Security (Exec. Order No. 13228, 2001). The executive order describes the mission of the new office “to develop and coordinate the implementation of a comprehensive national strategy to secure the United States from terrorist threats or attacks” (Exec. Order No. 13288, 2001, sec 2). To implement this counterterrorism focus, the new Homeland Security Advisor was charged with coordinating readiness and response across federal, state, and local governments; improving information sharing; and preparing to protect the American populace from a variety of weapons of mass destruction (Exec. Order No. 13228, 2001). The identified mission for the Homeland Security Advisor was counterterrorism, while the directed actions were focused on coordination for readiness, prevention, and response. President Bush issued 21 additional Homeland Security Presidential Directives during the remainder of his presidency (Committee on Homeland Security of the House of Representatives, 2008). These directives encompass a wide range of issues from national preparedness (HSPD-8) to maritime security (HSPD-13) to airport screening procedures (HSPD-6) to public health preparedness (HSPD-21). The approach for each of these directives is consistently on countering terrorism and present homeland security as a subset of the national security strategy (Committee on Homeland Security of the House of Representatives, 2008).

With a change in presidential administration came changes in how homeland security was defined and implemented. President Obama viewed homeland security as “indistinguishable from National Security—conceptually and functionally” and eliminated the separate homeland security designation for presidential directives (Obama, 2009, p. 1). Similarly, President Trump (2017a) has focused his homeland security

related directives as stemming from national security but with a primary emphasis on immigration procedures. Although the presidents have consistently emphasized homeland security as a national security program to counter terrorism, the required actions to secure the nation were predominantly emergency management activities combined with intelligence-sharing and law enforcement actions.

Congressional actions in creating and redefining the DHS have signaled a drift and expansion in the definition of homeland security through three main pieces of legislation: The Homeland Security Act of 2002, Post Katrina Emergency Management Reform Act of 2006, and the Implementing the 9/11 Commission Recommendations Act of 2007. These three acts in particular demonstrate Congress's developing understanding of homeland security. In the months following 9/11, the Homeland Security Act of 2002 (Pub. L. 107–296) created a cabinet-level department by combining 22 different agencies to primarily focus on preventing terrorist attacks (Homeland Security Act, 2002). In establishing a department of homeland security, the definitions portion of the act specifically defined homeland as referring to the United States but did not provide a separate definition of homeland security or discuss what is meant by security. Following Government Accountability Office's "Green Book" requirement that definitions precede mission and objectives, the Congressional intent for the concept seems to be focused on terrorism since four out the seven statutory missions of the new department are specifically related to countering terrorism (Homeland Security Act, 2002).⁴ Congress

⁴The other three primary missions focus on continuing the missions of the included agencies, protecting American economic security, and not diminishing the importance of other agency duties unless authorized by Congress (Homeland Security Act of 2002 [Pub. L. 107–296, 116 Stat. 2135], 2002).

later expanded the emphasis and priority of missions through two key bills seeking to address later homeland security failures.

The Post Katrina Emergency Management Reform Act (2006) and the Implementing the 9/11 Commission Recommendations Act (2007) both addressed analyses of homeland security failures by the U.S. government that reshaped the practice of homeland security. In 2005, Hurricane Katrina, a devastating Category III storm, directly hit New Orleans flooding 80% of the city, causing extensive damage and loss of life (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006; Townsend, 2006). Leaders at the federal, state, and local level failed to anticipate and coordinate a rapid, efficient, and effective response to the devastation in the initial days after the storm (Birkland, 2009; Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006; Townsend, 2006). DHS leadership was accused of overemphasizing terrorism while not sufficiently ensuring national preparedness for natural disasters through FEMA (Birkland, 2009; Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). In response, Congress added the Post Katrina Emergency Management Reform Act ([PKERMA], 2006) onto the annual DHS appropriation bill (Pub. L. 109–295). Under PKERMA, the role of disaster response and preparedness was asserted as an essential homeland security mission. FEMA’s administrator was required to have direct access to the Homeland Security Secretary, and the Secretary was restricted from reducing FEMA’s authority and funding (PKERMA, 2006). A year later via the Implementing the 9/11 Commission Recommendations Act of 2007, Congress began requiring DHS to complete a long-term strategy and priorities

study every 4 years (Pub. L. 110-53). The QHSR, first completed in 2010, would become the primary strategy document for homeland security (DHS, 2010b).

Implementing Homeland Security

In formulating homeland security, the three post-9/11 presidents consistently emphasized the preeminence of counterterrorism while Congress began to expand the definition beyond terrorism to include disaster response. As a department, Homeland Security has expressed its own definitions through a series of strategy documents. The first strategy documents were developed by the White House as the National Strategy for Homeland Security of 2002 (revised in 2007 by DHS). The National Strategy defined homeland security as “a concerted national effort to prevent terrorist attacks within the United States, reduce America’s vulnerability to terrorism, and minimize the damage and recover from attacks that do occur” (Bush, 2007, p. 1). The initial strategic direction focused the department on counterterrorism as expressed through actions of intentional coordinated effort, prevention, vulnerability reduction, and recovery from attacks. The department’s first strategic plan in 2008 emphasized unity of effort to accomplish three objectives: preventing and deterring terrorist attacks, hazard protection and response, and border security (DHS, 2008). The department’s strategic vision is no longer focused primarily on countering terrorism but on unified, coordinated effort, as exemplified by the plan’s title: “One Team, One Mission, Securing Our Homeland” (DHS, 2008). However, DHS was about to face its first transition to a new administration with a different political philosophy and approach.

The Obama administration’s DHS immediately launched a series of strategic planning efforts beginning with the QHSR and immediately followed by the Bottom-Up

Review (BUR) of 2010. The QHSR, directed by the Implementing the 9/11 Commission Recommendations Act, involved a multiagency review of the Homeland Security mission with the intention of establishing and prioritizing the departments' missions (Implementing the 9/11 Commission Recommendations Act, 2007). Of note for this discussion, QHSR 2010 began with an attempt to define homeland security and its mission. Before defining the discipline, however, the QHSR study team defined the homeland security enterprise. The QHSR emphasizes that the homeland security enterprise refers to the "collective efforts and shared responsibilities of the Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners-as well as individuals, families, and communities- to maintain critical homeland security capabilities" (DHS, 2010b, p. 12). While the emphasis is on the "shared roles and responsibilities," the QHSR recognized that each member faces different threats and risks with different capabilities and the enterprise must balance these in pursuing readiness (DHS, 2010b). Lacking from the discussion was who and how the enterprise should balance these needs although it is implied that DHS would provide "leadership and stewardship" for the enterprise (DHS, 2010b, p. 12). This understanding of who is responsible for homeland security provided a foundation for the QHSR's definition:

With the enterprise described, the QHSR 2009's definition states,

Homeland security is a concerted national effort to ensure a homeland that is safe, security, and resilient against terrorism and other hazards where American interests, aspirations, and way of life can thrive. (DHS, 2010b, p. 13)

This definition represents both the counterterrorism and disaster response concerns from the previous administration; however, the definition and the resulting

mission priorities began to continually shift with each subsequent strategic and policy document. In the 2010 BUR, the definition expanded to include the collection of customs, immigration management, and stewardship of the maritime transportation system (DHS, 2010a). Starting in 2012 and through the 2014 QHSR, the emphasis in the definitions began to shift toward the concept of resilience (DHS, 2012, 2014). In the 2014 QHSR, homeland security was emphasized as being a networked community working in unity of effort to achieve a national risk management as compared to past emphases on security and safety (DHS, 2014). However, the definitions and highlighted missions in both QHSRs did not include a list of prioritized missions as directed by the Implementing 9/11 Commission Recommendations Act (Reese, 2012, 2013, 2014). The consistent themes in all of these definitions include terrorism, responding to other hazards, coordination across the enterprise, and an increasing emphasis on resilience.

At the time of this writing, the Trump administration has yet to issue a strategic directive from Homeland Security, and the 2018 QHSR is still in the drafting stage; however, there is sufficient evidence to suggest a new emphasis in homeland security's definition. In the 2017 *National Security Strategy* (NSS), the Trump administration emphasized immigration and border enforcement as a primary mission to "protect the American people, the Homeland, and the American way of life" (Trump, 2017b, p. 4). The 2017 NSS also raises the priority of protecting American intellectual property and economic security while terrorism falls into a lower category with transnational organized crime (Trump, 2017b). One must also note that increasing American resilience is promoted in priority and is included as a significant facet of protecting the homeland (McInnis, 2017; Trump, 2017b)

A Multiplicity of Definitions

Defining the Discipline

Academic and professional analysis of the ongoing development of homeland security policy has generated a variety of proposed definitions for this emerging discipline. Bellavita (2008) suggested seven ideal types of definitions: terrorism, all hazards, terrorism and catastrophes, jurisdictional hazards, meta hazards, national security, and “*Security Uber alles*” (emphasis in original, p. 2). Other scholars have suggested that homeland security is about contingency coordination and collaboration, resilience and preparedness, or an intersection of multiple disciplines (Egli, 2011; Kahan, 2013b, 2015; Kahan, Allen, & George, 2009; Kettl, 2003, 2014; Kiltz, 2008; Kiltz & Ramsay, 2012). The suggested definitions can be categorized as homeland security defined by the threat or hazard it addresses, the activities required to address such threats, or the desired outcome. In examining the various definitions, each type contains elements of other definitions. For example, countering terrorism includes actions such as coordination, responding to the resulting catastrophe, and the desired outcomes (Bush, 2007). The difference between the categories is the emphasis on a central organizing principle of homeland security, whether it is marshalling these activities to address terrorism, or whether the goal is to achieve resilience that will involve coordination to weather a terrorist attack.

Threat/Hazard Definitions

The first categories of homeland security definitions focus on the threat or hazard that is being addressed by homeland security to include terrorism, all hazards, national security, local challenges, and metahazards. Homeland security focused on preventing

terrorism is a consistent theme throughout the literature. Homeland security as countering terrorism may be the most common view. In one recent study of Pennsylvanians' perception of homeland security, 37% identified homeland security as primarily preventing and countering terrorism (Siedschlag, 2017). As discussed previously, terrorism served as the primary focus for all the early homeland security legislation, strategic documents, and presidential directives (Bush, 2002, 2007; Committee on Homeland Security of the House of Representatives, 2008; Reese, 2012). In the first National Strategy For Homeland Security, President Bush emphasized that "Homeland Security encompasses those activities that are focused on combating terrorism" (Bush, 2002, p. 27). In the first homeland security budget, before the creation of the department, the Bush administration's funding request spent all but 11% of the funds on security activities related to countering potential terrorist attacks with only 9% allocated to emergency preparedness and 2% for information sharing (Bush, 2002). Early academic studies of homeland security definition center on homeland security as countering the threat of terrorism. One early study of collegiate homeland security curriculum suggested that homeland security is emergency preparedness specifically focused on countering and preventing terrorist attacks (Smith, 2005). Studies of both the presidential intent in homeland security directives and legislative intent in homeland security legislation both emphasized the centrality of terrorism to the definition of homeland security (Clovis, 2008; Kiltz, 2008). Kiltz (2008) suggested a theoretical framework for homeland security focused on criminal justice, international relations, and organizational theory; however, her recommendation is based on the assumption that

homeland security is essentially counterterrorism. All of these studies focused on the early years of homeland security in the immediate aftermath of the 9/11 attacks.

Although support remains for the terrorism definition post Hurricane Katrina, the definition categories began to expand. Kahan (2013b) suggested that the 2010 QHSR codified all DHS missions (including emergency management and immigration) into the definition of homeland security. This broadening of the definition is considered the “all hazards” approach.

The next group of threat-based definitions focused on all hazards approach to homeland security. All hazards is an umbrella term that covers all types of man-made and natural threats and hazards (Bellavita, 2008). Analysts noted that as the memory of terrorism fades from the news, homeland security could become a lesser priority and thus increase the nation’s vulnerability to a future attack (Bellavita, 2005, 2008). After Hurricane Katrina, the emphasis shifted to all hazards threat reduction (Morton, 2012; Townsend, 2006). The all hazards approach does not seek to prepare for every conceivable type of hazard or threat but recognizes that various threats and hazards required similar resources and capabilities to prevent, mitigate, or respond (Bellavita, 2008; Morton, 2012; Waugh, 2004). For example, both a terrorist attack and an earthquake may require teams to rescue individuals trapped under collapsed buildings, provide mass casualty care, and reestablish communication networks. The early homeland security strategy documents, such as the National Strategy for Homeland Security, emphasized that large scale emergencies required similar responses but were not necessarily Homeland Security incidents (Bush, 2007). The emphasis on counterterrorism did not always connect with the preparedness and security needs of state

and local governments. State and local needs might not fully align with federal homeland security priorities, but they would leverage available counterterrorism funding to address local and regional issues that could also qualify as counterterrorism readiness⁵ (Jain, 2006; Morton, 2012). The “all hazards” approach recognizes that the probable threat to terrorist attacks across most of the nation is quite low; however, when the emphasis is placed on preparing for activities common to the most probable threats and hazards, the overall preparedness for terrorism and natural disasters increases as well (Bellavita, 2008; Waugh, 2004).

The “all hazards” approach comes with some notable caveats. First, the approach should not conflate homeland security with all of the emergency management disciplines. While the emergency management disciplines are utilized in responding to homeland security events, not every natural hazard or threat necessarily rises to the level of a threat to the homeland (Kiltz, 2012). Furthermore, since not all of the missions of DHS are considered to be under homeland security, some have raised concern that homeland security missions, specifically counterterrorism, might not receive adequate funding (Kahan, 2013a). This is a rational fear since Congress had previously acted to limit DHS in how it manages FEMA’s funding after Hurricane Katrina through PKERMA, and the waning fear of terrorism could lead the pendulum to shift away from supporting homeland security funding (Bellavita, 2005, 2013). Since this approach is applied across the homeland security enterprise, the threats and hazards identified for planning purposes

⁵In the researcher’s experience reviewing Port Security Grants in the Midwest region, local agencies would prepare a grant package requesting resources and training they needed to address local risks and then work with state and federal partners to refine their grant package with endorsements on how this grant would fulfil a federal homeland security priority.

would be different based upon local and regional concerns but focused on core capabilities that could apply to a variety of threats or hazards (DHS, 2015). The all hazards approach suggests that homeland security may not be a federal-focused undertaking but a coordinated regional effort.

Other scholars and practitioners see homeland security responding to these threats and hazards as not a primarily federal response but a local or regional response. The International Association of Chiefs of Police ([IACP], 2005) resolved that “all terrorism is local” (p. 3), and it is the local police, fire, and other first responders who will act to prevent, prepare, and respond to a terrorist act long before federal involvement. The IACP further called for homeland security to not be a federally led effort but an equal, transparent, and collaborative partnership between all levels of government in a nationally coordinated effort (IACP, 2005). Researchers have found that local and regional priorities for activities labeled homeland security differed from federal priorities (Jain, 2006; Morton, 2012).

Senior DHS officials have also recognized the regional and local character of homeland security. In 2011, DHS Deputy Secretary Jane Holl Lute, while speaking to the American Bar Association about the relationship between homeland and national security, contrasted these two disciplines as follows:

National security is strategic, it’s centralized, it’s top-driven. Homeland security is operational, it’s transactional, it’s decentralized, it’s bottom-driven. It’s driven by the grassroots of this country, by the states, by the municipalities, by the cities and towns that experience these issues first-hand, day to day. It’s driven by the nearly two million people that pass through the TSA systems every day—every

day pass through these systems. . . . The national security culture has very strong influences from the military and the intelligence community. Homeland security, it's law enforcement, emergency management, and the political environment that is the vibrancy of this country. In national security there is a culture of confidentiality, the need to protect the nation's most sensitive information. In homeland security there's an expectation of transparency: it's not a need to know, it's a duty to share, it's an expectation to share. In national security there's unity of command. In homeland security, it's a unity of effort. It's a different model. It's a different model. (Bellavita, 2011a, pp. 1-2)

With the homeland security enterprise an essential part of the homeland security concept, what becomes clear is that the nature of these relationships remains up for debate. While the federal system necessitates federal government leadership over certain aspects of homeland security, the degree to which state, local, and tribal governments are considered equal collaborative partners or just resource providers to the federal response remains unresolved. As Lute's remarks suggest, the relationship should be bottom-driven, decentralized, with a greater degree of transparency at all levels to ensure unity of effort. Unlike national security, which is dominated by diplomats, military leaders, and intelligence professionals, Lute's emphasis on shared knowledge, unified effort, and decentralization suggests that the IACP's national rather than a federal approach may be an essential element to understanding homeland security.

A regionalized approach still requires federal leadership and support to succeed. Chenoweth and Clarke (2010) recognized that although terrorism is a local response, the ability of local governments to effectively use resources to prepare and respond is

directly related to the city's governing maturity and the degree to which the city's institutions are nested within state and federal homeland security and emergency management organizations. Furthermore, a series of studies of local and county governments in Florida noted that the federal and state homeland security requirements led to an increase in intergovernmental cooperation and networking (Caruson & MacManus, 2006; Caruson, MacManus, Kohen, & Watson, 2005). Yet, in view of Chenoweth and Clarke's work, one must note that Florida has a high degree of readiness and intergovernmental emergency management maturity from its experiences with frequent hurricanes (Caruson & MacManus, 2006). Although the details of how the relationships should work is unclear, the literature suggests that federal and state guidance facilitates intergovernmental cooperation and maturity of governance at local levels and impacts the ability to effectively participate in the homeland security enterprise.

One additional category of threat-based definitions encompasses metahazards. This approach views homeland security as protecting the nation from complex and ambiguous threats that fall outside the range of any specific discipline or existing department. Massey (2007) postulated that the homeland needs protection from "generational threats" such as failing educational and transportation systems, a coming debt crisis, and global warming. This vision of homeland security sees the discipline as coordinating the whole-of-government to address wicked problems. A wicked problem is defined as a societal problem that has numerous and often contradictory and conflicting causes where there is no one specific policy solution to address it (Rittel & Webber, 1973). The metahazard approach argues that things that happen to the homeland, such as

disasters or terrorist attacks, are not as significant a threat as the choices of the people that lead to long-term societal chaos, such as debt, environmental damage, or an undereducated and ill-prepared populace (Bellavita, 2008; Massey, 2007). In similar manner, Karimi (2015) argued that economic security is more vital to the homeland than mere defense. In his view, the United States should merge both the Departments of Defense and Homeland Security and create a new department to advance economic prosperity at home and abroad (Karimi, 2015). With these perspectives, any policy area with potential for a long-term negative impact could be considered a homeland security threat. Long-term security concerns have shaped policy across a variety of areas of governance. Presidents have frequently cited national security and defense needs as justification for shaping education policy (Simnjanovski, 2010). Obama specifically issued an executive order requiring FEMA to tighten requirements for federal grants to discourage building public buildings in flood plains as a bulwark against projected future rising seas caused by climate change (Obama, 2015).

The nature of wicked problems is that the causes and potential solutions do not fit into a single box. Even with a DHS, more than half the annual funding for countering terrorism is sent to the Department of Defense and other agencies outside DHS because of the wide range of policy issues impacted by the highly complex terrorist threat (Reese, 2012, 2013, 2014). As experience with the drug war illustrates, coordination across multiple departments for managing wicked problems is challenging and does not always yield the desired policy results (Caulkins, Kleiman, & Reuter, 2003). To manage the wicked problem of terrorism, all hazards or even metahazards, coordination of activity is an essential element of defining homeland security.

Activity Definitions

Activity-based literature on homeland security focuses primarily on the central organizing actions necessary to secure the homeland, which primarily include coordination and collaboration across the homeland security enterprise. Kettl (2003) argued that the essential element of homeland security is “contingent coordination” (p. 253). Contingent coordination encompasses the necessary actions for officials to deliver the right resources and capabilities to the right place at the right time in a crisis. Governments have been managing internal crises for generations; what is new is the complexity of the coordination issues because of the catastrophic consequences of the various threats and hazards (Donley & Pollard, 2001; Kettl, 2003; Yilmaz, 2013). For example, in the aftermath of a radiological attack in a major city, not only would first responders need to manage the crowds, attend to the injured, and assist in the investigation, but they would also be faced with concerns about the widespread contamination, the need for quickly deployed highly specialized teams, and the high degree of personal risk. With this scenario, multiple levels of government officials would need to expeditiously coordinate a myriad of specialized actions that exist under the jurisdiction of several different agencies and under the authority of multiple federal, state, or local government leaders (Kettl, 2003, 2014; May, Jochim, & Sapotichne, 2011; Yilmaz, 2013). Yilmaz (2013), similarly, argued that since homeland security involves every sector of society, the coordination and integration of activities across multiple dimensions of the homeland security enterprise is essential to defining homeland security.

Coordination is recognized as a significant activity in the existing policy and strategic direction to the department, but it is not considered the central defining action.

Indeed, the original vision of the Office of Homeland Security in HSPD-1 was to coordinate across the numerous departments and agencies that would be called upon to act to counterterrorism (Committee on Homeland Security of the House of Representatives, 2008). However, coordination across the federal government alone has been difficult. Previous experience with the appointment of so-called drug czars to coordinate multiagency and cross-departmental policy action was often frustrated by the different missions, cultures and priorities of the agencies tasked to participate (Caulkins et al., 2003). The challenges of homeland security, which includes a broader scope of policy disciplines than the drug war, increases the coordination difficulties.

To overcome this challenge, Kettl (2003) theorized that homeland security is essentially five coordination challenges:

1. Space and time coordination of emergency resources,
2. Establishing a national readiness baseline,
3. Developing a system of effective learning across the enterprise,
4. Building new capacity for coordinated action in existing and merged institutions, and
5. Meeting the public's expectations. (p. 256-257)

Coordination has been a consistent theme throughout all legislation, presidential directives, and departmental strategy (Bush, 2007; Committee on Homeland Security of the House of Representatives, 2008; DHS, 2008, 2010b, 2012, 2014). DHS has primarily sought to address the issues across the homeland security enterprise through doctrine with the establishment of the National Response Framework, National Incident Management System, and similar coordinating documents that provide guidance to federal, state, tribal,

and local agencies on how to prepare and respond to a variety of incidents (DHS, 2016; FEMA, 2017). Coordination focuses on the organization of activity of several parties. Collaboration moves beyond mere organization of effort to shared trust between agencies and governmental levels.

Homeland security as collaboration is focused on the proactive establishment of partnerships and networks across the homeland security enterprise. Donahue and Zeckhauser (2011) defined the key trait of collaborative governance as shared discretion. Ansell and Gash (2007) more specifically called for collaborative governance to include collective decision-making that is deliberative and focused on achieving a consensus. Although there are frequent calls for collaboration in presidential and DHS strategic documents, the focus is consistently on collaborating with state, local, and tribal officials to achieve federal priorities (Bush, 2007; DHS, 2010b, 2012). One scholar wondered whether collaboration was merely a buzzword since DHS guidance does not define it nor does it provide a framework to achieve collaborative governance in the Homeland Security Enterprise (Kay, 2009). Even if it merely appears as a buzzword, there is a general desire for collaboration in the form of shared discretion across the homeland security enterprise.

The literature repeatedly recognizes that collaboration is an essential trait of homeland security and is desired by members of the homeland security enterprise. In the previous discussion of regionally focused threats, the active sharing of discretion to advance security was a feature of both the IACP's recommendation of a national approach to homeland security and Deputy Secretary Lute's view that homeland security requires sharing across organizations and jurisdictions (Bellavita, 2011b; IACP, 2005).

Local and state homeland security and emergency management organizations tend toward collaboration on a horizontal level; however, federal agencies tend toward more centralized command and control (Kay, 2009; Waugh & Streib, 2006).

The homeland security challenge is that the threats and hazards do not confine themselves to a single jurisdiction. In a study of securing the maritime domain, Egli (2011) emphasized that effective maritime, as well as homeland security, required a concerted effort to achieve interorganizational collaboration across federal, state, and local agencies to achieve desired security objectives. The existential nature of the threats and hazards may provide sufficient motivation to sustain long-term collaborative efforts if collaborative relationships are not hindered from forming (Emerson, Nabatchi, & Balogh, 2011; May et al., 2011). Beck and Plowman (2014) observed that in the presence of a “massive, visible, shared problem,” federal, state, and local agencies can rapidly build trust to facilitate collaborative decision-making (p. 1238). Partnerships based upon trust are one of the foundations of collaborative relationships (Linden, 2010). A temporary trust, called swift trust, can develop between agencies that arrive to address a crisis; long-term collaborative success depends on trust that is grounded and proven through relationships and experience (Beck & Plowman, 2014). For the development of longer term and reoccurring partnerships, leaders develop trust through frequent interaction, transparency in information and motives, and shared objectives (Linden, 2010). Homeland security doctrine emphasizes the necessity of developing engaged partnerships across the homeland security enterprise, both intergovernmental and public-private, to secure the homeland (DHS, 2010b, 2012). While DHS emphasizes

partnership, the federal approach to partnership often maintains centralized authority and decision-making at the federal level with other agencies supporting federal action.

The challenge in viewing homeland security as collaborative action may be an issue of mission culture. Counterterrorism and intelligence in particular have historically been highly centralized, secretive federal efforts while emergency management is accustomed to ad hoc, bottom-up collaboration based upon the requirements of the situation (Marlowe, 2009). As Deputy Secretary Lute noted in 2011, national security is prone to secrecy, centralization, and top-down leadership while she viewed homeland security as needing to be based upon trust, transparency, and bottom-up leadership (Bellavita, 2011b). DHS's emphasis on the homeland security enterprise since 2009 requires the marshalling of the whole community to achieve established security, preparedness, and resilience goals. Since the American federal system limits the extent to which the federal government can mandate or control state and local action, some degree of buy-in is necessary to achieve unity of effort toward national goals.

Since homeland security leaders at all levels require an understanding of how to apply the national homeland security goals to address the known and yet-to-be-known threats and hazards the homeland faces, one area of activity needed to prepare for these threats would be sensemaking. Sensemaking describes actions leaders utilize to understand complex environments by mapping where the leader or organization is in relationship to the unknowns and uncertainties the leader faces (Ancona, 2011; Snowden & Boone, 2007). Former Secretary of Defense Donald Rumsfeld's infamous quip about "known knowns and known unknowns" represents one approach to sensemaking (Snowden & Boone, 2007, pp. 70-71). Bellavita (2006, 2012) suggested the Cynefin

[pronounced Kuh-Nu-vin] framework as a possible sensemaking map for homeland security. The Cynefin framework has five domains that represent what is known, knowable, complex interactions, chaotic interactions, and disorder (Bellavita, 2006). The leader applying the framework would assess the operational or strategic environment to determine what is known, unknown, and the level of order that exists (Bellavita, 2006; Snowden & Boone, 2007). Once the leader understands where she is on the framework, the leader identifies strategies and decisions to move away from chaos and disorder to the complex and knowable domains (Bellavita, 2006; Snowden & Boone, 2007). Bellavita (2012) suggested that the Cynefin framework could be a theoretical framework for guiding homeland security strategic thinking because of the high degree of complexity that exists within the homeland. Through sensemaking, homeland security leaders seek to understand the actions needed to address the threats and hazards that threaten the homeland. The choice of which activities should be used to address those threats is shaped and influenced by the desired outcomes of successful homeland security. To this end, the next section discusses outcome-based definitions of homeland security.

Outcome-Based Definitions

The third category of homeland security definitions focuses on the intended outcomes of homeland security policy and action. The literature contains three broad outcomes to which homeland security is oriented: security, resilience, and preparedness. From the earliest days of implementing homeland security policy, scholars and practitioners debated what the appropriate outcomes should be. In the immediate wake of the 9/11 terrorist attacks, the Bush administration clearly stated that the purpose is to secure the nation from a future terrorist attack (Bush, 2002; Committee on Homeland

Security of the House of Representatives, 2008). Some scholars insist that homeland security must be outcomes-focused with measurable variables (Caudle, 2005; Kettl, 2014). Kettl and others suggested the outcomes focus on security and preparedness (Caudle, 2005; Kettl, 2014). Kettl (as cited in Caudle, 2005) proposed that security would be measured by the absence of an attack while preparedness could be measured by either a national baseline of equipment and training or an indexed list of preparedness based upon multiple factors. After Hurricane Katrina, resilience begins to surface as a distinct outcome of homeland security. In the 2007 National Strategy for Homeland Security, the term *resilience* appeared but was focused on hardening critical infrastructures from attack or ensuring operational continuity (Bush, 2007). Starting with the 2010 QHSR, resilience begins to become a distinct objective with an emphasis on national resilience from disasters, and by 2014 QHSR, resilience and preparedness were listed together as top strategic priorities (DHS, 2010b, 2014). While the other strategic priorities listed in the 2014 QHSR described specific mission areas such as immigration and cybersecurity, two priorities focused primarily on outcomes to “prevent terrorist attacks and enhance security” and to “strengthen national preparedness and resilience” (DHS, 2014, pp. 6, 8). The descriptions of the cybersecurity-and immigration-related priorities ultimately focused on improving security, preparedness, and resilience in those areas as well (DHS, 2014). These three ideas have become the main ends to which homeland security is being directed.

Security as an end is difficult to assess, so scholars and practitioners tend to focus on vulnerability or risk management as a practical measure. The main challenge with security as an end is how to assess the outcome. As Kettl (as cited in Caudle, 2005)

noted, a measure could be the absence of terrorist attacks. However, this measure fails to provide any insight into the actual state of security other than the absences of an action. As President Bush stated during his first presidential debate in 2004, “We have to be right 100 percent of the time. And the enemy only has to be right once to hurt us” (FDCH E-Media, 2004, p. 9). The emphasis on security from a terrorist attack suggests that “defense” may have been a more appropriate term although it is another term that is more difficult to assess. The *New York Times* columnist, William Safire offered some insight on the origin of the term homeland security. Safire suggested that the term was decided upon primarily to separate this new policy area from existing defense policy:

A rationale was set forward that security was the umbrella term, incorporating local and national public-health preparedness for attack, the defense of the nation offered by the armed services, plus the intelligence and internal security activities of the C.I.A., F.B.I. and local police. (In fact, I’m told by secret nomenclature sources, security was chosen because the Defense Department did not want any jurisdictional confusion with the new White House organization.). (Safire, 2002, para. 9)

With the ambiguity of how to measure security, vulnerability and risk management become the measurable outcomes. Risk is the likelihood that an area would be attacked or impacted by a natural hazard while vulnerability represents the extent of the impact from the incident (Clarke & Chenoweth, 2006). The responses to both are similar—one hardens vulnerabilities (makes less likely to suffer from an incident) while one seeks to mitigate risks (Clarke & Chenoweth, 2006). However, officials’ views of risk vary based upon subjective, psychological factors including the recency of a threat,

perceptions of security, and the types of data considered during risk evaluations (Anderson, 2015; Haynes & Giblin, 2014; Jenkin, 2006). Lundberg and Willis (2015) analyzed available open source data on 10 homeland security threats, including terrorist attack, nuclear accidents, earthquakes, and hurricanes to develop a comparison of risks across threats and hazards. The study examined 17 different attributes including projected deaths, economic impacts, psychological impacts, long-term health and environmental damage, and the disruption of government services (Lundberg & Willis, 2015). After extensive analysis, the researchers concluded that the resulting estimates were too imprecise “to quantitatively differentiate” homeland security risks (Lundberg & Willis, 2015, p. 9). Similarly, Anderson (2015) argued that homeland security risks contain too many variables and are ultimately too unmanageable or unknowable to ever yield more than the appearance of security. In this view, agencies built to be adaptable and flexible are more critical to security than well-scripted plans and risk assessments (Anderson, 2015). Since risk and vulnerability management as an end is uncertain, the alternatives presented so far focus on preparedness and resilience.

One option for defining homeland security is to focus on the level of national preparedness for addressing threats and hazards. Defining the end state of national preparedness, as noted, is difficult. Scholars have suggested, as noted, that one could measure a national baseline of preparedness or develop an indexed measure that allows for comparison among various jurisdictions (Caudle, 2005). Preparedness is a major outcome of emergency management policy, but the focus had previously been on local and state preparation for a natural disaster (Caudle, 2005; Clovis, 2008). Since 9/11, the federal government has implemented a top-down approach to preparedness through the

establishment of the National Preparedness Goal and designation of core capabilities that all jurisdictions need to address (DHS, 2015; Kahan, 2014). The National Preparedness Goal is “a secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risks” (DHS, 2015, p. 1). To achieve this level of national preparedness, the entire homeland security enterprise must be engaged.

By engaging the homeland security enterprise in pursuing preparedness, scholars recognize that it changes the dynamics of homeland security. Clovis (2008) insisted that national preparedness, although important to homeland security, was not homeland security per se. He argued that homeland security is predominately countering terrorism and including preparedness distracts from this mission since state and local governments will be focused on preparing for other threats and hazards (Clovis, 2008). Caudle (2005), writing from the perspective of a senior analyst for the GAO, stated, “Whether the term ‘homeland security’ or ‘national preparedness’ is used, many organizations share the responsibility and burden for action in combatting terrorism and other threats and hazards” (p. 354). The details of what that burden and responsibility practically entails varies dramatically across the homeland security enterprise (Alexander et al., 2009; Clarke & Chenoweth, 2006). Indeed, a study of preparedness definitions among federal agencies, states, and major metropolitan areas showed that only about half of the jurisdiction shared some aspect of the federal view of preparedness (Alexander et al., 2009). The inability of leaders at all levels of government to achieve consensus on what constitutes preparedness is consistent with the lack of consensus on what constitutes homeland security itself.

The studies mentioned were notably conducted before the implementation of Presidential Policy Directive 8 [PPD-8] and the most recent revision of the National Preparedness Goal [NPG] in 2015; however, scholars and practitioners continue to express concern about the ability to approach preparedness. Kahan (2014) recognized that the sustained cooperation between federal, state, and local officials to reach the wide-ranging goals of PPD-8 was unsustainable in the American federal system. The NPG does provide a connection to jurisdictional threats through a focus on community resilience to local hazards; however, the overwhelming majority of the NPG is focused on federally defined risks. The NPG itself calls for the whole community cooperation to achieve both security and resilience for the homeland (DHS, 2015). Although preparedness may be a more measurable outcome, the results of preparedness point toward resilience as the aim of homeland security.

Resilience exists as an enduring and also undefined goal for homeland security. The term is found throughout DHS and presidential documents without a definition (Kahan, 2015; Palin, 2010). Secretary Napolitano repeatedly emphasized that implementing the 9/11 Commissions' recommendations made America more resilient (DHS, 2011). Although the original National Strategy for Homeland Security did not mention resilience, the 2007 update emphasized the need for resilient critical infrastructure, operational commands, economic systems, and the American spirit (Bush, 2002, 2007). During the 2008 campaign, then-candidate Obama articulated a vision that homeland security be based upon resilience rather than protection from all harm (Kahan et al., 2009). Obama defined resilience in PPD-8 as "the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies"

(Kahan, 2015, para. 3). The concept of resilience holds some promise as both an outcome for homeland security and an overall strategic approach.

Homeland security literature on resilience shows strategic promise for the concept but also significant complexities in its adoption. Palin (2010) argued that resilience should be the “grand strategy” of homeland security. A grand strategy combines both “practicality and principle” while recognizing that “ends must fit within available means” (Gaddis, 2018, p. 215). Palin (2010) suggested that George Kennan’s “Long Telegram” that outlined the American strategy of containing the Soviet Union should be the outline for a resilience strategy. Instead of focusing on a particular enemy, the United States should focus primarily on addressing risks to the homeland by embracing the tragic reality that American security forces will be surprised and fail at times but resilience will help America “absorb and buffer disaster” (Palin, 2010, p. 12). Kahan (2015) concurred with the necessity and promise of resilience as both a national and homeland security strategy but cautioned that shifting to a resilience focus could undercut preparedness efforts. In his view, the efforts to achieve preparedness under PPD-8 would also lead to increased resilience as a externality (Kahan, 2015). Resilience, with its multiplicities of definitions across a vast array of disciplines from physics to psychology, is inherently difficult to operationalize and measure (Kahan et al., 2009; Prior & Hangman, 2014). Since resilience is vastly multidisciplinary and the modern state is highly complex and interconnected with a variety of national and international systems, defining resilience is not only a managerial problem but also an inherently political one since a manageable definition requires a political decision on what should and should not be measured (Prior & Hangman, 2014). While difficult to quantify, scholars have noted signs of resilience.

After the Boston Marathon Bombing, the emergency medical teams were unfazed by the nature of the injuries since they had trained for terrorist attacks while the American populace responded with “Boston Strong” and no fear of further attacks (Bellavita, 2013). Even though resilience is difficult to measure, the concept speaks to a distinct homeland security definitional theme of America being able to adapt, withstand, and recover from adversity.

Each of the three definitional outcomes emphasize an aspect of what homeland security is. Security emphasizes the American desire to be safe from further terrorist attacks post-9/11. Security is the logical outcome from the threat-based definition of homeland security as counterterrorism. Resilience recognizes that no system is completely secure and that the homeland must be able to bend without breaking during a crisis. Resilience is a potential outcome of all the threat- and hazard-based definitions since resilience addresses the national reaction to a crisis. Preparedness, on the other hand, provides a more practical measure of the national system for responding to threats and hazards but is lacking since it defines a level of readiness, but it is not a clear end in view of the threats and hazards. One may be ready to respond to a threat or hazard, but the result of the preparation is not inherently defined in the idea of preparedness. Yet, as a policy, preparedness is much easier to measure and define than resilience, and when security fails, it provides an explanation (i.e., the particular unit was not sufficiently prepared).

Why Does the Definition Matter?

In reviewing the changing and expanding homeland security definitions, one could be tempted to see this discussion as quibbling over the wording. However, it is

imperative to note that the American concept of homeland security was considered a new idea only 17 years ago. As one scholar has noted, the American concept of homeland security with its blending of law enforcement, security, and emergency management across a federal system is unique in the world (Morag, 2011). DHS also constitutes the third largest federal department with over 230,000 employees interfacing with the American people at every level of government across 87,000 jurisdictions (Bullock et al., 2013). As Reese (2012, 2013) stated to Congress, the lack of a consistent definition suggests that there is a lack of consensus on a homeland security concept and that this ambiguity will be a challenge to congressional oversight, establishing funding priorities, and strategic planning (Bellavita, 2008, 2012; Bynum, 2016; Reese, 2012, 2013, 2014). Some have asserted that since homeland security is a nascent discipline and preparadigm, the definition of homeland security needs to evolve (Bellavita, 2008, 2012). Yet as Reese (2012, 2013, 2014) recognized, the lack of a definition impacts Congressional actions in terms of oversight, funding, and the granting of legal authorities. Unlike national security, which is solely managed at the federal level, homeland security impacts activities and priorities at every level of government. The 2009 QHSR emphasis on balancing the needs and priorities of the entire homeland security enterprise from the federal government and states down to family and individual actions requires a shared understanding across all levels of government that permeates beyond government officials to individual citizens. The establishment of a consensus definition of homeland security is necessitated by the need for political accountability, strategic planning for security and resilience, and coordinating a unified effort across the homeland security enterprise.

Definition Needed for Political Accountability

This research was aimed at further defining homeland security through an action-based definition. A clear and agreed upon definition of homeland security is essential for political accountability horizontally between the branches of the federal government and vertically between federal, state, and local governments. Since QHSR 2010, the homeland security enterprise concept envisions all Americans playing a part in advancing security, it is essential that the leadership at all levels have a consensus understanding of what they are participating in. The necessity of developing a shared definition is illustrated through the Constitutional doctrines of separation of powers and federalism and the perennial public administration debate about the relationship between the political and administrative institutions of government.

When the Constitution was written, the framers insisted on a two-way separation of powers—a separation of powers within the federal government and a separation of powers between the federal government and the state and local elements of government. The Constitutional framers distrusted the amassing of power in the government, as illustrated by the Declaration of Independence’s inveighing against the tyranny of King George III. In developing the Constitution, the framers limited Congress to a list of enumerated powers with a significant emphasis on national defense and war, commerce, revenue and spending, and the interconnectedness of the states (U.S. Const. Article I, § 8). Although the Constitution (and later the Supreme Court) affirmed that federal law is supreme over the states (e.g., *McCulloch v. Maryland*, 1819), the overall design shared power between the federal and the states. To further emphasize the framers’ intention to have a limited federal government, the 10th Amendment specifies, “The powers not

delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people” (U.S. Const., Amend X). In this framework, national security is held exclusively at the federal level as is clearly implied in Article 1 through the enumerated powers related to declaring war, creating an army and navy, advising on treaties and ambassadors, and so forth. Since homeland security exists as an intersection of law enforcement, emergency management, and a variety of other disciplines, homeland security actions must necessarily flow from a “unity of effort” between all levels of government (DHS, 2010b, 2014; Painter, 2015). The structure of the relationships between the federal, state, and local governments has been found to take multiple forms as expressed through the concepts of federalism and home rule.

Federalism shapes the ability and the extent to which the state and federal government can effectively coordinate and collaborate to achieve homeland security missions. As discussed, the Constitutional separation of powers limits the federal government’s powers while allowing the states discretion on how to manage their internal issues. Before the American Civil War, the United States conceived federalism as a dualism with the federal and state governments having their own somewhat sovereign spheres of influence (Clovis, 2006; Kincaid, 1990). After the Civil War, through the 13th, 14th, and 15th Amendments, states’ rights began to wane and federal law extended further into the states to advance issues of equity and social justice (Clovis, 2006; Kincaid, 1990). During Franklin Delano Roosevelt’s administration, the Congress expanded the use of the Constitution’s Commerce clause to increasingly regulate activities within states rather than merely between them (Kincaid, 1990). For the

purposes of this discussion, the literature on homeland security and federalism focuses on three contemporary models: cooperative, coercive, and competitive federalism and proposes two potential models: distributive and networked federalism.

The literature assessing the current intergovernmental relationships between the states and federal government focuses on cooperative, coercive, and competitive federalism. In cooperative federalism, the federal government gains state cooperation toward national goals through the generous provision of financial aids and grants (Clovis, 2006; Kincaid, 1990). In the initial implementation of homeland security policy, Congress increased funding to existing aid programs for fire and emergency management and later consolidated existing programs into the Homeland Security Grant Program (Eisinger, 2006). In these grant programs, the federal government requires states and local governments to update security and emergency plans while complying with federal homeland security priorities as a condition of receiving grants (Clovis, 2006; Eisinger, 2006). As the initially generous funding decreased, the intergovernmental model shifted quickly to coercive federalism.

In coercive federalism, states still receive federal funding, but the amount of federal direction increases as well. Coercive federalism grew out of the economically severe budget environment of the 1970s when Congress' ability to fund grants decreased but desire to centralize policy in areas of the environment and education continued to increase (Kincaid, 1990). Under coercive federalism, Congress requires state compliance encoded in new statutes and increases the policy compliance requirements to receive aid while expanding federal authority into new policy areas (Posner, 2007). Although grants were offered for specific state and local security and emergency response projects, other

federal requirements such as reforming security features on driver's licenses under the REAL ID Act were instituted without direct support to the increased costs required for compliance now leveled onto state legislators (Posner, 2007). States must balance the need to fund the "unfunded" federal mandates while complying with federal regulations to receive much needed federal funding for other policy areas (Posner, 2007). Clovis (2008) recognized a need for top-down guidance in achieving a national level of preparedness but suggested that instead of coercive federalism, the federal competitive grant programs are achieving a competitive federalism.

The concept of competitive federalism aligns with the view that homeland security is a regionally defined concept. In competitive federalism, states compete for citizens through the services they offer, which are funded consistent with the size and needs of their population (Clovis, 2006, 2008; Kasper, 1994). In this system, the states decide their security priorities and develop necessary collaborative and networked arrangements to provide the necessary security to the citizens of that state (Clovis, 2006; Kasper, 1994). In competitive federalism, states compete for citizens who may show disapproval for the policy by moving to a more secure state or working to change the policy (Clovis, 2006). In his study of national preparedness policy, Clovis (2008) noted that in the states and localities' decisions to participate (or not) in the Homeland Security Grant Program, the jurisdictions weighed the financial burden on the locality, the security risks, and constituents' policy preferences to determine their participation. Although jurisdiction chose not to participate, levels of local preparedness did not begin to decrease in localities that chose not to participate (Clovis, 2006, 2008). Although a race to the bottom through noninvestment in preparedness did not materialize, the temptation for

states to invest funding elsewhere and rely upon the readiness of others still exists. The underlying assumption of the race to the bottom concept is that federal leadership and direction is required to ensure the achievement of national priorities. On the other hand, states also looked to the federal government for both guidance and funding to navigate the post-9/11 environment (Eisinger, 2006). The challenge with the cooperative, coercive, competitive models is that all assume the federal government must be the primary actor to initiate, direct, and permit state action. However, the centralization of homeland security planning and prioritization neglects the diversity of threats and challenges faced by the 87,000 jurisdictions across the nation (Marlowe, 2009; Morton, 2012; Roberts, 2007; Scavo, Kearney, & Kilroy, 2008). The achievement of the homeland security enterprise as envisioned since the QHSR 2009 requires a greater degree of interdependence between government levels than exists in these previous models.

Scholars and practitioners have proposed disbursed and networked models of federalism as an alternate vision for the homeland security enterprise. Disbursed and networked federalism embrace decentralization while recognizing that interdependence and collaboration vertically and horizontally throughout the homeland security enterprise is essential to achieve homeland security objectives (Birkland & Waterman, 2008; Morton, 2012; Roberts, 2007; Waugh & Streib, 2006). The network federalism approach balances the legal structures of American federalism while recognizing that the intentional fostering of collaborative relationships between all levels of government and local and regional private groups is essential to fulfilling the homeland security enterprise vision. Current federal direction, including both Bush's HSPD-8 and Obama's update in

PPD-8, only requires the federal government to “consult” with state, local, and tribal leaders (Morton, 2012). However, the necessities of planning, preparing, and responding to incidents of all types require a concerted effort of all members of the homeland security enterprise in a region. Waugh and Streib (2006) described the vital necessity for collaboration during Homeland Security incidents as follows:

The response to natural disasters is, in large measure, an ad hoc affair involving organized nongovernmental actors, governmental actors, and emergent groups that often become well organized and long lived. No one can ever have complete control; it is not possible to fully command attention or to compel compliance. Nongovernmental organizations will respond with or without government approval. Volunteers will arrive with or without an invitation. (Waugh & Streib, 2006, p. 137)

The networked approach emphasizes the local detailed knowledge and inherent interests of local governments, nonprofits, commercial interests, and volunteers in helping their community prepare and respond to emergencies (Clovis, 2008; Morton, 2012). Dispersed federalism also emphasizes the essential role of networking and facilities’ direct federal involvement through dispersing homeland security officials throughout the country in a manner similar to FEMA response regional offices (Morton, 2012; Roberts, 2007). The vision of dispersed federalism is that federal homeland security regions would have offices located in or near major communities to facilitate coordination and collaborative efforts across all levels of government (Morton, 2012; Roberts, 2007). In the author’s experience, the U.S. Coast Guard is representative of dispersed federalism. The Coast Guard is a federal agency with broad law enforcement,

homeland security, and emergency planning authorities with operational offices in communities large and small on the coasts, Great Lakes, and Western Rivers. With a small staff overseeing safety and security of a region, Coast Guard officials collaborate with local, state, and regional agencies as well as local nonprofit groups to develop comprehensive security and response plans through Area Maritime Safety Committees and similar collaborative groups defined in the Code of Federal Regulations. The dispersed nature of the Coast Guard, its emphasis on local partnership, and the intimate regional knowledge developed by its officials may explain in part the Coast Guard's ability to lead during Hurricane Katrina while more centrally organized federal agencies struggled to respond (Horwitz, 2009). The networked and dispersed models both emphasize the local nature of Homeland Security incidents.

These five models of federalism describe the structure of the interactions between the state and federal government in responding to Homeland Security incidents. In relationship to this study, the interactions between levels, both when priorities conflict and align, provide evidence as to the understanding of what constitutes the concept of homeland security at each level of government. When expressed during a Homeland Security incident, the type of federalism being expressed may influence which agency's views prevail.

In a similar vein, the distribution of authorities between the political and administrative elements of government is an essential part of the Homeland Security definition. As Reese (2012, 2013, 2014) observed in his testimony and reports to the Congress, the lack of a definition not only impacts both DHS's ability to prioritize and plan its efforts but also the ability of Congress to properly oversee the department's

actions. In public administration, this dynamic between the political principals and the department is described as the politics administration dichotomy. First described by Wilson (1887), politics was viewed as the leadership of the government while the administration led the execution of the business of government. Goodnow (2008) expanded upon the discussion by declaring that the doctrine of separation of powers required a separation between the political leadership and administration. Contemporary scholarship recognizes three views: a dichotomy, a continuum, or a complimentary relationship (Demir, 2009). The Wilson/Goodnow view of a complete separation is generally seen as obsolete in the current era since politicians and administrators collaborate on both the development and implementation of policy (Demir, 2009; Harmon, 2006; Svara, 1998). Overeem (2005) argued the dichotomy is still a valid description of the relationship that manifests as the political neutrality of administrators in political matters. Svara (1998, 2006), in dialogue with Overeem, stated that an emphasis on political neutrality is too narrow since the complex necessities of modern policy require a complimentary relationship between the politicians and administrators. Others have argued that politicians and administrators work along a continuum from separation to collaboration based upon the situation (Demir, 2009). In the practice of homeland security, the direction is tending toward the idea of complementarity rather than the Wilsonian/Goodnow dichotomy. Former Coast Guard Commandant Thad Allen (2012) sees homeland security operating environment shifting toward full complementarity:

So what does this mean? It means that Woodrow Wilsons charge to public servants to demonstrate neutral competence in a political environment has been

fundamentally changed. To be effective in addressing the challenges that we face, we must learn how to unite those who have a consequential role in the outcomes we seek regardless of their role or affiliation. To rephrase Wilson, we must be effective within a political process without becoming political (as in partisan). (Allen, 2012, p. 321)

With the separation of powers, the framers set upon a structure that would lead to competition and compromise between the various entries. The homeland security enterprise contains a potential for a vast number of relationships with both competing and complementary priorities, whether between the political and administrative elements or between the federal, state, local, and tribal governments. Local and state homeland security and emergency management agencies have priorities and challenges that significantly diverge from federal priorities (Chenoweth & Clarke, 2010; Eisinger, 2006; Jain, 2006; Roberts, 2007). In discerning the collective definition of homeland security across the enterprise, this analysis views the interactions between leaders a basis for exploring a theory of action-based definition for homeland security.

Theoretical Framework: Action Theory

Existing Definitions as a Theory of Action

This study aimed to identify a theory of action for homeland security through the analysis of the actions of federal, state, and local leaders during the *Deepwater Horizon* oil spill response. The earliest versions of action theory are found in Aristotle's (n.d.) *Nicomachean Ethics*, where the philosopher differentiates voluntary actions as extending from choices based in rational principles. In action theory, actions are value-infused behaviors that reflect the social construction of the situation (Catron & Harmon, 1981).

Action theory is a critical response to Simon's decision theory, in which decisions are the identified optimal choice based upon the best available data (Simon, 1960). Simon's approach focused on facts and data while removing individual and collective values from the decision calculus (Harmon & White, 1989). Action theorists recognize that a social group's values shape the decision process and influence the resulting action (Harmon, 1981, 1989). Action theory evokes Follett's (2008) "law of the situation," where all individuals involved in completing a task contribute their perspective and insight to developing the course of action to address the issue at hand (p. 60). For developing a definition of homeland security, the relevant social community would be the leaders of the homeland security enterprise. As described in the 2009 QHSR, the enterprise consists of "Federal, State, local, tribal, territorial, nongovernmental, and private-sector entities, as well as individuals, families, and communities who share a common national interest in the safety and security of American and the American population" (DHS, 2010b, p. iii). Although the formal definition includes everyone imaginable who is concerned about American security, this research focused on the leaders in the enterprise who are most routinely engaged in work described as homeland security, namely the federal, state, local, tribal, and territorial leaders of political jurisdictions (the president, governors, mayors, parish presidents, etc.) as well as the leaders of government agencies routinely engaged in homeland security operations.

The nature and structure of a theory of action explains and defines the professional practice in a field. The goal of theory is to explain and or predict actions (Argyris & Schon, 1992). In developing a theory of action, the researcher observes professional practice, identifies tacit and explicit assumptions, and identifies conflicts

between ideal and actual practice (Argyris & Schon, 1992). A theory of action is developed in the form of if a certain condition exists, then conduct a certain activity to achieve a certain result (Argyris & Schon, 1992). In Argyris and Schon's (1992) formulation, each individual scenario is a theory of action, and a group of related action theories become a theory of practice. This study resulted in describing a theory of action, not a theory of practice, since the focus was on how to define the discipline rather than develop a larger theory of homeland security practice.

The current literature on homeland security definitions and theories can be separated into three categories identified as focusing primarily on threats and hazards to the homeland, activities to address threats and hazards, and desired outcomes of homeland security efforts. In assessing these categories of threats, activities, and outcomes, one can discern a potential series of "if . . . then" structures. This represents the fundamental format of a theory of action (Argyris & Schon, 1992). This formula, applied to the homeland security literature, would be the following: If [a threat or hazard risk], then [conduct these activities] to achieve [outcomes/consequence]. When grouped collectively by these categories, these ideas represent potential theories of action to describe homeland security. Figure (2) depicts a possible composite of the categorized definitions and how these definitions can interrelate.

Summary

This chapter reviewed the relevant literature related to the challenge of identifying a definition of the homeland security concept. The idea of homeland security, originally proposed in the late 1990s, was identified by President Bush and the Congress as the conceptual basis for preventing a future 9/11-type attack on the United States. This

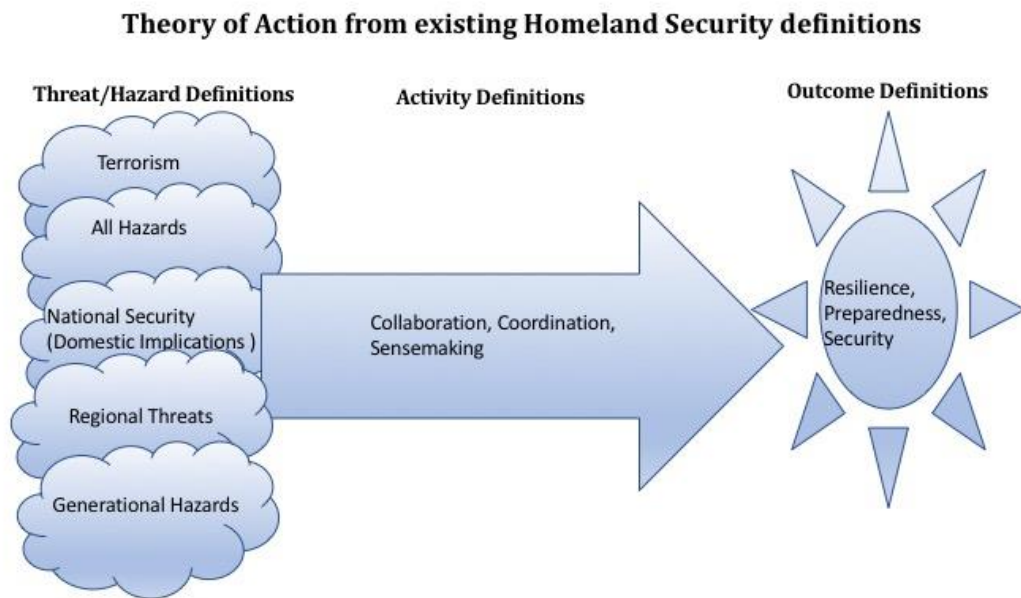


Figure 2. Theory of action from existing homeland security definitions.

chapter examined how the president and Congress developed this vaguely defined concept through presidential directives and legislation into a vast operational cabinet-level department. Although the president and Congress outlined what homeland security should do, a formal attempt to define the boundaries of this new concept was never codified. Since 9/11, a series of directives, legislative actions, reviews, and strategic plans have provided diverging ideas of what homeland security actually is. This study develops a theory of action to demonstrate how the members of the homeland security enterprise, as a social community, define the concept through their actions during the *Deepwater Horizon* oil spill response. The researcher presented the existing definitions and theories of homeland security in three categories of threat-based definitions, activities, and outcomes. When grouped together in this manner, the collective literature begins to approach the framework for a theory of action. This chapter concludes with a reflection on the necessity for a clear definition for political accountability across the

homeland security enterprise and discusses a hypothesis that the various proposed definitions and theories of homeland security suggest a theory of action. This study develops a conceptual model for discerning an action theory definition through the analysis of federal, state, and local leaders' actions during the *Deepwater Horizon* oil spill response.

CHAPTER 3: RESEARCH METHODOLOGY

Homeland security as a discipline continues to lack a consensus definition that describes the range of expected actions necessary to achieve “security.” To keep the homeland security enterprise secure, officials across multiple levels of government must coordinate over 87,000 different jurisdictions at the federal, state, local, and tribal governmental levels (Bullock et al., 2013). Without a shared understanding of what constitutes homeland security, achieving DHS’s desired “unity of effort” can be frustrated by the misalignment of homeland security priorities between jurisdictions. This study examines the actions and interactions of each level of government during a Homeland Security incident to identify a theory of action-based definition. The purpose of this study was to explore the shared understanding of what constitutes “homeland security” as expressed through the actions of federal, state, and local officials during the *Deepwater Horizon* oil spill response of 2010. This chapter includes the research questions, the hypotheses, and a description of the research methodology. The discussion of research methodology includes the sampling procedure and population, instrumentation, and procedures for data collection, and analysis.

Research Question

This research study focused on exploring one research question:

What do political leaders’ priorities and actions at each level of the response (federal, state, local) indicate about the definition of homeland security?

In this question, priorities are to be understood as the actions requested by federal, state, and local leaders to be implemented by the response organization to address the impacts of the oil spill. Actions should be understood to include any orders or direction

provided by a leader to individuals or groups under his or her authority and jurisdiction to address impacts from the spill.

Research Design

The researcher undertook a qualitative study to investigate theoretical principles demonstrated in how U.S. federal, state, and local officials respond to a Homeland Security crisis. In a qualitative study, data are “purposely selected” to help better understand the research problem (Creswell, 2014, p. 189). Since qualitative studies do not rely upon quantitative statistical analysis methods, researchers are able to adapt their sampling methods to explore the unique attributes of that case or cases (Ishak, Yazid, & Bakar, 2014). Qualitative methods are useful for exploring new phenomenon and in the formation of theory (Creswell, 2014). In a qualitative study, the researcher utilizes inductive methods to construct theories and develop patterns by exploring the meaning of phenomenon (Creswell, 2014). This study examined what the actions and priorities of leaders at various levels of the homeland security enterprise suggest about the leaders’ pragmatic understanding of what homeland security is. In seeking to develop an action-based definition for homeland security, the documented actions of the leaders are an invaluable record of how the response was conducted and allowed the researcher to identify patterns that lead to definitions. Case study method allows one to examine the incident to explore these patterns. This study explored a single unique, extreme Homeland Security incident, the *Deepwater Horizon* oil spill response of 2010. In this response, the federal, state, and local priorities and perspectives diverged, and this required leaders to find consensus for unified action.

Population and Sample

This study focused on a single case study of the *Deepwater Horizon* incident response of 2010. Case study research is conducted using a purposeful sampling of a specific case (or cases) that is of interest to the researcher and will contribute to the literature. Cases are selected to explore a specific phenomenon. When selecting the case, one must choose between a single or multiple case design (Creswell, 2014; Yin, 2009). There are four general reasons for selecting the single case design: the critical case, the unique case, the average case, or the revelatory case (Yin, 2009). The critical case represents the case that tests a current theory while the unique case explores an unusual or extreme phenomenon (Yin, 2009). The average case illustrates the typical manifestation of a phenomenon or theory while the revelatory case provides insight into the recently available details of an event or phenomenon (Yin, 2009). In choosing a multiple case design, one must ensure that the cases selected either predict similar results or “predict contrasting results but for anticipatable reasons” (Yin, 2009, p. 54). This study explored a single case that represents an unusual and extreme Homeland Security incident.

This case study explored the extreme case of the *Deepwater Horizon* oil spill response in 2010. An extreme or unusual case examines an incident that is atypical and pushes the boundaries of what is known or expected and reveals phenomena that are not normally experienced (Kiltz, 2008; Yin, 2018). With *Deepwater Horizon*, Homeland Security professionals and other government officials sought to stop an uncontrolled deep-sea oil release and clean up from the largest oil spill in United States history through coordinating the whole-of-government response (Allen, 2010; Randle, 2010).

This event represents a multifaceted array of threats, hazards, and multijurisdictional challenges that would occur after a complex large-scale terrorist attack or natural disaster. Likewise, when terrorist attacks or major hurricanes occur, there is a degree of national unity behind the response, and homeland security actions are sometimes not questioned until after the fact (Bellavita, 2013). In this case, responders found that the scope of the spill, technologically, geographically, and politically, exceeded the established National Contingency Plan (NCP) and required response leaders to adapt to a dynamic and expanding threat to the Gulf Coast region while encountering unforeseen and unique challenges. This study examined those leaders' actions and requested actions to identify the essential actions that could constitute a definition of homeland security.

Since this single case study proposed to develop a generalizable theoretical definition of homeland security, it must address issues of validity and reliability. One common criticism is that the case study is not scientifically generalizable. However, Yin (2009) noted,

Case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a "sample," and in doing a case study [the] goal is to expand and generalize theories and not to enumerate frequencies. (p. 15)

The goal of the case study is to seek an understanding of the meaning of the phenomenon; cases are selected based upon what one can learn from them (Stake, 1995). As discussed above, this case was selected because of the uniqueness of the incident and the engagement required across the homeland security enterprise.

Case study method provides several advantages for researching homeland security and public administration issues. First, case studies allow one to study phenomenon that cannot be replicated because of ethical principles in a controlled environment (Yin, 2018). In this case, no one would reasonably authorize the uncontrolled discharge of crude oil in the deep ocean to examine how responders would react. Although some of these reactions could conceivably be simulated through a tabletop exercise, the actual event would provide unique opportunities to examine organizational and individual responses. Second, case study method explores a large quantity and variety of data to develop the narrative, allowing for an in-depth study of a particular incident. The case attempts to “illuminate a *decision* or set of decisions: why they were taken, how they were implemented, and with what result” (Schramm as cited in Yin 2018, p. 14). This case focused specifically on those decisions made by federal, state, and local leaders. Third, case studies open new lines of inquiry. Since cases are used to examine unique, extreme, or even common phenomenon to develop theoretical understanding of events, the theories and themes identified in the case can become the foundation for further qualitative and quantitative studies (Yin, 2018). This advantage fits with the overall purpose of this particular study in the effort to set a theoretical foundation for homeland security with an emphasis of defining professional education standards.

The disadvantages of case research also stem from the reliance on examining an uncontrolled phenomenon. First, the events in a case cannot necessarily be replicated in a controlled environment (Yin, 2018). This disadvantage is the opposite of the advantage noted above. Although one can construct a case study so another researcher could reliably reconstruct the study from the same data, one could not necessarily recreate the

case itself in a controlled environment to observe the events unfolding or measure phenomenon for additional analysis. The data available for a case are outside the researcher's control and the researcher must work with the imperfect information available. As discussed previously, a secondary disadvantage is the challenge of generalizing the findings in the case study. To address this challenge, the researcher focuses on developing theory and not necessarily the broader application of principles identified in the study (Stake, 1995; Yin, 2009, 2018). However, one can use the theory generated from a case study as the basis for further research. Third, case studies can require a greater workload to mine relevant data (Yin, 2018). As Yin (2018) noted, the ability to scope the case study can alleviate some of the data collection challenges associated with case study method. However, since this particular case study was composed nearly a decade after the event, the data were collected from existing archival and government documents, journalistic accounts, and other academic studies. This researcher was also a participant observer during the *Deepwater Horizon* oil spill response. He served on the Intergovernmental Affairs staff of the National Incident Command (NIC) for 92 days from May through August of 2010. During his time at the NIC, he led the interagency and intergovernmental effort to prepare daily policy briefs for a senior advisor to the president and the deputy National Incident Commander who would brief the five Gulf Coast governors (a daily meeting nicknamed "the Governors' Call") on the status of the whole-of-government effort responding to the spill. The researcher directly participated in coordinating, drafting, and editing the daily Governor's Call policy briefs, briefing government affairs officers assigned to the Gulf region on

intergovernmental issues, and responding to queries from members of the United States Congress.

Instrumentation

This study focused on the actions of leaders at different governmental levels of the incident response. As a historical case study, this research did not employ a survey or interview instrument, but relied upon the existing documentation of a real-world event.

Data Collection

When collecting evidence for a case study, one must be both rigorous and fluid to follow themes and trends as they emerge through data collection. Yin (2009) identified six main sources of case study evidence: documents, archival records, interviews, direct observations, participant-observation, and physical artifacts. The collection of evidence must follow a case study protocol designed by the researcher to address the unique data requirements for this particular case (Ishak et al., 2014; Yin, 2009). Data collection for this study consisted of collecting official government reports, congressional testimony, requesting working documentation from the Coast Guard and DHS, speeches and writings of response leaders, and news accounts of the events collected.

The data collection for this case study occurred in three main phases: official published reports, congressional testimony, and press conference and news appearance transcripts. During the initial data collection, the researcher identified and collected official government reports that described the spill response efforts of federal, state, and local officials. This collection was limited to reports detailing the actions during the response operations and did not include reports and studies related to the precipitating accident aboard the *Deepwater Horizon* that led to the spill, reports related to long-term

environmental and economic recovery in the region, or general analysis of deep-sea drilling in the Gulf. The initial data collection included the National Commission on the British Petroleum (BP) *Deepwater Horizon* Oil Spill and Offshore Drilling, the Federal On Scene Coordinator's (FOSC) report, the National Incident Commander's report, and the U.S. Coast Guard's Incident Specific Preparedness Review (ISPR). These reports are publicly available through the websites of the authoring agencies, the Government Printing Office, and have also been uploaded to nongovernmental organization websites with an interest in Oil Spill Response. Congressional testimony related to the incident response was obtained through the Congressional Record maintained by the Library of Congress. Federal, state, and local political leaders involved in the response made frequent appearances on national cable and broadcast news shows (e.g., *Anderson Cooper 360*, NBC's *Today Show*). Transcripts of these appearances as well as press conferences were collected and reviewed. After primary source data collection was complete, a review of news accounts from national newspapers (e.g., *New York Times*, CNN) and Gulf Coast papers (e.g., *New Orleans Times Picayune*) assisted in triangulating events and identifying local leaders' actions. In collecting these data, the researcher established guidelines to ensure proper treatment of individuals involved in the response effort, as discussed below.

Protecting Human Subjects

In developing this case study, data were collected ethically and with respect to the confidentiality of individuals involved in the response. Department of Health and Human Services regulations, known as the "Common Rule," require the ethical treatment of all human subjects in a research study (45 CFR 46). Since the case was a highly public

incident, the leaders of the response were public officials whose actions, written decisions, statements, and reports are public record as guided by the Freedom of Information Act, 5 U.S.C. § 552 and may be personally identified. These individuals, including the president of the United States, senior White House staff, department secretaries, the National Incident Commander and deputy, members of Congress, governors, and county officials and parish presidents were identified by name. For nonelite response personnel, the research identifies the individual by a general description of their response assignment. For example, the Unified Area Command (UAC) for *Deepwater Horizon* designated Coast Guard officers to serve as liaisons to local leadership. If the individual was assigned to a local leader in Louisiana (which has parishes), the individual was designated a Parish President Liaison Officers (PPLO). For other states, the officers served as County Liaison Officers (CLO). The officers assigned to these duties rotated back to their regular duty station every 30 days. To maintain confidentiality of an individual's insights, all parish/county liaison officers were referred to generally as a PPLO/CLO without reference to their name or to whom they were assigned. The anonymity of public officials in pursuit of their assigned duties was not required by the Common Rule, however in this study, the anonymity allow the research to focus on the actions themselves and not the individuals involved.

Case Study Database

As evidence was collected, the researcher developed a case study database. The use of a case study database is a growing practice in case study methodology (Yin, 2018). The database assists the researcher in managing the variety of data being collected and serves as a useful reference for future researchers who might choose to explore the case

and evaluate the initial researcher's conclusions (Yin, 2018). In this case, the researcher collected and examined data that may prove useful for other lines of inquiry about intergovernmental response during Homeland Security incidents. The documents included in the case study database are listed in Appendix B.

Data Analysis

The data analysis focused on identifying actions and desired actions (priorities) of federal, state, and local leaders during a Homeland Security incident as indicators of the leaders' definition of homeland security. Case study data analysis is an iterative process that begins with the first review of the data through ongoing identification of patterns and connections between ideas and events (Stake, 1995). Through this inductive strategy, theoretical principles are identified by working from the "ground up" to build an understanding of how the data are related (Boblin, Ireland, Kirkpatrick, & Robertson, 2013; Stake, 1995; Yin, 2018). This study employed this strategy to examine how leaders signaled their intended actions through daily meeting minutes, stated priorities, and actions undertaken.

In this analysis, the principles were identified through a multistage process of analyzing and coding the official government reports, Congressional testimony of federal, state, and local leaders, and transcripts of press conferences and news show appearances by federal, state, and local leaders. The first stage involved precoding the National Commission report to record first impressions of the data (Saldana, 2016). In this stage, the researcher first identified actions that were beyond the scope of the existing response plans and then thematically coded the actions. The researcher initially coded actions based upon the existing homeland security actions and outcomes definitions discussed in

Chapter 2 (such as coordination, collaboration, resilience, etc.). For actions that did not fit the existing definitions, new thematic codes were established. The second stage involved formal coding of the documents with the assistance of MaxQDA software. The MaxQDA software allowed the researcher to import the existing documents, insert codes into the document, extract the coded segments for further analysis and comparison, and create visual displays of the data. While coding, the researcher recorded impressions, research notes on the context of the passage, and preliminary findings in analytic memos (Saldana, 2016; Yin, 2018).

A second strategy employed in this study was to examine the data through a theoretical framework. In this strategy, the underlying propositions of a theoretical framework are identified as analytic priorities (Yin, 2018). In this study, action theory served as the theoretical framework to guide the development of a theoretical definition. One aspect of action theory, the double loop learning model, was adapted to serve as a conceptual framework describing how a homeland security definition could be derived from lessons learned during an incident as discussed in Chapter 1.

In establishing data points, triangulation of the data between multiple sources is necessary to increase the validity of the study (Stake, 1995; Yin, 2018). When presenting evidence, researchers should aim to include relevant uncontested information to increase the reliability of the case (Stake, 1995). In case study methodology, the internal validity is further established through practices such as triangulation (Stake, 1995). In triangulation, the researcher seeks to validate the case data through checking the data in the case from a variety of sources. When examining evidence, the researcher establishes lines of convergence where multiple sources intersect (Yin, 2018). Of note, Stake (1995)

suggested that lines of divergence can also yield data of interest during the analysis.

When combined with the external validity steps described above, the case study alone is still subject to the researcher's inferences from events. One option for increasing the external validity would be for the researcher to conduct a follow-on quantitative study to examine whether his inferences from the case study resonate with the practitioners in the field and lessons learned from other case studies.

In preparing the study, the researcher sought to increase the validity of the case study findings through comparison of this study's findings with the existing literature including the lessons learned from other Homeland Security incidents. Since a case study represents a single incident, the generalizability is limited. As Kennedy (1979) observed, when generalizing from a single case study, the ability of the researcher to clearly describe the case and the attributes under study will assist the reader in applying those attributes to future studies. As noted above, Yin (2018) stated that one can use analytical generalization to expand the understanding or development of theory. Cases also exist as a record of phenomena observed from multiple perspectives (Stake, 1995). Comparing the case with the existing literature can yield increased validity through understanding of how this phenomenon conflicts or explains existing theories (Kennedy, 1979). When a researcher examines how the case compares with literature that contradicts the findings, internal validity is increased (Eisenhardt, 1989). When the case is compared with similar literature and cases, the researcher is able to demonstrate how the findings are more generalizable since the case fits within the existing literature (Eisenhardt, 1989). This process allows for theoretical triangulation of the case (Stake, 1995). The flexibility and

challenges of demonstrating validity are an example of the advantages and disadvantages of case study method.

The next chapter presents the findings from this research including a discussion of the oil spill response regulatory framework, Louisiana's homeland security response framework, the initial actions to respond to the *Deepwater Horizon* spill, followed by an analysis of how federal, state, and local leaders acted and recommended actions to stop the discharge of oil from the well, recover existing oil, and protect the region from future spills.

CHAPTER 4: FINDINGS

This chapter presents the findings of a case study of the 2010 *Deepwater Horizon* oil spill response. This study examined the actions and interactions of each level of government during a Homeland Security incident to identify a theory of action-based definition. The purpose of this study was to explore the shared understanding of what constitutes “homeland security” as expressed through the actions of federal, state, and local officials during the *Deepwater Horizon* oil spill response of 2010. This research study focused on exploring the following question: What do political leaders’ priorities and actions at each level of the response (federal, state, local) indicate about the definition of homeland security? In this analysis, the current theories-in-use are the operational priorities established at the outset of the response by the Federal On Scene Coordinator (FOSC) and the state and local leadership in Louisiana. As the leaders at different levels employ their theories-in-use, conflicts occur that open opportunities to explore how each level views the crisis differently and what their chosen actions suggest about the leaders’ understandings of what *should* be happening in a Homeland Security incident response.

The case study was conducted by examining the actions of federal, state, and local leaders as recorded through official reports, congressional testimony, and news interviews and press conference transcripts. This analysis focused primarily on the actions of the President of the United States, the National Incident Commander and FOSC at the federal level, Louisiana Governor Bobby Jindal at the state level, and Plaquemines Parish President Billy Nungesser at the local level. Leaders from other Louisiana parishes and different levels of Mississippi, Alabama, and Florida governments

were also studied; however, the analysis focused primarily on the leaders who are most routinely engaged with both the operational response as well as with the media. The researcher analyzed the official reports, congressional testimony, and press conference and media transcripts to identify actions or requests for actions that were beyond those actions already required under the National Contingency Plan (NCP). These actions were coded based upon the level of government (federal, state, local), the type of action, and the desired outcome of the action (when indicated). This chapter presents the findings of that analysis.

Organization of Case Study

This chapter is structured to explore the case study through the context and controversies of the spill response that best illustrate the actions and requested actions of the federal, state, and local leaders. This chapter first provides context for the spill response including a discussion of the federal oil spill response legal framework as compared to Louisiana's state and local emergency response framework. The chapter then presents a series of controversial issues addressed during the 117 days between explosion and sinking the *Deepwater Horizon* Mobile Offshore Drilling Unit and the declaration of well kill on August 15, 2010. These issues include a discussion of the sinking of the *Deepwater Horizon*; the initial spill response and Spill of National Significance declaration; conflicts between federal, state, and local leaders over deploying boom, building berms, and using dispersants; compensation; the establishment of unified federal coordination during June 2010, President Obama's moratorium on offshore drilling and the reaction from Louisiana; and efforts to stop the release of oil

from the undersea wellhead. The chapter concludes with a summary of the action themes demonstrated by each level of government.

Legal and Operational Response Frameworks

Oil Spill Response Legal Framework

Oil spills and their cleanup are a daily occurrence in the United States. The Bureau of Transportation Statistics (2017) noted that in 2015, over 2,000 spills occurred in the United States, releasing over 300,000 gallons of hydrocarbons. In the maritime realm, U.S. Coast Guard stated that their officials respond to an average of 35 pollution incidents each day, which is nearly 13,000 per year (U.S. Coast Guard, 2017). Under federal law, any discharge (or a spill) of hydrocarbons into a waterway of the United States violates the Clean Water Act as amended by the Oil Pollution Act of 1990 [OPA 90] and must be reported to the National Response Center. The spill must be cleaned up by the Responsible Party (RP), who is the individual or organization responsible for spilling the oil (Ramseur, 2017). Under OPA 90, any spill, no matter how small, is required to be reported and investigated and carries the potential for fines based both upon the amount spilled, liability to pay the costs of clean up and liability for remediation of any damage caused by the spill (Ramseur, 2017). To effectively address the daily occurrence of spills, the existing oil spill regulatory framework requires federal oversight of the cleanup and prescribes a specific federal response structure, the duties of the RP, the relationships between the federal, state, and local government during a spill, and the limits to liability for the RP. This framework developed over the course of about 40 years to address the damage from the release of hazardous substances into the environment.

The oil spill regulatory framework in effect at the time of the *Deepwater Horizon* spill was founded upon a long history of efforts to improve the quality of American waterways. The Federal Water Pollution Control Act of 1948 was the first national effort to encourage clean water, but Congress did not clearly define what constituted an illegal discharge or provide an enforcement mechanism (Poe, 1995). In 1972, the Federal Water Pollution Control Act was amended and received the nickname the “Clean Water Act” (Poe, 1995, pp. 5–6). Under the revised statute, the newly formed EPA was charged with eliminating all discharges of oil and other substances into American waterways and provided with the authority to enforce regulations related to illegal discharges (Poe, 1995). The Clean Water Act was put to the test in 1989 when the oil tanker *Exxon Valdez* ran aground and spilled 11,000,000 gallons of oil into the environmentally sensitive waters of Valdez, Alaska (Ramseur, 2017). The Coast Guard’s response to the *Exxon Valdez* spill identified several deficits in the existing legislation that Congress would address in the OPA 90 (Ramseur, 2017).

The Coast Guard’s efforts to respond to the largest tanker spill in American history identified the necessity of expanding the regulatory framework to include requirements for increased federal governance and spill response preparation, clarifying the economic responsibilities of the spiller; and expanding the Oil Spill Liability Trust fund. With the passage of the OPA 90 (P.L. 101-380), the president was granted the legal authority to oversee removal activities by a RP including the authority to provide detailed orders to the RP (OPA 90, 1990). The act also allowed the president or his representative to assume complete federal control over the response and use federal resources alone to complete the clean-up (National Incident Command, 2010; Ramseur, 2017, p. 12). The

president was also granted the authority to delegate these powers to the EPA for spill in the interior of United States or the U.S. Coast Guard for spills impacting coastal waters (Ramseur, 2017)⁶. Although the president (or his representative agency) could assume complete control (federalize) of the spill, this raises other challenges. Once the response is federalized, the federal government assumes all costs for immediate action and would need to seek reimbursement from the RP through litigation (National Incident Command, 2010). Litigation is a long process that can take decades. In the short term, the federal government could cover costs through the Oil Spill Liability Trust Fund, but if the fund were to be exhausted, any further funding would require a specific appropriation by Congress (National Incident Command, 2010). This course of action is likely to impede recovery operations. Litigation for the *Exxon Valdez* spill lasted over 26 years and only ended when Alaska and the federal government decided not to pursue the remaining \$100 million in recovery costs and damages from Exxon (Waldholz, 2015). The federal government does have the option to order the RP to take specific actions through administrative orders; however, since liability is limited under OPA 90, if the On Scene Coordinator (OSC) were too directive, it could jeopardize future cooperation between the RP and the federal government and lead to a federalized spill (National Incident Command, 2010). To minimize the possibility of federalizing a spill, OPA 90 included requirements for contingency planning and preestablished response organizations (Ramseur, 2017). Through mandatory exercises with the Coast Guard offices in their

⁶The “Coastal Zone” is defined in 40 CFR 300.5 to include “all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on the inland rivers, waters of the contiguous zone, other waters of the high seas subject to the National Contingency Plan, and the land surface or land substrata, ground waters, and ambient air proximal to those waters.”

region, the oil companies and the local OSC could jointly plan and prepare for future contingencies ensuring a smooth response.

Under OPA 90, Congress clarified and expanded both the planning requirements for spills and the structure and responsibilities of National Response System. OPA 90 required oil facilities, vessels, or rigs to establish and exercise (practice) responses to small, medium, and worst-case scenario spills (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; Ramseur, 2017; Rufe & Moore, 2011). Under these requirements, potential responsible parties must regularly demonstrate their ability to clean up spills through updated plans and exercises supervised by the Coast Guard's local OSC, Regional Response Team, and other members of the Area Committee as directed by the NCP (Ramseur, 2017; Sylves, 1998).

To accomplish the robust federal oversight envisioned under OPA 90, Congress directed the establishment of an enhanced National Oil and Hazardous Substances Pollution Contingency Plan (also known as National Contingency Plan or the NCP). The NCP is codified in federal regulations encompassing all of 40 CFR § 300. The EPA authored and maintains the NCP in coordination with the members of the National Response Team ([NRT], 40 CFR § 300.2). The NCP directs a tiered planning and response structure starting with the NRT. The NRT is composed of 15 cabinet-level agencies that coordinate the whole-of-government planning and response to oil spills and chemical releases and serve as the stewards of the NCP (40 CFR § 300.110). The NRT is chaired by the EPA with the U.S. Coast Guard serving as vice chair and includes the following additional federal agencies: FEMA, Department of Defense (including U.S. Army Corps of Engineers, U.S. Navy Supervisor of Salvage), Department of Energy,

Department of Agriculture (including the Forest Service and Agricultural Research Service), Department of Commerce represented by National Oceanographic and Atmospheric Agency (NOAA), Health and Human Services (HHS), Department of Interior, Department of Justice, Department of Labor, Department of State, Nuclear Regulatory Agency, and the General Services Administration (40 CFR § 300.175).

These cabinet-level officials are to coordinate the intergovernmental affairs during both planning and response operations to facilitate timely resolution of operational and policy challenges posed by a spill. The technical support of response operations is supplied by the Regional Response Teams (RRT).

The RRTs support the planning and responses conducted by individual Area Committees throughout the United States. Under the NCP, the United States is divided into 10 regions supported by RRTs (40 CFR § 300.115). Whereas the NRT focuses on the federal coordination, the RRT, as a regional organization, is charged with engaging state, local, and tribal leaders in planning and preparing for a response (40 CFR § 300.115). During a spill response, the RRT provides technical support and guidance during the response, including but not limited to, oversight of *in situ* burning operations, the use of chemical dispersants, and coordinating agency participation (OSC, 2010a).

The RRT directly supports the local Area Committees.

The Area Committees represent the local agency teams that plan and supervise oil spill response in that designated area. In the Coastal Region, Area Committees align with Coast Guard Captain of the Port jurisdictions since the Captain of the Port is delegated authority to serve as the FOSC for spill response (40 CFR 300.120). These coastal Area Committees are chaired by the local Coast Guard Captain of the Port (cochaired by EPA

representative), the state OSC, and representatives of other federal, state, and local agencies with an involvement in oil spill and chemical release response (40 CFR § 300.120). The Area Committee produces the Area Contingency Plan (ACP) that establishes initial response plans for spills of various size in the area, identifies resources for containing the spill, provides charts of environmentally sensitive areas, lists federal, state, local agencies along with local oil industry companies, and describes how the Incident Command System (ICS) will be implemented for oil spill response (Sector New Orleans, 2009). At the time of the *Deepwater Horizon* spill, the Coast Guard Sector in New Orleans had established a *Geographic Response Plan* as the acting ACP. The Geographic Response Plan contained an extensive discussion of initial actions and prominently lists the Louisiana Oil Spill Coordinator (LOSCO), Louisiana Department of Environmental Quality, and all the major oil companies as a charter members (Sector New Orleans, 2009). Missing from the Geographic Response Plan is a discussion of outreach or specific plans to include parish and local leaders (Rufe & Moore, 2011; Sector New Orleans, 2009). When an oil spill occurs, the ACP (or in New Orleans' case in 2010, the Geographic Response Plan) becomes the guiding document for establishing a coordinated intergovernmental response.

When an oil spill occurs under OPA 90, the response is to be conducted by the RP under the supervision of the nearest FOSC or his officially designated representative. When a spill is discovered, the RP or the individual finding the spill reports it first to the National Response Center and the nearest Coast Guard Captain of the Port (Sector New Orleans, 2009). The FOSC has the authority to “coordinate and direct removal action under . . . the NCP” (40 CFR § 300.5). In this capacity, the OSC monitors the actions of

the RP and directs any clean up or remediation action in accordance with the NCP as described in the ACP and monitored by the RRT (OSC, 2010a). However, in cases of catastrophic spills such as *Deepwater Horizon*, OPA 90 created a new category of spills: the Spill of National Significance (SONS).

Spills of National Significance

After the *Exxon Valdez* spill, Congress recognized the necessity of authorizing increased federal response capabilities during a catastrophic spill. The NCP defined a SONS:

A spill that, due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge. (40 CFR 300.5).

The NCP further authorizes the Commandant of the Coast Guard to appoint a National Incident Commander (NIC) who will have OSC authority to direct RP actions and will primarily focus on coordinating intergovernmental and interagency response while serving as the government's primary media spokesperson during the response (Allen, 2010). During a SONS, the NCP envisioned the OSC to lead the operational effort in the field while the NIC would manage the political, media, and national level coordination efforts (Allen, 2010; OSC, 2010a). As per the NCP, the Coast Guard routinely conducted SONS exercises at various ports throughout the nation, but there was little involvement in these exercises from either federal administration leaders or intentional engagement with local leaders and communities (OSC, 2010a; Rufe & Moore,

2011). The Coast Guard had completed a SONS exercise in March 2010, and much of the initial staffing of the NIC came from individuals who participated in the exercise (OSC, 2010a). This is the overall federal framework for responding to oil spills within the United States that existed prior to the *Deepwater Horizon* spill.

The nature of liability and funding under OPA 90 also shapes the actions in this response. Under OPA 90, the RP is liable for all removal (clean up) costs, remediation of environmental damage, and damages caused to others impacted by the spill (Ramseur, 2017). In OPA 90, Congress chose to cap liability. Responsible parties must pay for all removal costs, but offshore facilities like the *Deepwater Horizon* Mobile Offshore Drilling Unit were capped at \$75 million for natural resource and other economic damages (Ramseur, 2017). Congress also established the Oil Spill Liability Trust Fund (OSLTF) from a small tax per barrel of oil to fund federal costs if the RP was not able to cover the initial recovery effort (OSC, 2010a; Ramseur, 2017). At the time of the *Deepwater Horizon* oil spill, the OSLTF held \$107 million available for oil spill response (OSC, 2010a). Furthermore, the law includes statutory preclusion: if a state takes any action (even administrative) against a RP before the federal government, this action can prevent federal prosecution (Lamb, 2015). Under this stipulation, it is within the federal government's financial interest to keep the RP fully engaged with removal and recovery operations. However, this structure also requires primary federal leadership of the spill response effort. While state and local leaders are welcomed into the response organization, it appears that the determination of priorities lies with the FOSC and the RP.

The above legal framework represents the federal government's plan for responding to a SONS. Although the Coast Guard had routinely exercised a response for a SONS, the NCP and area plans had not been aligned with Homeland Security's National Response Framework yet (Rufe & Moore, 2011). The Coast Guard's Incident Specific Preparedness Review (ISPR) of the response effort would later find that organizers of previous SONS exercises had not included or educated local leaders on how oil spills are managed differently than natural disasters under federal law (Rufe & Moore, 2011). The *Exxon Valdez* spill impacted a remote and mostly unpopulated region where extensive local public outreach was not required. As the size and scope of the *Deepwater Horizon* spill was realized in the early days of the response, the federal leaders continued to pursue the spill as practiced. However, the leadership of Louisiana and her parishes has a different perspective on how to respond to this type of disaster.

Louisiana's State and Local Homeland Security Response Authorities

Louisiana and her parishes entered into the *Deepwater Horizon* response with a different perspective on how to address a spill of this magnitude. Louisiana was legally structured to align with the NCP with a previously designated state OSC (Louisiana Oil Spill Coordinator [LOSCO]) who was a professional environmental official assigned to represent the state's interests in oil spills large and small (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Oil spills in Louisiana are a routine occurrence, with the Coast Guard investigating an average of 1,200 spills each year (U.S. Coast Guard, n.d.). The state's OSC operated from the Louisiana Oil Spill Coordinator's office (LOSCO). The LOSCO was originally under the governor's office, but in 2009 it had been reassigned to the Department of Public Safety (LA DPS) under

the state police. At the time, Louisiana officials believed that the resources of LA DPS would be able to provide more support and resources for oil spill response efforts (“The Deepwater Horizon Oil Spill Chain of Command,” 2010). Although LOSCO was no longer directly under the governor’s office, any crisis, oil spills included, potentially leads to the activation of the Unified Command Group under the direct oversight of the governor.

Louisiana had long ago established its own unified and centralized command structure for all types of emergencies. The Louisiana Homeland Security and Emergency Assistance and Disaster Act, also known as the Louisiana Disaster Act (LRS Title 29: 721-739, 2009), recognized that emergencies required extraordinary coordination of government resources and established a Unified Command Group (UCG) led by the governor as the unified commander (Governor’s Office of Homeland Security and Emergency Preparedness, n.d.). The UCG is led by the governor with the head of the Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP) as his deputy to coordinate interagency and intergovernmental action during a crisis (GOHSEP, n.d.). With the governor as the final decision maker,

[The UCG] provides a **unified** and **coordinated** approach to emergency incident management, enabling institutions and agencies with different **legal, geographic** and **functional responsibilities** to *coordinate, plan* and *interact* effectively.

[Emphasis in the original] (GOHSEP, n.d., para. 2)

Whereas in other states the state oil spill coordinator has delegated authority to represent the governor and make operational decisions, in this system, the LOSCO is a

member of the UCG and the governor becomes the only decision maker. Although the system appears highly unified, the Louisiana Disaster Act disperses authority as well.

While the UCG centralizes state decision-making, the Louisiana Disaster Act also disperses authorities to the parish presidents. Under the law, when a state of emergency is declared, the parish presidents take on broad emergency authorities to lead an effective and efficient response in their jurisdiction during an emergency. These powers include the ability to suspend regulations, commandeer resources at the parish president's discretion, control all movement and routes within his or her jurisdiction, and suspend or limit sales of alcohol, tobacco, and explosives (Louisiana Legislative Auditor's Office, 2018). In an emergency, the Louisiana parish president's authority within his or her jurisdiction rivals that of the governor himself.

The homeland security response framework in Louisiana is paradoxical. The legislature empowers the governor to lead a whole-of-government response through the UCG with the ability to work across jurisdictions and authorities to act in the best interests of the state. Then in the same legislation, the legislature grants the parish presidents with equally broad powers over their own jurisdictions. Since the governor is seeking to act for the good of the entire state, it is conceivable that a parish president, acting for the good of her jurisdiction, would occasionally interfere with the governor's efforts or have neighboring parish presidents advancing different priorities during a crisis.

Three Competing Response Frameworks

At this stage of analysis, three distinct response frameworks are set to be in conflict at the outset of the spill response. At the federal level, the Coast Guard is operating under the view that a SONS is primarily a regulatory response under OPA 90

where federal officials supervise the RP in recovering and remediating the spill. For the federal response, homeland security is the responsibility of the federal government with state and local support of the OPA 90 framework. The state of Louisiana views the spill as a homeland security response, similar to a widespread natural disaster. The state responds under a framework with a centralized, governor-led response effort that seeks federal assistance. Plaquemines Parish also views this as a centralized, single leader effort with support flowing from upper levels of government down to the local level. In the Parish framework, the parish president has the authority to remove most regulatory obstacles to expedite emergency response efforts. While all three initial models focus on coordination and communication, the three views differ on who leads the effort. A detailed look at these frameworks beyond coordination and communication is necessary to understand the potential conflicts during a SONS response.

The federal framework at the outset of the *Deepwater Horizon* spill was focused primarily upon the coordination of the response and communication with the states impacted by the spill. ADM Thad Allen adopted the phrase “unity of effort” from the National Response Framework to serve as the motto of the first National Incident Command (Allen, 2010; FEMA, 2008b, p. 8). Deputy Secretary of Homeland Security Lute later explained, unity of effort is focused on coordination of actions between various parties in the response rather than single leader control (Bellavita, 2011b). The initial objectives that the Coast Guard employs for any spill, as recorded in their Incident Management Handbook, are:

- Ensure the safety of citizens and response personnel
- Control the source of the spill

- Maximize protection of environmentally sensitive areas
- Contain and recover spilled material
- Minimize economic impacts
- Manage a coordinated response effort
- Keep stakeholders informed of response activities
- Keep public informed of response activities
- Ensure that the source of a discharge is designated and the RP advertises procedures by which claims may be presented or that the National Pollution fund Center (NPFC) assumes this role
- Inform the NPFC regarding the source of the discharge.
- Refer all removal and damage claims to the RP or, if no identifiable RPB, to the NPFC Claims Adjudication division. (U.S. Coast Guard, 2006, pp. 19–10)

The prioritized federal actions at the outset can be summarized with the following four themes: security/defense, coordination, communication, and compensation. The first five priorities are actions based upon security or defense of the United States. The actions focus on controlling, containing, and recovering oil, which relate to stopping the threat of damage as well as actions related to ensuring the safety of the public, responders, the economy, and environment from damage due to the hazard. The next priority focuses on the coordination of the responding personnel since the NCP and ACP emphasize the necessity of cooperation between federal, state, local, and tribal governments as well as the RP and any contracted organizations. The next category is actions related to communication with those impacted by the spill and the public at large. The final set of actions is categorized as compensation since it includes accounting for

costs, liability, and claims. Together, this group of actions—security/defense, coordination, communication, and compensation— is considered the federal theory-in-use at the outset of the response for the purpose of this analysis.

At the state level, the framework seeks to have the State play the lead role in managing the crisis on its shores. Louisiana is also primarily focused on coordination and communication among those involved. However, the governor acts to adapt existing systems during a crisis including to “issue, amend, or rescind executive orders, regulations, or proclamations” (LRS Title 29: 724, 2009). At the parish level, the theory-in-use includes actions such as commandeering resources, adapting regulations, and controlling borders (LRS Title 29: 727-728, 2009). These policies are focused on the theme of security and defense during a crisis. The Louisiana theory in use includes themes of security/defense, coordination, communication, and adaptation. At the parish level, one would add commandeering resources to that list. For the purpose of this analysis, these three frameworks serve as the initial theories-in-use to be evaluated in developing a theory of action. These three frameworks were set to be in use in April 2010 as the Mobile Offshore Drilling Unit (MODU) *Deepwater Horizon* was preparing to put a temporary cement plug into a recently drilled deep-sea well.

The Deepwater Horizon Accident and SONS Declaration

On April 20, 2010, the workers on the MODU *Deepwater Horizon* were completing the process of placing a temporary cement plug into a freshly drilled well. The drill site, technically known as the Mississippi Canyon Block 252, Macondo Well, sat approximately 41 miles off Louisiana (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). The newly drilled well was 20,200 feet

deep and separated from the surface by approximately 5,000 feet of water (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). At 10 a.m. on 20 April, an explosion and fire occurred onboard the rig. The Coast Guard's initial actions focused on searching for missing crewmembers and securing the situation by fighting the fire (OSC, 2010a). On Earth Day, April 22, the remains of the *Deepwater Horizon* rig sank to the bottom of the ocean, releasing the approximately 7,000 gallons of oil on board the rig (OSC, 2010a). Eleven crewmembers were tragically lost in the accident.

Two days later, remotely operated vehicles (ROVs) discovered that the well's fail safe, called a blowout preventer (BOP), failed to seal the well, resulting in an uncontrolled discharge of oil flowing from a broken riser pipe formerly attached to the rig (Allen, 2010; OSC, 2010a). Over 87 days, the Macondo Well continued to discharge oil, spilling approximately 4.9 million barrels of oil (231,000,000 gallons).

Initial Actions, SONS Declaration, and Conflicting Frameworks

On April 29, 2010, DHS Secretary Janet Napolitano declared the *Deepwater Horizon* spill as a SONS and appointed the Commandant of the Coast Guard, Admiral Thad Allen, to serve as the nation's first NIC. Allen was the logical choice to serve as the NIC for this response. In 2005, President Bush appointed Allen to lead the failing federal response effort to Hurricane Katrina. Allen earned respect throughout the Gulf for his leadership in turning around the response effort. He was also the officer who led the 2002 Coast Guard SONS exercise simulating a Louisiana oil spill (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011).

In making the SONS declaration, Secretary Napolitano also stated that she would be fulfilling the role of the Principle Federal Official (PFO) for domestic incidents under HSPD-5 (Allen, 2010). The filling of these two separate roles (PFO and NIC) resulted from a doctrinal overlap between the NCP and Homeland Security policy that had not been addressed in the creation of DHS (Allen, 2010). Under the NCP, the NRT serves as the national level overseeing body for the response with intergovernmental coordination and communication occurring within the 15-agency team. Under HSPD-5, the PFO becomes the central leader, and all agencies should coordinate their actions with the PFO. DHS as a department did not have a seat on the NRT although two subordinate agencies (Coast Guard and FEMA) did. As Allen (2010) described it in his NIC's report, the NRT transformed from an interagency coordination team into a team whose effective mission was to support cabinet-level officials, leaving the NIC without support for interagency problem-solving. With the NRT providing policy and decision-making support to the president and DHS, Allen needed a new interagency team to serve the function of the NRT envisioned under the NCP.

Allen in response created the Interagency Solutions Group (IASG) to resolve this dilemma. The IASG grew to include 20 federal agencies that oversaw some aspect of policy or regulation impacted by the spill and the response (Allen, 2010). The IASG established themselves in a large conference room at Coast Guard Headquarters in Washington, DC to allow for rapid coordination with their individual departments and other agencies involved in the response. Allen tasked this group with a wide range of emergent issues, from evaluating proposals to create berms and barriers in the Gulf to scientifically studying the rate of oil escaping the Macondo Well and troubleshooting

Occupational Safety and Health Administration (OSHA) training and equipment regulations issues that potentially delayed response efforts. The members of the IASG were experts in their various technical fields and were able to innovate both technical and policy solutions while advising within their expertise; however, when conflicts with agency or department policy arose, the decision to change, suspend, or uphold those requirements remained with the individual department.

Federal and state officials held a press conference at Robert, Louisiana on April 30 to demonstrate that the whole federal government was behind the response effort. DHS Secretary Napolitano repeatedly emphasized that the president had authorized every federal resource to be used to address the spill and stressed that “coordinated federal partnerships” were overseeing BP as the RP (Federal News Service, 2010b). The overall action emphasized was coordination between federal departments and with the RP. Napolitano was joined by EPA Administrator Lisa Jackson and Interior Secretary Ken Salazar who also emphasized their commitment to coordinating the work of their department with the federal response effort. When President Obama arrived in Venice, Louisiana on May 2, the president acknowledged the need to coordinate with state, local, and tribal leaders, emphasized that the federal government had responded aggressively, and indicated that BP would be held fully responsible (Obama, 2010a). Obama continued, saying to the people of Louisiana, “Your government will do whatever it takes, for as long as it takes, to stop this crisis” (Obama, 2010a, p. 3). Obama’s speech highlighted federal leadership as critical to the success of the spill effort. He commended the work of the Coast Guard in its response with an emphasis on the deployment of protective boom along critical waterways and said that Energy Secretary, Noble Prize

winning physicist Dr. Steven Chu would lead federal oversight of efforts to contain the well (Obama, 2010a). Whereas 2 days earlier, Napolitano emphasized the necessity of coordination between the various federal departments with relevant jurisdiction, Obama emphasized a centralized federal leadership in protecting the shore, holding BP responsible, and sealing the well.

From the state perspective, Governor Jindal of Louisiana viewed the spill as requiring more drastic and immediate action to defend his state. On April 29, Jindal responded to the SONS declaration by issuing a State of Emergency declaration to activate the state's UCG, provide emergency authorities for coastal parishes for defense of their coast, and request aid for fishermen unemployed because of the oil impacting fishing grounds (Jindal, 2010; National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). In activating the UCG, Jindal became the main decision maker for the state, so the LOSCO who was working directly with the federal response needed to run all decisions through the governor (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Jindal sent formal requests to several federal officials for aid in dealing with the looming disaster. Jindal responded as a governor facing a natural disaster would by requesting National Guard support from U.S. Department of Defense (DOD) to create barriers and assist with laying the protective boom and asking the federal agricultural secretary to declare a fisheries failure to authorize food stamps for unemployed fishermen (Federal News, 2010a). When Obama arrived on May 2, Jindal stated that the president asked him to be "careful" with his requests (Jindal, 2010, p. 2). Jindal (2010) stated that he replied, "What I'm

frustrated about is resources. We still don't have the boom and skimmers we need to fight this spill" (p. 2).

Later, on May 2, Jindal and the parish presidents who were impacted by the spill released their own Louisiana Initial Spill Response Plan. The Louisianans stated that the existing ACP did not foresee a spill of the size and scope of *Deepwater Horizon* and that the existing plans lacked local knowledge of critical waterways, currents, and fragile wetlands to provide an adequate defense against the oil (State of Louisiana, 2010). The state's plan leveraged local and state resources to assist in the spill response including detailed maps prepared by the parish presidents recommending areas requiring protective boom to guard against the oil (State of Louisiana, 2010). Allen (2010) and the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling (2010) described these acts as nullifying the NCP. The Coast Guard's independent ISPR team understood these actions differently. The ISPR team noted that since Louisiana officials best understand the National Response Framework, the state and local leaders submitted their requests for resources as they would for a natural disaster but requested resources from the FOSC for funding by the RP (Jindal, 2010; Rufe & Moore, 2011). Jindal was requesting Stafford Act-like support but through the channels created by OPA 90. Louisiana's actions were not due to lack of knowledge of OPA 90, but they were an effort to maintain state control over the response within the OPA 90 framework (Jindal, 2010). Jindal (2010), who later described the federal response as "lackadaisical," was attempting to force the federal government to adapt procedures to expedite response efforts and to coordinate and collaborate more closely with the local officials (p. 4).

The Louisianans were driven by a foundational concern that they had to fight yet another enemy trying to destroy their way of life. St. Bernard Parish President Craig Taffaro, Jr. summarized the Louisianan's view of the spill during a May 7 Press Conference:

We cannot afford for this event to turn into another catastrophe for St. Bernard Parish. It's not just about wetlands and the cleanup. It is about people's lives. It is about a society and a community that is just getting back on our feet after Hurricane Katrina. And the psychological impact to this community for this to happen, without the proper resources, is unforgivable. We're calling on all agencies. We're calling on any private individual, any private company to please respond to our call. We need the resources to protect our wetlands. We need the resources to protect our way of life. We need the resources to protect a culture and history-rich parish. (Federal News Service, 2010c, para. 29)

Taffaro's rhetoric is consistent with his parish president peers. The parish presidents frequently evoked the metaphor of warfare to describe their efforts to fight the oil. During an overflight of the spill in late April, a Coast Guard captain told the parish presidents that they were prepared to clean up impacts on the marshes when the oil arrived ashore. Plaquemines Parish President Nungesser told the Coast Guard Captain: "Land this chopper. There is no cleanup in South Louisiana. You either prevent it from getting in—or we're dead" (Khatchadourian, 2011, p. 44). The enemy was not always the oil, either. As one Louisianan put it, "Kicking the hell out of the federal government is good sport down here" (Khatchadourian, 2011, p. 44). For the local leaders, the

imperative was defending their parish, and anyone who stood in their way was a potential enemy.

Only 12 days after the initial disaster, the federal, state, and local governments had established different views of how to respond to a homeland security crisis. The federal level emphasized the necessity of leadership by experts. Obama's appointing Dr. Steven Chu to oversee source control emphasized scientific experts leading. Napolitano's choice of Allen as NIC, who was a celebrated hero in Louisiana for his leadership during Hurricane Katrina, put the most well-known and trusted Coast Guard leader over the entire response effort. While Allen was the NIC, several federal cabinet-level officials continued to direct response activities that were under their jurisdiction. Although coordination was frequently emphasized by federal leaders, it was unclear who at the federal level was coordinating between departments and agencies. Both federal and state leaders emphasized the importance of coordination to focus the efforts of all responding agencies. These leaders also demonstrated actions of clear communication through exchanging formal letters, press conferences, and private meetings focused on coordinating response efforts. Both the federal and state signaled that homeland security actions should include the ability to adapt policy and procedure to expedite solutions to the crisis. Allen created the IASG to fill the role that the NCP assigned to the NRT. Jindal's actions sought to adapt OPA 90 to function with the same bottom-up focus as the Stafford Act (1988). However, a lack of trust was apparent. Jindal and the parish presidents were acting because they did not believe the federal government was focused on helping Louisianans. Louisiana's experience with Hurricane Katrina taught Jindal, Nungesser, and the other parish presidents that the federal leadership was only concerned

about meeting their own priorities and the Louisianans were on their own (Jindal, 2010). The Louisianans were determined to protect their citizens and make their voices heard from the beginning. As the spill continued to progress, these concerns grew in importance.

Conflicts of Coordination, Communication, and Leadership

As the oil flowed closer to the Louisiana and Gulf Coast, the federal, state, and local leaders struggled with each other over the actions needed to secure the coast and remove any oil that impacted the marshes, beaches, and waterways. Although each level of government stated they were committed to a unified, coordinated effort to fight the spill, the federal responders worked with the RP while the state and parishes developed their own plans and pleaded with the NIC and OSC to fund their own plans for booming and protecting their home state.

For the federal response under Coast Guard leadership, actions beyond fighting the spill focused on consolidating the incident command and attempting to draw the state and local leaders into unified effort with the federal officials. As discussed in Chapter 2, unity of effort is focused on coordination of diverse groups working toward the same goals. This idea is reflected through the NCP with the leader of the response being titled the On Scene *Coordinator* instead of an On Scene *Commander*. Yet under the NCP, all requests for funding from the RP must be approved by the OSC since it is issuing a federal order for BP to pay for those actions. Although the OSC coordinates action, he is also the final arbitrator of what is and is not part of the official response. As a SONS, two individuals held OSC authority: Allen as the NIC and the Admirals who served as the Unified Area Commander (UAC) in Roberts, Louisiana.

The Coast Guard, as the OSC, established a multitiered response organization to oversee the *Deepwater Horizon* Response. The Coast Guard routinely employed the ICS as the multiagency response staffing structure for oil spills (OSC, 2010a; U.S. Coast Guard, 2006). Under a smaller response, a single incident commander (IC) oversees a structure of officers drawn from all the responding agencies that oversee functional departments for operations, planning, finance, and logistics (FEMA, 2017; U.S. Coast Guard, 2006). Because of the size and complexity of the *Deepwater Horizon* spill, the Coast Guard established four incident commands in Houma, Louisiana; Mobile, Alabama; St Petersburg, Florida; and Houston, Texas (OSC, 2010a). Each of these command posts was led by a senior Coast Guard captain who was authorized to be the legal representative of the FOSC. These ICs reported to the UAC in Roberts, Louisiana, which was initially led by RADM Mary Landry, commander of the Coast Guard's Gulf Coast forces and was then relieved by RADM Paul Zukunft (OSC, 2010a)⁷. The OSC at the UAC led the operational aspects of spill response while Allen at the NIC oversaw the relationships with senior-level BP officials, media, federal government agencies, other nations offering support, and the Gulf state governors (Allen, 2010; OSC, 2010a). Figure 3 illustrates the relationships within the federal response effort.

Through the UAC and ICPs, the federal *Deepwater Horizon* response conducted the daily tasks necessary to recover the oil and begin the restoration of the Gulf. Oil spill response practices such as tracking oil, deploying skimmers to recover oil, and

⁷RADM Landry's primary duty was serving as the Eighth District Commander over all Coast Guard forces in the Gulf Coast and Midwest. When it was determined the spill response might continue for months, the Commandant of the Coast Guard assigned RADM Zukunft to serve as the OSC to allow RADM Landry to return to leading the Eighth District units not involved in spill response.

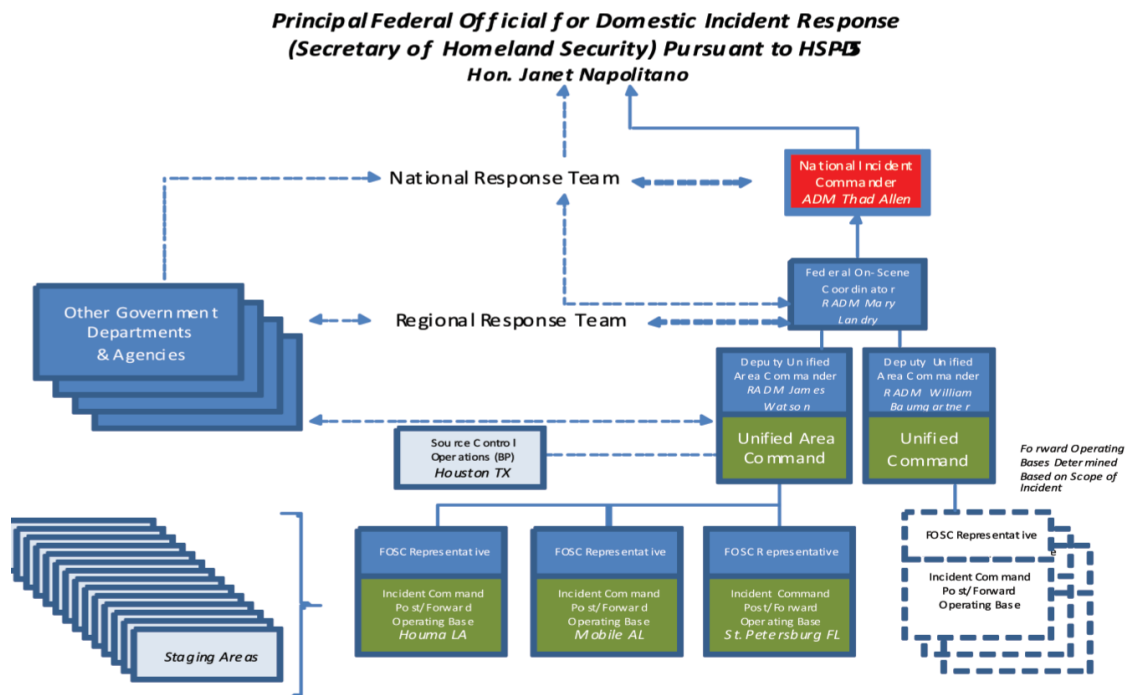


Figure 3. Federal response chain of command. From *On Scene Coordinator Report: Deepwater Horizon Oil spill*, by On Scene Coordinator, p. 7, 2010a, Washington, DC: National Response Team (<https://repository.library.noaa.gov/view/noaa/283>).

conducting *in situ* burns of oil on the water are actions that are routine parts of these operations and therefore are not covered in any significant detail in this analysis although the issue of dispersants requires some mention here. During the response effort, however, the Coast Guard and EPA notably disagreed over the quantity and method of using dispersants. A dispersant is a chemical that causes oil to separate into tiny beads to assist in the natural breakdown in the maritime environment (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a).⁸ Early on, BP selected a dispersant named COREXIT that had been previously approved by the

⁸A common example of dispersants is a dish detergent that specifically targets grease. When added to a tub with a greasy sheen on top, one will note the sheen disappears. The grease is still present, but the detergent has separated the particles and keeps them suspended in the water until they can naturally break down.

Coast Guard and EPA for use in the Gulf (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). BP later requested and received approval to inject dispersants at the wellhead as the oil was entering the Gulf. As the volume of dispersants released increased, the EPA expressed concern over long-term impacts to both the health of response workers and impacts on the maritime environment (Allen, 2010; National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a). The EPA, with assistance from NOAA, developed testing protocols, exposure thresholds, and daily usage limits to minimize negative impacts while allowing the continued use of an effective response technique (OSC, 2010a). The EPA recognized that although COREXIT was effective at dispersing oil, the impact of high volume, long-term exposure on the complex environmental systems of the Gulf and on humans was unknown and required caution.

As with the issue of dispersants, the public began to wonder who was really in charge of the response: BP or the Coast Guard? In establishing the Incident Commands, BP had employees assigned to work alongside all the senior level officers in the response commands, which is routine practice under OPA 90 (OSC, 2010a). Another common practice is the hiring of Oil Spill Response Organizations (OSRO). OSROs are companies and organizations that are properly trained and insured to assist with oil spill recovery and restoration (OSC, 2010a). These companies were funded for by BP and responsible to BP, but the OSC has final say on when BP has met their legal responsibilities. In testimony before Congress, Nungesser expressed his frustration with the *confusing* leadership structure:

I still do not know who is in charge. Is it BP? Is it the Coast Guard? When I get mad enough in a meeting, the Coast Guard in our office stands up and says, “I can make that happen.” When I throw a BP official out of my office, he comes back the next day and approves something. I have spent more time fighting the officials of BP and the Coast Guard than fighting the oil. (“Deep Impact,” 2010, p. 12)

As the response continued through May, Governor Jindal and the parish presidents became increasingly frustrated with the lack of response to their requested plans to protect their coasts. The Louisianans’ initial plan requested 5,000,000 feet of protective boom to ensure there was sufficient shoreline coverage, but the Coast Guard deployed only a fraction of the boom based upon the original ACPs (Jindal, 2010). Jindal convinced the IC from Houma, Louisiana, to join him on an overflight to see where the boom was deployed, the areas that were unguarded, the ribbons of oil slicks moving toward Louisiana, and areas that were already impacted. After the flight, the IC told the press that he was increasing the boom deployments by triple. When asked why he had not done so already, he replied, “I guess I’m just slow and dumb” (Khatchadourian, 2011, p. 46). The captain was relieved the next day and replaced with a more press savvy captain.

The boom quickly became the measure of federal effort for Jindal and the parish presidents. During daily conference calls with the White House and NIC, Jindal compared his own analysis of feet of boom deployed and in staging areas with the

numbers published by the UAC⁹. The parish presidents treated the boom staged in their parishes as property of their jurisdiction and hindered efforts by the UAC to reassign boom to another parish or to another state (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). To meet the boom demand, the Coast Guard relaxed regulatory requirements for OSROs in other parts of the country to free up boom staged in other parts of the country. Soon, every foot of boom being made in the world was directed to the Gulf coast (Center for Health Security, 2011). Yet even with boom, oil still entered into marshes and bays.

Believing that everything must be done to prevent oil from coming ashore, state and local leaders sought novel approaches to protecting critical waterways. In Plaquemines Parish, Nungesser devised a plan to use jack-up barges¹⁰ to assist with deploying boom and cleaning oil. Nungesser requested to put vacuum trucks on these barges to suck up oil in areas where the Coast Guard had not yet deployed skimmers (“Deep Impact,” 2010; Khatchadourian, 2011). The mayor of Grand Isle, Louisiana, in Plaquemines Parish asked permission to fill in five passes with rocks to prevent oil from entering into the bay (“Deep Impact,” 2010). Over in Florida, the Okaloosa County Commission voted to defy the IC from Mobile and shut the pass into Destin Harbor and Choctawhatchee Bay since oil was approaching and the commissioners felt the Coast Guard’s response had been insufficient (Morton, 2012). In each case, the requested actions were outside the jurisdiction of the localities to accomplish without federal

⁹The researcher observed these daily calls during the spill response from 23 May through 15 August 2010.

¹⁰A jack-up barge is a flat barge with retractable metal poles in each corner that would allow the barge to be raised out of the water.

approval, much less when operating under OPA 90. The leaders' concerns focused on the amount of time it was taking Coast Guard leaders to act, and they wanted to see a more adaptable and agile response to emergent concerns as they faced increased threats. The most significant example of this was Louisiana's request to build sand berms offshore to protect wetlands from oil.

The most expensive, involved, and contentious suggestion for protecting the Louisiana shoreline was Jindal and Nungesser's plan to build a series of six berms off the coast. Jindal and Nungesser put together the plan to use dredge spoils to create barrier islands in the Chandeleur Islands and to extend Grand Isle to keep the oil from the sensitive waterways. This was not a new idea; Louisianans had been considering such a dredge project since Hurricane Katrina in the thought that the berms would be a hindrance to hurricane storm surge (Khatchadourian, 2011). At a press conference, Jindal emphasized that the delay in receiving boom required new tactics:

But the ultimate—one of the ultimate tactics we need, one of the most comprehensive approaches, would be the dredging, would be to stop this oil before it gets to the boom. I think the boom would be a lot more effective if it was being deployed as the fourth, fifth layer of defense. And that way, if you had barrier islands out here to prevent the oil from coming in, then you could see boom coming on the inside. (Federal News Service, 2010d, p. 8)

Louisiana needed two approvals to make the berms a reality, and the team of Jindal and Nungesser pursued every possible outlet to build the berms. The first approval was needed from the U.S. Army Corps of Engineers since this project would require dredging and the reshaping of waterways. The commander of the New Orleans District

agreed to review the request as an emergency permit, but the request still had to be reviewed for its environmental impacts and feasibility (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). When asked at a White House press conference, Allen described the process:

Yes. I'm going to give you my characterization of the Army's side, and I don't want to get into too much detail because it's a process they own. The state has applied for a permit that would take a look at establishing a system of barrier islands and berm structures—one to the east of the Mississippi River on the Chandeleur Islands or Breton Sound; the other one basically from around Grand Isle over to the west—to the east towards the Mississippi River. The Army Corps of Engineers is evaluating that right now. They're looking at the cost and the schedule, the feasibility, the engineering issues associated with it, where the sediments would come from—you have to go get them from someplace to deposit them there. What are the implications of where you remove the sediments from? How high do you have to build the berms if you were going to build them and what is the ecological impact associated with that? . . . I've been in touch frequently with Governor Jindal. We're trying to drive to a decision that we can announce as soon as we can. (White House, 2010, p. 4)

Jindal kept the pressure on federal officials through highly visible appeals. Jindal requested the Army Corps of Engineers Commander meet with him and included several parish presidents to discuss the permit. Louisiana's congressional delegation wrote letters to the Corps on the state's behalf, and Senators Vitter and Landrieu appealed directly to President Obama to expedite the process (National Commission on the BP

Deepwater Horizon Oil Spill and Offshore Drilling, 2011). On May 27, the Army Corps of Engineers approved the building of six berms totaling almost 40 miles (Lee, 2010). However, further approval was required from the OSC.

The OSC was required to certify the project since offshore berm construction was not a technique recognized in oil spill response doctrine. For BP to pay the estimated \$360 million cost, the OSC must first designate the berms a “prototype oil spill response mechanism” necessary for this spill response (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011, pp. 156–157). Allen requested a review by the IASG. After their review, Allen agreed to fund one berm as a test project and authorized \$16 million toward the project (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Since it was unlikely the berms would be completed before the relief wells were completed, Allen figured the berms would not make a significant impact on the spill and thought that one berm would satisfy Louisiana and allow the response to move on to higher priority challenges (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Jindal and Nungesser saw this as another bureaucratic hurdle preventing them from effectively defending Louisiana, so they appealed directly to President Obama.

One of the challenges for federal officials delivering a final no, was President Obama’s willingness to say “yes, we can.” During Obama’s visit in early May, Nungesser appealed to the president to expedite the approval of the jack-up barges, and they were approved shortly thereafter (Matthews, 2010). During Obama’s May 28 visit to the Gulf, Jindal, the other governors, and parish presidents had arranged a meeting to discuss the state of the spill. Nungesser later claimed that he crashed the meeting to

emphasize his commitment to breaking down barriers to get the berm, but Nungesser had been invited all along (Jindal, 2010; Khatchadourian, 2011; National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). After the meeting, Obama ordered Allen to gather experts to evaluate the berm plan and make a decision within a week (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). The resulting meeting on June 1 saw Louisiana's experts present arguments for the berms while other experts presented the environmental and logistical concerns. In the end, Allen agreed to authorize all six reaches and require BP fund the initiative (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011).

The battle for boom and berms was most visibly fought in the media. Nungesser, in particular, became a frequent guest on *Anderson Cooper 360* to share tearful stories of Coast Guard and BP's inability to recover oil from the marshes, the impacts on local workers, and his frustration with being barred from acting to protect his parish. Obama would eventually counsel Nungesser: "If you can't get it done through the chain of command, you pick up the phone and call the White House. If you can't get me on the phone, then you can go call Anderson Cooper" (Khatchadourian, 2011, p. 49).

The berms and boom wars manifested a lack of coordination, adaptability, and trust. From the state and parishes' perspectives, the federal response was not capable of mounting an effective response. Under disaster response authorities, the state and local authorities were quite active in acting on the behalf of their constituents. In this case, the oil was closer, and the state and local leaders interpreted the lack of visible action in their jurisdictions as a lackadaisical response. While the federal response officials emphasized

orderly compliance to regulations to ensure the response was conducted in accordance with OPA 90, state and local leaders who are empowered by their state to waive regulations in emergencies, saw this commitment to legal compliance as being uncaring to those who were about to be impacted by oil. These actions also continue to suggest a persisting lack of trust between all parts of the homeland security enterprise in the response.

“Making It Right”—Compensation as Homeland Security Action

Compensation to victims of the spill was an aspect of the federal theory-in-use and became a minor theme of the state and local actions and requests. When the SONS was declared, Jindal’s first actions were to request BP cover the costs of federal programs that routinely compensate disaster victims: small business administration loans, food stamps, fisheries disaster declarations, and so forth (“Deep Impac,” 2010; Jindal, 2010; Jindal et al., 2010). Under OPA 90, individuals and companies impacted by a spill may request compensation from the RP, but this is normally done after the fact, not in the middle of the response (Ramseur, 2017). The immediate concern from the state and local leaders was keeping the fishery and tourism industry from collapsing during and after the spill (Jindal, 2010). The governors and parish presidents pushed for BP and the Coast Guard to employ unemployed Louisianans impacted by the spill in the response effort. Efforts to employ the spill-related unemployed in direct clean-up operations faced what the state and local leaders considered bureaucratic hurdles. Oil, as a hazardous substance, requires special handling. Under OSHA regulations, cleanup workers had to wear full body suits. In the extreme heat and humidity of the Gulf Coast, workers were required by regulation to take frequent breaks, often only working 20 minutes and then resting for 10

minutes (Jindal, 2010; OSC, 2010a). Nungesser, in his testimony before Congress, expressed his anger and his solution to this:

BP could fire all their contractors because they are doing absolutely nothing but destroying our marsh. You could put every fisherman to work. This is an emergency. To work 20 minutes and take 10 minutes off, would we do that in war? Because we are at war here. Would we say, “Lay down your guns because the sun is over 90 degrees. They are not going to come at us for another 20 minutes. Let us take a break?” That is absurd. We are letting the rules, the regulations, the contractors, and BP stand in the way of us saving our coastline. (“Deep Impact,” 2010, p. 14)

One program that was successful at putting fishermen to work was the vessel of opportunity (VOO) program. The Coast Guard and BP launched the VOO program to expand the responses’ ability to deploy and tend boom, surveille and monitor oil, deploy skimming systems, tow sensors, and assist with logistics (OSC, 2010a). During the spill, BP deployed over 9,000 VOO boats a day, a fleet larger than the Allies used to land D-Day forces during World War II (OSC, 2010a). The pay for a vessel and her crew was between \$1,300-\$3,000 day, which was often better than the fishermen’s normal daily earnings (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). The ISPR team hailed this program as successful in extending the resources of the response and reducing political pressure on the Coast Guard to find jobs for professional mariners (Rufe & Moore, 2011).

For all its success at putting mariners to work, the VOO program still suffered from similar coordination and communication challenges. As news traveled that BP was

hiring boats at good wages, fishing boats and even pleasure boaters from other states arrived to sign up for work, and the parish presidents accused these interlopers of crowding out the impacted mariners of the Gulf. Acy Cooper, president of Louisiana's Shrimp Association testified to the National Commission:

Everybody jumped on board and tried to get vessels to go to work. So we had a big problem. It was creating a turmoil within our community and our fishing community because of the fact we have some guys working and some guys that are not working. So for one guy to sit at home and watch another one go and make money to pay his bills and keep his livelihood up—we're starting to have big problems now. (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2010, para. 19)

The greatest concern for local leaders was the perception that the fleet was not being used effectively. The Coast Guard faced a variety of coordination problems with the program, including incompatible communication and navigation gear available on the vessels, language barriers with ethnic minority fishing crews, and an inability of crews to follow orders (OSC, 2010a). For example, the mayor of Grand Isle, Louisiana, testified that crews from his town reported sailing in empty water and they wanted to go back home to stop the oil coming ashore in Plaquemines Parish ("Deep Impact," 2010). By mid-June, the Coast Guard established more direct control of the VOO fleet through organizing the vessels into task and patrol forces under the oversight of a Coast Guard officer (OSC, 2010a). The Coast Guard eventually turned over the daily planning and coordination of the task forces to the local communities with the cognizant IC providing the daily priorities to be fulfilled ("The Deepwater Horizon Oil Spill Chain of

Command,” 2010). Turning local control over to the parishes leveraged the local knowledge of the mariners, empowered the local leadership, and eased the planning burden of the ICs. This collaborative gesture essentially built trust between the local leaderships and the Coast Guard.

During May, the federal response struggled to present a credible public image that they were truly in charge of the *Deepwater Horizon* response because of the inability to stop the leak, struggles deploying resources, and the Louisianan’s media appeals demanding faster action. As noted above, governors and local leaders pressed for increased control and that the federal officials pay attention to the concerns of local residents. The OPA 90 requirement that the RP serve as a central leader in the response created a public perception that BP was in charge and the federal government was complying with BP’s desires rather than controlling BP (Jindal, 2010; Khatchadourian, 2011). During press conferences, the federal officials offered a series of cabinet-level secretaries, administrators, and response officials to answer questions and pass questions off to each other while at the state level, Jindal alone fielded all questions except when he invited select parish presidents to speak specifically about the conditions in the parishes. For example, in a May 24 joint federal and state press conference in Galliano, Louisiana, a reporter asked,

What does it say about the federal response to this oil leak that you have the governor of Louisiana now saying that it will take local situational awareness, state situational awareness to identify those pockets of oil that are coming ashore because it’s obviously not being done. (Federal News Service, 2010a, para. 129)

In a reply from both Interior Secretary Salazar and DHS Secretary Napolitano, both took turns saying that it was a National Guard issue because it was a “massive effort” and “we basically got the National Guard unleashed to do what the National Guard is doing” (Federal News Service, 2010a, para. 129). Although the federal leaders emphasized that it was a whole-of-government effort, the contrast between the action-oriented governor and the policy-oriented cabinet officials fostered the impression that the federal response was not fully focused on the spill, an impression became a repeated talking point for Jindal and Nungesser (Federal News Service, 2010b; Jindal, 2010). While state leadership was consolidated in Jindal and the other governors, federal leadership was split between the Coast Guard leaders of the response operations and the variety of administration officials in the cabinet and the White House who each maintained ownership of policy aspects of the spill that fell to their departments. With a plurality of leaders at the federal level and a perception that BP was actually running the response, the federal response needed to improve its overall coordination, communication, and leadership.

Establishing Federal Coordination: The “Tripling Order” and the PPLO Program

At the end of May, the attempt to stop the leak with the *top kill* operation failed, signaling the spill would continue for the foreseeable future (see discussion of source control below). With a long-term spill response now certain, Obama and Allen worked to solidify leadership of the *Deepwater Horizon* Response under Allen and improve the quality of federal coordination and communication. During a visit to Grand Isle, Louisiana, on May 28, Obama acknowledged federal struggles and stated that he was ultimately in charge of the spill response (Rioux, 2010). Obama further stated that all

response elements should work through Allen as the NIC and ordered a tripling of Coast Guard personnel assigned to the response effort (Allen, 2010; National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; Rioux, 2010).

Increasing Coordination Through Increased Presence

The tripling order served to reinforce Coast Guard (and thereby federal) leadership of the response effort. Coast Guard presence in the response would swell to nearly 6,600 members and strain the Coast Guard's ability to achieve its other statutory missions (Allen, 2010; Rufe & Moore, 2011). Additionally, Coast Guard personnel arriving at the ICPs did not necessarily have experience operating in an ICS or managing a response under the NCP. Prior to 2010, oil spill response and the use of ICS had been primarily led by the smaller Marine Safety occupational community within the Coast Guard (Rufe & Moore, 2011). DHS had only recently required ICS as the primary incident response system under NIMS (FEMA, 2008a). As Coast Guardsmen were rotated into service for 30-day deployments, the RRT's training team conducted just-in-time training in both oil spill response policy and ICS to facilitate the smoother operation of the response organization (OSC, 2010a; Rufe & Moore, 2011). The benefit of the larger Coast Guard population allowed for increased direct supervision of recovery operations along the Gulf Coast, including increased oversight and leadership of the VOO fleet. The additional personnel also facilitated improved communication through daily communication with the governors and the parish presidents.

Improved Communication: The Governor's Call and PPLO Programs

During June, the NIC and OSC prioritized improving relations with the state and local leaders through proactive engagement through the daily *Governor's Call* and

through the establishment of the Parish President Liaison Officers (PPLO) Program. The Governor's Call was established by Valerie Jarrett, Senior Advisor to President Obama, as a daily coordination call between the White House, National Incident Command, On Scene Commander, other federal agencies, and the five Gulf Coast governors (Allen, 2010; OSC, 2010a). During May, the call consisted of daily brief by the NIC, OSC, and a forum for the governors to ask questions and coordinate with the response's federal leadership.¹¹ As the governors raised issues that fell outside the Coast Guard's jurisdiction, such as seafood testing, tourism concerns, vocational issues, and other concerns; senior policy leaders would be invited to discuss the issues, but there was little coordination before the call between response officials and policy experts. By the end of May, the White House intergovernmental affairs staff determined that because of the increasing complexity of issues being discussed by the governors and the indeterminate duration of the spill, a more unified and coordinated approach to the call was needed. The National Incident Command coordinated a daily talking point document that included a comprehensive catalog of federal policy statements on any issue raised by the governors during the daily call. After each daily call, an intergovernmental team assigned various agencies to develop the necessary policy statements requested by the governors, and the answers would be provided the next morning. These Governors Call talking points were then distributed to all senior response leaders as well as intergovernmental and interagency liaisons throughout the Gulf Coast to facilitate a single unified message throughout the response organization.

¹¹The researcher was assigned to the National Incident Command and responsible for coordinating the unified talking points of 17 agencies for this call from June 1 through the end of the daily call in mid-August.

The establishment of the PPLO program also served to increase coordination between the federal response and the local leaders. This program placed a mid-grade to senior officer (lieutenant commander or commander) at the service of each parish president and county officials in Alabama, Mississippi, Texas, and Florida. The sole duty of the PPLO was to serve as a direct conduit for the PPLO to senior response officials. No other duties or calls upon the PPLOs were allowed. The PPLOs directly reported to a PPLO Coordinator (Coast Guard captain) but had direct access daily to the DHS Deputy Secretary Lute. The goal of the PPLO program was to be a direct conduit to solely to serve the leaders. As stated in the official information sheet:

The success of the PPLO mission relies heavily on the ability of the PPLO to focus strictly on the president. To attain this mission, a strict protocol is in place to shield PPLOs from outside calls for data and information. All outside calls are vetted or referred to the PPLO Coordinator. This provides IC Houma and the PPLO Coordinator situational awareness and the ability to prioritize requests. To support the PPLOs, two additional staff members are located in IC Houma to field PPLO questions throughout the day. (OSC, 2010b, p. 1)

Federal assessment of the PPLO program was that it was a success. The ISPR team noted that institution of the 70 member PPLO team allowed local leaders access to participate in the response (Rufe & Moore, 2011). The ISPR team recommended that the program become part of emergency response doctrine and be implemented in future situations (Rufe & Moore, 2011). For some parish presidents, this was still insufficient. St. Bernard Parish President Taffaro testified to Congress that the liaison provided briefings and information from the DHS secretary but complained that he was never

granted direct access to DHS (“DHS Planning and Response,” 2010). Through the PPLO program, the Coast Guard made a direct and intensive effort to include the local officials directly in the response with the direct effort to gain their cooperation and trust.

The Moratorium: Conflicting Visions of Resilience

One significant action that is beyond the scope of the NCP was the administration’s decision to put a moratorium on offshore drilling. On May 27, Interior Secretary Salazar announced that the administration was placing a 6-month moratorium on drilling in over 500 feet of water, cancelling planned drilling in Alaska, and pending sales and permits in the Gulf and off Virginia (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; Obama, 2010b). In presenting the moratorium to the nation, Obama emphasized the broader security significance of this move:

Let me make one final point. More than anything else, this economic and environmental tragedy—and it’s a tragedy—underscores the urgent need for this nation to develop clean, renewable sources of energy. Doing so will not only reduce threats to our environment, it will create a new, homegrown, American industry that can lead to countless new businesses and new jobs. (Obama, 2010b, p. 4)

Obama’s moratorium was broader than preventing another catastrophic accident but focused on the long-term resilience of the United States through developing a renewable energy industry. Meanwhile, back in the Gulf, Jindal and the parish presidents were also focused on resilience but through keeping the jobs provided by the oil industry. Jindal (2010) argued that the moratorium would devastate the Gulf Coast economy

through a cascade of job losses from the oil exploration and then on to the various industries that support oil exploration and the workers in the industry. Jindal argued that the mobile offshore exploration rigs cost \$500,000 a day to rent and would be moved to other waters off other continents with the moratorium. The moratorium had potential long-term economic impacts on both the region and the nation as a whole. Heritage Foundation economists noted that each rig creates about 700 jobs and contributes \$4 million per day in federal royalties from leasing rights (Bluey, 2011). The state and local leadership largely agreed that new steps were essential to maintain the health of the Gulf but saw that the long-term national and regional resilience did not require a ban on drilling. As Nungesser testified before Congress, the preferred plan would be to station a federal official with the authority to shut down drilling at that site when unsafe practices were identified and empower workers through whistleblower protection to report unsafe practices to this official (“Deep Impact,” 2010).

From the local perspective, the issue was not the fact of drilling but the mechanics of oversight. For local leaders in the Gulf, a collaborative federal presence would help prevent future spills. The May moratorium would end up being overturned in federal court and would ultimately be replaced through a restrictive regulatory regime that led to a 71% decrease in permits for offshore drilling during the Obama administration (Bluey, 2011). While preventing future spills focused on resilience, containing the current spill was an issue of sensemaking.

Unknown Unknowns: Understanding the Threat and Controlling the Macondo Well

For Allen and federal response, the most daunting challenges related to understanding deep unknown dangers arising from the continual release of oil 5,000 feet below sea level. Under the OSC, a separate Incident Command Post (ICP) was established in Houston where BP's technical experts were developing solutions to stop the leak (OSC, 2010a). The only sure way to kill the well was to drill a relief well that intercepted the Macondo Well deep under the ocean floor. BP deployed two drilling rigs to attempt to drill down and intercept the Macondo Well, with an estimated 100 days drilling time (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a). In the meantime, the federal response and BP worked to deploy other tactics to stop the flow of oil. Under OPA 90, the oil industry was required to develop solutions to stop uncontrolled oil release (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; Rufe & Moore, 2011). BP's first attempt on May 5 was to lower a containment dome (a 40-foot tall metal box) with a collection hose over the well's failed blow out preventer. The scale of this effort is difficult to imagine. BOPs, which sit over wellheads as a safety shut-off, are approximately five stories tall (50 feet). The containment dome was then lowered 5,000 feet by cables to sit over the BOP and collect the released oil until the relief well was drilled. Once the containment dome was in place, ROVs determined that the oil was flowing from underneath the bottom edge of the dome; oil distillates had crystalized in the collection hose due to the intense pressure (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Once the off-the-shelf

solution failed, BP engineers with technical oversight from Secretary Chu's team began to design, create, and deploy a series of engineering solutions to stop or at least decrease the release of oil. Allen described this effort as on par with the feat of the NASA engineers who devised an engineering solution to rescue the Apollo 13 crew as they returned from the Moon (Center for Health Security, 2011). In late May after the cofferdam attempt, the Source Control team in Houston attempted to use valves on the BOP to clog the well with a procedure called *top kill* followed by an attempt to force the oil down through pumping drilling mud through a side valve to push the oil down. These efforts ultimately failed because of higher than expected pressure of the oil escaping (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). At this time, the riser tub that had connected the rig to the blow out preventer was still connected to the BOP. ROV footage showed oil was escaping from the end of the broken riser pipe and through cracks at the kink where the pipe was bent. At the end of May, BP's engineers recommended using special robotic saws to cut the top off the riser pipe and create a smooth surface for the future installation of a specially designed small BOP, called the capping stack, once it was ready for installation in early July (OSC, 2010a). In the meantime, employing the knowledge they learned from the cofferdam, BP's engineers lowered a collection device called *top hat* over the leak to collect oil while BP used the hosing for the *junk shot* to siphon on some of the oil before it was released (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a). With the oil now flowing straight out of the BOP and toward the top hat, scientists and federal officials had a clear view of the escaping oil

plume via subsea high definition cameras, which would help address another unknown—the quantity of oil being released.

The National Incident Command needed not only to stop the release but also to estimate how much oil was being released into the environment. In early May, Allen tasked the IASG with creating the Flow Rate Technical Group (FRTG) composed of government and nongovernment scientists led by Marcia McNutt, Director of the U.S. Geological Survey, to study the video of the plume and estimate how much oil was entering the environment (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Early estimates of the spill were little more than an educated guess. Once the blowout was discovered, the FOSC had estimated the spill at a 5,000 barrels a day (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). As federal officials were able to utilize satellite imagery and video of the various leaks, estimates began to vary widely from 12,000 to 50,000 barrels per day (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Federal officials needed a reliable estimate for operational, legal, and engineering reasons. Operationally, if the FRTG could provide an estimate of how much oil was entering the environment, it would allow for more efficient operational planning and help officials understand the extent of the threat to the environment. Legally, OPA 90 requires the RP to be fined based upon the amount of oil that enters the environment (Ramseur, 2017). A clear understanding of how much oil was released would allow for a more accurate fine. The FRTG released an estimate of 12,000-19,000 barrels a day based upon three independent evaluations by FRTG subcommittees by May 27 (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC,

2010a). However, once the riser pipe was cut and the FRTG was able to view a high definition live video feed combined with acoustic sensors, the estimate soared to 46,000 to 63,000 barrels per day (OSC, 2010a). The volume of oil being released from the Macondo well was equivalent to an *Exxon Valdez* spill (11,000,000 gallons spilled) occurring every 4-6 days for 87 days. Understanding the flow rate also assisted the engineers to determine why the top kill effort failed and allowed them to estimate the pressure within the well head itself. The revised flow estimate raised a new potential unknown to address: the physical state of the well itself.

As the source control team of BP engineers, under the supervision of Secretary Chu's team of federal scientists, neared the deployment of the capping stack in July, significant concern arose about the state of the well. With the capping stack, BP could potentially stop the flow by shutting in the well. Although this was the desired result, the BP and federal scientists were concerned that that top kill attempt may have ruptured part of the well. If the well were to be shut in, oil could be forced out of the well into the substrata and potentially lead to a collapse of the sea floor and a catastrophic release of oil (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Chu established a Well Integrity Team to study the well and rock formations before recommending an attempt to shut in the well. After careful study, the team stated that there was sufficient time to reopen the well if sonar, pressure, and acoustic monitoring of the sea floor detected any movement of oil into the rock formations (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Once the capping stack was in place, Allen and Chu briefed President Obama and his cabinet on the potential to shut in the well and its risks. Vessels from NOAA and

other scientific research groups were prepared to conduct seismic, sonar, and other surveys of the seafloor during a potential shut in. The Well Integrity Team had estimated the expected pressure based upon the flow rate and estimate of well size and recommended that a pressure reading greater than 7,500 psi from the gauge equipped capping stack would be considered safe enough to continue the test for 48 hours; if it was between 6,000-7,500 psi, the risk was considered uncertain and the test would only consider another 24 hours (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). When the capping stack was closed on July 15, the pressure read 6,600 psi.

As the BP Commission recorded, there was significant disagreement between the scientific advisors with several recommending to end the test immediately and reopen the well. Allen, Chu, White House Environmental Advisor Carol Browner, Salazar, Coast Guard Rear Admiral Kevin Cook and McNutt discussed the results. This team faced a difficult dilemma keeping the well shut-in, ending the release of oil into the Gulf, but it also risked the possibility of collapsing the seafloor and releasing 110,000,000 barrels into the Gulf (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). The team finally agreed to hold to their initial decision to monitor the test for 24 hours.

Sometimes there is a critical moment when an individual single-handedly rescues the day. In that 24-hour extension, Paul Hsieh, a U.S. Geological Survey scientist working in California, received a cellphone picture of the well pressure graph from a colleague in Houston seeking his perspective. Overnight, Hsieh developed a theory explaining how the pressure readings represented a fully intact well and prepared a

complex model that demonstrated that the well was safely shut-in (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; U.S. Geological Survey, 2011). When presented with Hsieh's model, Allen and the other leaders agreed to continue monitoring and reevaluating the situation every 6 hours. As pressure readings remained within the new parameters, the monitoring periods were routinely extended to every 24 hours. With the capping stack shut-in, no new oil was entering the Gulf and the beginning of the end was in sight.

With the success of the capping staff, BP approached the Coast Guard about the possibility of inserting a cement plug in a static kill operation. This proposed operation was similar to top kill: heavy drilling mud would be forced through the BOP to push down the column of oil, and then cement would be pumped in to create a seal that holds the oil below the surface. The difference this time was that the oil was no longer flowing out into the Gulf but static within the BOP and capping stack (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a). After a thorough scientific review, Allen authorized BP to pump cement into the well on August 5. By the next day, the well was effectively sealed. The well would not be officially sealed until the relief wells had completed a deep underground or well kill cementing on September 19 (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011; OSC, 2010a). In the effort to finally kill the well, the ability of federal leaders to understand and gauge the dynamic operational environment was critical to their success.

Summary of Findings

This case study highlighted the themes of homeland security actions identified through the analysis of the *Deepwater Horizon* spill response. The study consisted of an analysis of federal, state, and local leaders' actions and requested actions as recorded in official reports, Congressional testimony, and press conference and news transcripts. A full listing of these documents is listed in Appendix B. These documents were reviewed and coded based upon action-related themes that are reflected in the current homeland security theory literature discussed in Chapter 2. The codebook with the definitions of these themes is included as Appendix C. The initial analysis of this current study examined the frequency that different action themes were represented in the reports, testimonies, and press conferences of the federal, state, and local leaders. Appendix D presents a brief discussion of the challenges encountered in that analysis and the findings. The analysis presented above followed the events of the case and traced themes of action that arose in the conflicts and convergences of federal, state, and local action throughout the timeline. The events from the case reflect the context of how the leaders' actions were demonstrated during the response and how these actions shaped the incident response.

While the confusion and conflict from the initial days of the spill garners the most attention, this study noted positive action themes shared across all three levels of government during the response. Each leadership level shared a commitment to coordination and communication, which aligns with the existing theories-in-use. For the federal government, sensemaking became a significant theme as they attempted to navigate the chaos and complexity of a dynamic operational environment. For the state

and local leaders, who repeatedly expressed frustration with the approval process for boom and berms or upset by the OSHA requirements that they believed hindered clean-up operations, adaptability/flexibility was an important theme. The state and local leaders repeatedly requested that existing federal processes be expedited or waived, in their view, to facilitate the protection of their shores and to expedite the removal of oil impacting their shores.

All three levels also shared a common theme of trust building. Although the leaders were legally required to work together under the NCP, the statements of leaders at all levels evidence a lack of trust in the motives and actions of leaders at other levels. Trust building activities such as coordinated communication, dedicated liaison officers to local leaders, and systematically addressing the concerns raised at the state level were found to assist with bringing order to the response effort as discussed above.

In Chapter 5, the implications of these themes are further discussed as well as the application of these actions to a theory of homeland security.

CHAPTER 5: CONCLUSIONS

This chapter presents conclusions drawn from the case study presented in Chapter 4 and provides a discussion of the implications for action and recommendations for further research. This study explored the definition of homeland security. In the aftermath of 9/11, President Bush and Congress pressed homeland security as the approach to secure the nation from such future threats. In the urgency to establish this new security structure, neither Bush nor Congress defined what homeland security is or should be. Scholars and government officials recognized that the lack of a formal definition would create challenges in defining the discipline theoretically as well as articulating policy boundaries (Bellavita, 2012; Kiltz, 2008; Reese, 2012, 2013, 2014). The *Quadrennial Homeland Security Review* (QHSR) of 2010 clarified that homeland security was the responsibility of the homeland security enterprise, which consisted of the federal, state, local, and tribal governments as well as private corporations and individual citizens (DHS, 2010b). Yet, across the homeland security enterprise, there existed different understandings of what constitutes homeland security (Jain, 2006; Robinson & Mallik, 2015; Thacher, 2005).

Defining Homeland Security Through Action Theory

Bellavita (2008, 2012) suggested action theory as a possible approach to developing a theoretical understanding of homeland security. Action theory suggests that the actual performance of a discipline constitutes a theory of practice, and through an examination of the relationship between the actions of the members of the community of practice and their underlying values, one can develop a theory of action to guide that discipline (Argyris & Schon, 1992; Harmon, 1981). In the case of homeland security, the

community is constituted of the homeland security enterprise including both the political leadership and the various homeland security and emergency management agencies. The purpose of this study was to explore the shared understanding of what constitutes “homeland security” as expressed through the actions of federal, state, and local officials during the *Deepwater Horizon* oil spill response of 2010. This research study focused on exploring the following question: What do political leaders’ priorities and actions at each level of the response (federal, state, local) indicate about the definition of homeland security?

This study identified the *theories-in-use* of federal, state, and local leaders at the outset of the *Deepwater Horizon* response and examined the themes demonstrated by their actions to suggest a theory of action definition of homeland security. The actions were identified through an analysis of official government reports, Congressional testimony, and press conference and news transcripts of the leaders involved at the federal, state, and local levels. In this analysis, the theories-in-use were identified from the operational response frameworks at the outset of the response. For the federal government, the action theory-in-use was the Federal On Scene Coordinator’s (FOSC) operational priorities that align with the NCP. For the state and local leadership in Louisiana, leaders operated under Louisiana’s homeland security response framework. As the leaders at different levels employed their theories-in-use, conflicts occurred that opened opportunities to explore how each level viewed the crisis differently and what their chosen actions suggest about the leaders’ understandings of what should be happening in a Homeland Security incident response.

Although the actions and requests of federal, state, and local leaders during the spill often led to conflict, the underlying themes represented by those actions were similar. At all levels, coordination, communication, and trust building were consistent themes of their actions, this study finding coordination to be the most frequently identified theme across all levels of the response. The federal level of the response was engaged in attempts to understand the challenges and operating environment that were categorized in this analysis as sensemaking. At the state and local level, leaders repeatedly emphasized the need for adapting or allowing for flexibility with rules and regulations. These themes are consistent with the actions identified in the current literature as well as with the strategic actions identified by the Department of Homeland Security (DHS).

The finding that coordination and communication were frequent action themes is consistent with the Homeland Security and Emergency Management praxis and literature. Kettl (2003, 2014) affirmed that homeland security was primarily an issue of coordination. Kettl (2003) further articulated five coordination challenges that were evidenced by the actions of federal leaders during *Deepwater Horizon*:

1. space and time coordination of emergency resources,
2. establishing a national readiness baseline,
3. developing a system of effective learning across the enterprise,
4. building new capacity for coordinated action in existing and merged institutions, and
5. meeting the public's expectations. (p. 257)

Federal officials coordinating source control efforts, boom deployment and delivery, and the deployment of vessels of opportunity (VOO) were all issues of bringing the right resources and knowledge to address the problem while ensuring coordinated and unified effort across three layers of government to meet the public's expectations of a rapid response.

The boom wars were grounded in concerns about insufficient resources and plans for the defense of the entire Louisiana coast. Although federal officials believed their plans were sufficient to protect the coast, the Coast Guard's lack of sufficient outreach to state and local officials before the spill (Kettl's idea of building capacity for coordinated action) led to a lack of cooperation between leaders during the spill response.

Furthermore, the Coast Guard and EPA's failure to address alignment between the NCP and the National Response Framework allowed Louisiana to develop a system of homeland security response that did not align with NCP norms and expectations since there was not an established baseline of how to integrate oil spill response with the National Response Framework.

The history of Homeland Security responses and incidents also highlight the centrality of coordination and communication. The 9/11 Commission found that coordination challenges between agencies and within administrations hindered the nation's ability to prevent the terrorist attack (National Commission on Terrorist Attacks on the United States, 2004). An investigative committee of the House of Representatives found coordination between federal, state, and local leaders to be a key failure during Hurricane Katrina's response (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). Although the Coast Guard's ability to

coordinate its own response was praised, the bipartisan committee also found issues with the Coast Guard's ability to coordinate with other agencies, including DOD (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). Egli's (2011) study of maritime security challenges focused entirely on the necessity of interagency coordination to achieve national goals. More recently, FEMA's (2018) own analysis of the 2017 Hurricane season highlighted its successes and struggles in responding to Hurricanes Harvey (Texas), Irma (Florida), and Maria (Puerto Rico) and emphasized the challenge of coordinating multiple teams for "current, complex missions" (p. 6).

As this study illustrates, coordination within a single organization during a large-scale event is challenging in and of itself, but to coordinate between agencies and governments requires leadership and trust. During the first month of the spill, it was unclear who was leading the effort. Although the NCP states that the president or those to whom he delegated authority as OSC (EPA or Coast Guard) were to lead the effort, the federal level of the response offered an often uncoordinated group of senior cabinet officials, plus Allen as the NIC and Landry as the OSC, as potential leaders of the response. This confusion was exacerbated by the unfamiliarity of the public with the legal role of BP as the Responsible Party (RP) in executing the spill response. Governor Jindal, who saw himself as an action-focused leader, attempted to assert state leadership by proactively requesting disaster-type assistance through the OSC and by drafting alternative plans with state and local officials. The leadership confusion was further exacerbated by Plaquemines Parish President Nungesser and other parish presidents who appealed directly to Obama to demand action on their requests. When the parish

presidents could not reach Obama, they appealed to him through CNN. It was not until Obama told reporters that Allen was the one in charge of the whole response on May 28 that the federal response finally began to develop as an organization *with its own identity* separate from that of the component agencies.

This finding suggests the necessity of both a single leader to coordinate a homeland security response and the role of the president to empower that leader. The necessity of a single leader is consistent with Egli's (2011) study of maritime security coordination in which he noted that a single leader who actively coordinated between agencies was necessary for successful multijurisdictional operations. Allen's success in bringing order to the federal response in Hurricane Katrina was credited to his ability to actively engage key leaders for coordination and collaboration (Linden, 2010). The NCP calls for two key leaders during a SONS: the National Incident Commander (NIC) to address media, interagency, and intergovernmental challenges and the OSC to oversee the operational response to the spill. The codified structure envisioned a clear division of labor between two response leaders who were supported by the National and Regional Response Teams (NRT and RRT). However, in the early days of the spill, Allen and the OSC, Rear Admiral Mary Landry, were joined by several cabinet-level leaders who mixed discussions of policy with operational reports while the public was still struggling to grasp why BP was playing a significant role in leading the response effort. For the state and local leaders looking for action, it was unclear who was in charge of the effort, so they sought to act on their own with funding from the RP.

Homeland Security responses have succeeded without designating a single leader. Beck and Plowman (2014) found that agencies and governments could develop a

temporary collaborative organization without a single leader, theorizing that a “massive, visual, shared problem” could facilitate the rapid development of trust between the agencies involved (p. 1238). Beck and Plowman examined the 2003 response to the Space Shuttle *Columbia* disaster, which united NASA, FEMA, Department of Defense, and numerous agencies from Texas, Louisiana, and Arkansas into one response.

Theoretically, *Deepwater Horizon* was a massive visual, shared problem that should have allowed a response to form across governmental and agency lines. Unlike the response to the *Columbia* disaster, the *Deepwater Horizon* response had a proven operational plan (the NCP) to guide unified effort. While the *Deepwater Horizon* should have coalesced around the NCP, the federal leadership was hindered by the memory of Hurricane Katrina.

Even though *Deepwater Horizon* was a massive, visual, shared problem, the federal government faced a preexisting trust gap with the Gulf Coast states because of the initial mishandling of Hurricane Katrina response. State and local leaders saw their lack of trust verified in the early days of May when the response would not respond to their requests for assistance. This trust gap between federal, state, and local leadership needed to be overcome before even effective coordination could be achieved.

The necessity of trust building actions in emergency response was an unexpected finding in this study. The concerns of state and local leaders were often portrayed by the media and federal leaders as political maneuvering. The fact that a Democratic president approaching midterm elections was responding to a disaster impacting four Republican governors suggests a possible narrative that any disagreement was due to politics. While this may have played a role, in this analysis, the actions of Jindal, Nungesser, and the

other local leaders suggest part of their motivation was a distrust of the ability of the federal government to effectively manage the spill. For the Louisianans, the federal missteps during Hurricane Katrina and Rita had left a lingering concern about federal concern for the people of Louisiana. Napolitano's appointment of Allen, who is widely credited as being the leader who brought order during the Katrina response, was supposed to inspire confidence. However, during Katrina and Rita, the state and local governments still had freedom to direct their own local responses, but under the NCP the state and local leaders had to ask permission for every action if they desired financial reimbursement. Allen went from being the leader who organized chaos into efficiency during Katrina to being viewed by the Louisianans as the distant decision maker who decided whether BP should fund state and local initiatives. When requests and plans early in the spill, such as the May 2 boom proposal, were either delayed through long reviews or denied, state and local trust in the ability of Allen and the Coast Guard to lead a successful response decreased further. By mid-May, Nungesser found more success in advancing local concerns by making an emotional appeal on *Anderson Cooper 360* than in petitioning the local IC in Houma, Louisiana. Obama inadvertently reinforced this tactic during the May 28 meeting by asking Nungesser to call him first before calling CNN. Since the tactic was working, Nungesser continued to use CNN appearances to argue for his priorities.

The necessary role of the president in generating trust in the response effort was another unexpected finding. From the beginning of the response, Obama's senior officials were fully engaged with the response effort. The cabinet-level officials with direct policy connections to the response were actively engaging the media as early as

April 30 to show the whole-of-government was behind the spill response. Valerie Jarrett, senior advisor to the president, was directly engaging the governors daily on Obama's behalf. Although there was significant visible high-level attention, the federal response struggled to demonstrate leadership. Local leaders found that direct appeals to the president were more effective than active cooperation with the responders in their own jurisdictions. The findings of this study suggest that the pivotal moment was May 28 when Obama explained to the press that he was in charge and Allen was his designated leader for the response. The presidential endorsement of Allen as the central leader of the response was the catalyst for coalescing the response activity of the federal government into a unified effort and facilitated intentional efforts to gain the trust of state and local leaders.

The president's role as a catalyst of trust in response leadership is evident in previous responses. In Hurricane Katrina, President Bush accepted responsibility for failures during "the process going in" to respond to the disaster (Associated Press, 2005, p. 1). Bush then directed Allen to be the Principal Federal Official (PFO) and rescue the recovery (Kettl, 2014). In the 2003 Space Shuttle *Columbia* disaster, Bush played a pivotal role in declaring the multistate debris field a federal disaster and designating FEMA to coordinate a response even though the impacted states were unsure whether the Stafford Act allowed them to act (Haddow, 2004). In Beck and Plowman's (2014) study of the *Columbia*, Bush was not mentioned, and the case was focused only on the emergence of the response organization. The finding in this current study that the president played a role as a catalyst for the *Deepwater Horizon* command may suggest that Bush's early role in establishing FEMA as the lead agency to support NASA's

recovery of the shuttle was the catalyst that allowed for a response to form without a designated leader. While the role of the president as a catalyst for homeland security response should inspire more inquiry, Obama's endorsement on May 28 provided the catalyst for achieving unity of effort during *Deepwater Horizon*.

With the president's endorsement of Allen, the NIC and OSC acted intentionally to gain trust through a series of concerted trust-building actions. Although acceding to Louisiana's booming strategy was at times derided by Coast Guard and other federal responders as deploying boom for political reasons, the actions signaled to the local leadership that they were being included in the response effort. Likewise, the agreement to authorize the building of Jindal's coastal berms may not have been the soundest environmental strategy, but it once again signaled that the state was a necessary participant in the response effort. The deployment of the Parish President Liaison Officers (PPLO) assured the local leadership that not only the NIC and OSC wanted to hear their concerns, but the deputy DHS secretary was also listening to their concerns and ensuring that the issues were being addressed. Finally, the transition to local control of the VOOs signaled a significant step toward collaboration with local leadership.

This finding suggests that the definition of homeland security should include actions focused on building partnerships and trust. The ISPR team found that the Coast Guard needed to make more intentional outreach to state and local leaders during planning and exercises (Rufe & Moore, 2011). Trust building requires more than outreach. Egli (2011) emphasized the necessity of personal networking by key leaders to build a foundation for interagency coordination during a crisis or time-sensitive incident. Trust is built through frequent ongoing intentional interactions including joint planning,

training, and exercises (Beck & Plowman, 2014; Egli, 2011). The Coast Guard is generally known for being engaged with local leaders and their communities with local responses normally run by the Coast Guard officials assigned to that region. The presence of Coast Guard units throughout coastal and riverine communities across the United States allows those partnerships to develop over time through continual interactions.

In *Deepwater Horizon*, the federal leadership's choice to station Allen in Washington, DC created the impression that decision-making was occurring outside the Gulf region. The decision to locate the NIC in Washington, DC was supposed to facilitate interactions with the federal political leadership and media since the NCP delegates to the NIC the authority to engage with federal, state, and local leaders, the RP, the media, and Congress to facilitate the response. With the NIC addressing political and media issues, the UAC could focus on the operational response in the Gulf (Allen, 2010; Center for Health Security, 2011). Yet, with the standup of the National Incident Command in Washington, DC, the nature of the relationships built between state and local leaders with the RRT and Area Committees changed. No longer was the decision-making occurring among trusted oil spill professionals from different agencies, but now it was a negotiation with both the White House and BP for the survival of the people of the Gulf Coast. Contrast this with Allen's leadership in Hurricanes Katrina and Rita. When he was appointed PFO, Allen operated out of Baton Rouge (Kitfield, 2005). During Hurricanes Katrina and Rita, trust between federal and state officials was also a challenge. For example, when Louisiana Governor Kathleen Blanco had sharply criticized Allen in the press for the pace of body removal, Allen met with her personally

to discuss and resolve her concerns. Allen personally intervened with the other governors as well (Kitfield, 2005). In Katrina, federal coordination was conducted from Baton Rouge; in *Deepwater Horizon*, the coordination with BP, other agencies, and others appeared to be coming from Washington, DC. It was not until federal officials closed the distance gap through the PPLO program, engaged in concerted efforts to provide unified communication with the governors, and allowed direct state and local participation in the response that conflicts between the various government levels decreased and a more unified response began to occur.

Trust, Perspective, and Proximity: Regionalization of Homeland Security

The analysis from this study suggests that the proximity of federal decision makers to the impacted jurisdictions influences their perspective of response priorities, which in turn shapes their actions. Homeland security doctrine recognizes the importance of these different perspectives. The first QHSR stated, “Homeland security will only be optimized when we fully leverage the distributed and decentralized nature of the entire enterprise in the pursuit of our common goals” (DHS, 2010b, p. iii). For a response to achieve unity of effort, the relevant homeland security enterprise members need a shared understanding of the situation from the diverse perspectives of the federal, state, and local participants. In *Deepwater Horizon*, the distance between the Gulf and Washington, DC became an obstacle to developing trust and unified effort in this response.

For the parish presidents, this was a war to defend their people. This war required parishes to commandeer and hoard boom while demanding the implementation of untested barriers, such as sunken jack barges and building barrier islands. Why?

Because the parish presidents believed themselves to be in the front lines of a war where they needed to employ every advantage over the “enemy.” As they perceived inaction and a lackadaisical response by the federal leadership, they acted to defend their homes. Local leaders and their constituents need to be enabled to act toward productive goals during a crisis. It is their home that has been impacted, and they want to be part of the solution. Local leaders and residents have local knowledge, resources, and motivation to contribute toward the success of the operation. If locals are not brought into the response effort, they will find their own way to do something. In *Deepwater Horizon*, this manifested in Nungesser’s jack-up barges, calls for berms, filling rocks into channels, and demands over control of boom. In the 2016 North Louisiana Flood and 2018 Hurricane Harvey, it was the self-identified *Cajun Navy* that rallied hundreds of volunteer boaters to rescue trapped residents (Wax-Thibodeaux, 2017). The challenge for federal leaders is to channel the passion and energies of local volunteers and leaders into supporting the unified effort as a force multiplier and not as a separate effort. However, when there is a gap in trust between the locals and the federal response, locals will act to defend their homes and neighbors.

At the federal level, Obama’s and Allen’s actions focused on longer term concerns while addressing the immediate risks. For example, the OSC acted toward long-term health and safety of response workers by requiring workers to comply with OSHA requirements for oil spill removal, to the consternation of local residents and officials who claimed it was unnecessarily slowing down the response. Obama’s moratorium reflects the higher level perspective of preventing a future similar SONS and reducing the demand for offshore drilling through alternative energy development. For

the state and local leaders, the moratorium felt like yet another attack on the people of Louisiana and the Gulf since it threatened current jobs of thousands of citizens. From the distant perspective of Washington, DC, this spill was about policy issues of compliance with the requirements of OPA 90, regulatory reviews of proposed interventions for impacts on the environment, and a strategic shift toward renewable energy. While the federal leaders focused on these necessary and important policy issues, their inability to address the local leaders' more concrete operational concerns did not engender trust between the levels of government. By not understanding and addressing the state and local concerns quickly, the message to the local leaders was one that policy was more important than people.

Rear Admiral Peter Neffenger, Deputy NIC testified to Congress that "all oil spills really are local" and "we learned in the early weeks of the spill the importance of bringing local mayors, local city councils, and local parish presidents into the effort" ("DHS Planning and Response," 2010, p. 49). A continuing theme appears to be the localness of homeland security events regardless of the type of incident. Homeland Security incidents have had dramatic national consequences that reshape national priorities, restructure laws, and redirect international relations. While the consequences impact the entire nation, the immediate impact, response, and recovery is experienced in local communities that tax local resources. Often, local responders work alongside state and federal responders to restore their communities, as for example in 9/11, New York's Fire and Police Departments were leading the initial response. Yet in *Deepwater Horizon*, federal responders were in charge and did not recognize the necessity of assuaging the concerns and the potential of including the local leadership into the

response organization until much later in the response. The federal responders saw the spill as a national incident and treated the local demands as pestering and not the potential for strengthening the response effort.

Madison, in discussing the control of factions in Federalist 10, argued that extending the sphere of governance over a greater area including more diverse peoples would create conflicts that would inhibit a particular faction from gaining control over the United States. The same phenomenon that protects the republic also proves to be a challenge in achieving homeland security. With over 87,000 jurisdictions in the United States, the multiplicity of unique aspects of the geography, culture, lifestyle, and economics that arise would hinder any preparation or response without direct cooperation, collaboration, and at times, leadership by the peoples of these various communities. While in smaller nations like France, a centralized police and security force is possible, in the United States the diversity in geography alone across the nation is enough to frustrate any emergency planner, much less account for the various state and local government structures, variety of response capabilities, and cultural differences. The ongoing and direct involvement of all Americans in the homeland security enterprise is incongruent with the idea of federal-only response that merely coordinates and communicates with state and local officials.

One can make a strong case for federal leadership, both under the Constitution because of the interstate aspects of the threats and hazards and the wide variation in community response capacity across the nation. In *Deepwater Horizon*, the Macondo well was outside any particular state jurisdiction and would not have been stopped without direct federal direction. In combatting terrorism, the differential in criminal

statutes across state lines alone is an argument for a federal law enforcement agency to investigate, arrest, and then prosecute alleged terrorists. During disasters, federal aid becomes necessary when the local and state resources become overwhelmed. Likewise, not all states and localities are sufficiently prepared to deal with all types of threats and hazards. Chenoweth and Clarke found that local governments were not equally prepared to respond to crises (Chenoweth & Clarke, 2010; Clarke & Chenoweth, 2006). Similarly, Jain (2006) observed that federal priorities for homeland security did not sufficiently permeate down to impact local planning efforts. Different communities require different levels of federal leadership and support in planning and achieving homeland security goals.

To mitigate the difference between local priorities and needs and federal priority and leadership, an ongoing relationship between federal officials and state and local leaders is necessary. The necessity of federal leadership does not preclude direct collaborative work and ongoing engagement with state and local leaders. In Hurricane Katrina, while FEMA's initial response floundered, the Coast Guard was praised for leading the largest airlift in U.S. history in the immediate aftermath of the storm (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). The Coast Guard's success in response was predicated by the local nature of each individual sector, station, and air station. With dispersed commands working independently with local leaders on a continual basis, one is able to build trust to facilitate response during times of crisis. If the locus of federal leadership had remained in the Gulf from the beginning, the trust challenges between governmental levels might have been ameliorated earlier. This suggests a more regionalized approach to homeland

security is necessary to establish and maintain the necessary trust for successful coordination during a Homeland Security incident.

The building of trusting relationships between federal, state, and local leaders also allows for the response to move from mere coordination to collaboration. During the *Deepwater Horizon* response, the PPLO program allowed for the development of the relationship between federal and local officials to the point of allowing the local direction of the VOO program guided by federal response priorities. Collaboration is a common feature of Coast Guard strategic and operational planning. Donahue and Zeckhauser (2011) admired the natural collaborative tendencies of Coast Guard officials that are unusual for a government agency. In the author's professional experience, local and regional Coast Guard commands collaborated daily with local and state officials to accomplish security, law enforcement, and environmental protection through joint and independent operations that leverage the unique capabilities, authorities, and jurisdictions of the agencies involved to work toward shared goals. Coast Guard run forums, such as the Area Maritime Security Committees that support port security, and the Area Committees that support oil spill response, allow for that trust and collaboration to develop at the local and regional level. As the International Association of Chiefs of Police ([IACP], 2005) emphasized, homeland security events are local events and the knowledge and capabilities of local responders and leaders is essential for success. For the homeland security enterprise to become actualized, an intentional effort to network federal, state, and local leaders and responders to work collaboratively is essential for achieving security. A regionalized approach to homeland security would foster the ability of agencies to collaborate across homeland security missions as well as network

both response and political leaders in preparation for unity of effort during a Homeland Security incident. The multilevel collaboration also allows for developing a greater understanding of the social, political, and operational challenges of that region.

Sensemaking in Homeland Security Response

Another prominent action theme in this study was sensemaking by federal officials. In a routine oil spill, officials know the source and are able to estimate the approximate amount released. In routine cases, responders are also able to utilize established tactics to stop uncontrolled releases from wells, pipes, and other sources. Additionally, the responders are usually local federal officials working with the RP's local representatives, local emergency management officials, and the state representative operating in a social and political environment that is understood by all involved. In *Deepwater Horizon* the leaders faced distinct and unique unknowns. After the sinking of the rig, responders did not know for several days that the blowout preventer (BOP) had failed and an uncontrolled leak was occurring. At the outset, responders were unaware that the means to end the spill would need to be conceptualized, designed, and fabricated. Similarly, once the well was shut in, the cabinet and response leadership faced uncertainty whether the shut-in well continued to pose a threat or whether the spill was finally over, and they marshalled a host of engineers and scientists to discern the state of the ocean floor.

The existence of a catastrophic unknown appears to be a reoccurring aspect of Homeland Security incidents. The 9/11 Commission discussed the essential elements of both foresight and hindsight in stopping terrorist attacks and diagnosed the intelligence services of a “failure of imagination” (National Commission on Terrorist Attacks on the

United States, 2004, pp. 339–348). During Hurricane Katrina, the failure was one of initiative, not understanding who was acting or conceptualizing the situation in New Orleans and the developing humanitarian crisis (Birkland & Waterman, 2008; Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006; Townsend, 2006). In *Deepwater Horizon*, the officials faced not only the unknown complexity of the spill but also the unanticipated actions of the state and local leaders and the public. The nullification of the NCP that Allen described added an unanticipated degree of complexity to an already complicated response effort. Whereas the response policy defined in the NCP was sufficient for oil spill response, the responders were faced with discerning the appropriate actions while also faced with new levels of complexity from both the technological aspects of the spill and the political ones.

With the greater degree of complexity that appears to exist in Homeland Security incidents, this analysis suggests that sensemaking should be included as an essential component of a homeland security definition. In his exploration of possible homeland security theories, Bellavita (2012) posited that the homeland security environment is a complex-adaptive system that requires leaders to discern the “relationship among people, experience, and contexts” (pp. 17–18). Center of Homeland Defense and Security educators adopted the Cynefin framework as a tool to train leaders (Pelfrey & Pelfrey, 2010). The Cynefin framework, which has gained popularity in business circles, assists leaders in discerning the actions to move from chaotic and complex environments toward more ordered systems of response (Bellavita, 2006, 2012; Pelfrey & Pelfrey, 2010). Homeland Security leaders during a crisis must not only discern the knowns and

unknowns of the incident but also must discern how best to navigate the changing political and social environment that they must operate in.

A good example is Allen's frustration that the social and political environment nullified the existing policy. Allen repeatedly explained the coordination, communications, and leadership challenges at the beginning of the response as resulting from the "social and political nullification of the NCP" (Allen, 2010, p. 20; Center for Health Security, 2011). The political leadership operating outside the NIC and UAC at all levels of government largely took the NCP as more of a suggestion than a blueprint for responding to a SONS. Allen's assessment was that the governors and locals did not understand the NCP while the public did not largely understand the role BP was required to play under the law (Allen, 2012; Center for Health Security, 2011). The public's inability to grasp the role of the RP was reflected in Bradshaw's (2012) argument that government-corporate collusion covered up environmental crimes. Allen had not foreseen that the state and local leaders as well as the public would not view a SONS as an oil spill response but as a Homeland Security incident that threatened the country.

The existing oil spill framework was developed before the creation of homeland security and did not anticipate the National Response Framework as a competing response framework. When OPA 90 and the resulting NCP were drafted, the legislators and regulators did not envision a spill nearly 20 times the size of *Exxon Valdez* with an uncontrolled release of oil that threatened the entire southern coast of the United States. The NCP also was not modified to align with the National Response Framework (Rufe & Moore, 2011). This analysis suggests that the massive threat to the economic and social fabric of the southern United States was perceived by the political leaders as a threat to

the homeland. The lessons of 9/11 and Hurricane Katrina instructed the political leadership that the public expects proactive and involved president and governors to lead through the crisis. To Allen and the Coast Guard, a SONS was a federal regulatory response under existing policy where the NRT, RRT, and FOSC work with the RP to recover the hydrocarbons in the environment and assess fines as required by law and regulation. To the public and political leadership, *Deepwater Horizon* was a homeland security crisis that required robust leadership at all levels to protect the nation. While the NCP does provide all the regulatory tools and framework for such a response, a homeland security event requires the full participation of all members of the homeland security enterprise, as envisioned in the 2009 QHSR. The early struggles for coordination, communication, and leadership were in reality the leaders of homeland security enterprise redefining a SONS as a homeland security event. In view of past incidents, homeland security must be a discipline that cultivates sensemaking leaders who are able to discern the threats and the political and cultural realities of an incident.

Adaptability and Flexibility in Homeland Security Response

The actions of state and local leaders also suggested the necessity of leaders to be able to adapt or be flexible with the execution of laws and regulations during a Homeland Security incident. The Louisianans' desire for flexibility during a crisis arises from their own Louisiana Disaster Act (LRS Title 29: 721-739, 2009), which grants the governor and parish presidents the authority to suspend regulations and commandeer equipment to expedite assistance and maintain control during a crisis. When the Louisianans' requests to implement their own response strategy, modify coastal waters (the berms), or have BP fund response equipment for the use of the parish alone, the state and local leaders

expressed their frustration that the federal government would not expedite reviews of these requests or waive necessary environmental reviews (in the case of the berms) because the oil spill was an emergency. The federal leaders were more adaptable than Jindal and the parish presidents' complaints suggested. When it came to the berms, the Army Corps of Engineers pushed the permit through their emergency review process and leveraged the Interagency Solutions Group (IASG) at the NIC to assist with the environmental assessments that were required by several other federal statutes (Center for Health Security, 2011; Lee, 2010). When Jindal and Nungesser requested foreign oil spill skimming vessels be utilized in US waters, Allen worked with Secretary Napolitano at DHS to waive the Jones Act (Allen, 2010; National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). The waivers that were granted were done in accordance with stipulations allowed in the existing statutes themselves. Whereas at the state and local level, leaders were allowed to waive regulations during emergencies, at the federal level those waivers were only granted when the law to be waived stipulated a waiver could be granted in certain circumstances.

In Homeland Security incidents, the adaptability of legal requirements is limited by the language of the laws themselves. This is rightly so. If one were to waive commercial shipping statutes or environmental regulations to facilitate an oil spill response without established legal authority to do so, the resulting precedent would be damaging to the rule of law. For example, after the 9/11 attacks, Congress passed the USA Patriot Act to provide law enforcement increased flexibility in searches during terrorist investigations (Rackow, 2001). The legally enacted exceptions caused (and continue to cause) concern within legal, political, and public circles for the possible

infringement on civil liberties. If Homeland Security leaders were allowed the same latitude with federal laws that hampered a response as Louisiana's parish presidents, waivers during a natural disaster may not cause concern; however, waivers of procedures, regulations, and laws during a terrorist incident could very well infringe further upon civil liberties and rights. Since the Constitution intentionally limits, separates, and checks the powers of the three branches, federal Homeland Security leaders should continue to be constrained by the laws and regulations except where Congress has duly authorized a procedure for waiving those requirements.

From a different perspective, the Louisianans' demand for flexibility is a symptom of the lack of trust rather than a fundamental need for the waiving of federal statutes. The state and local leaders' underlying concerns were either being addressed or could be addressed in another way. The May 2 Louisiana booming strategy was initiated because of a concern that the UAC was not identifying a new booming strategy or deploying boom at a pace that eased local concerns. Jindal and Nungesser's demand to waive the Jones Act was met on a case-by-case basis to allow foreign skimming vessels to operate in coastal waters. The case of Louisiana's berm project, however, does not fit the pattern because it was not a new project for the spill. Although Jindal and Nungesser pressed the berms as a protection against oil infiltration of Louisiana's marshes, the project was under development and had previously been presented to the Army Corps of Engineers for evaluation. The *Deepwater Horizon* oil spill provided an opportunity to expedite this request and have a third party (BP) pay for it. While this analysis suggests the requests to waive procedures in the case of the berms was more a desire to expedite

an existing project, the other events suggest further support for trust building as a distinct action in definitional homeland security.

Proposed Definition

The goal of this study was to suggest a definition of homeland security based upon the actions of federal, state, and local leaders during the *Deepwater Horizon* oil spill response. Since the federal, state, and local leaders are key members of the homeland security enterprise, these leaders represent the community of practice whose actions would shape a theory of action. In this analysis of this community of leaders' actions, the findings suggest that the component parts of a homeland security definition should include the following:

- The coordination of people and resources to address emergent issues;
- Active engagement across all levels of the homeland security enterprise to build trusting partnerships for action across jurisdictions;
- Seeking understanding of operational environment through sensemaking activities;
- Regionalized partnerships guided by a national strategy with national and regional priorities.

Each of these component parts is reflected in both the current literature as well as in the findings from major disasters.

Based upon these components, a possible definition for homeland security would be as follows:

Homeland Security is a national strategy for the security of the United States homeland through the unity of effort of regionalized networks of intergovernmental, interagency, and nongovernmental partners who cultivate

ready and resilient communities and develop an understanding of national, regional, and local threats, hazards, and vulnerabilities while practicing the disciplines of mitigation, preparedness, response, and recovery to weather and overcome any threat to the American Homeland.

The proposed definition is constructed from the actions of coordination, communication, leadership, and sensemaking while building trust through engaged partnerships at the regional level. As previously discussed, coordination and communication are actions consistently described in homeland security strategic and response priorities. As noted in this study, federal, state, and local leaders disagreed over coordination strategies and demanded effective and clear communications at all levels of the response. While leadership is a necessary trait at all levels of the response, this study suggests the identification of a single leader during a Homeland Security incident is necessary to achieve unity of effort for coordination across the homeland security enterprise. Likewise, this study suggests that the leader should be present in close proximity to the incident. Although the OSC, as a federal decision maker, was present in Houma, Louisiana, Allen, as the NIC with his direct access to senior leadership of both the federal government and BP, was headquartered in Washington, DC. To the Louisianan leadership, the distance between Washington, DC and the Gulf Coast created a delay, whether real or perceived, in effective action to stop the spill. Locating the top leadership in the impacted region would seem to lessen this gap and facilitate trust through the presence of the senior response leadership. Additionally, homeland security includes actions related to understanding, responding, and adapting to the developing operational environment through engagement in sensemaking.

One possible criticism of this definition is the absence of a threat focus since DHS was founded with a definite focus on countering terrorism. The challenge with threat-based definitions is that one would potentially need to redefine homeland security with every new catastrophic event. The United States was unprepared for the coordination, communication, and collaboration challenges that led to 9/11, and this led to an emphasis on countering terrorism. When Hurricane Katrina roared ashore in 2005, the United States was once again unprepared for a major event impacting the homeland. After the hurricane, homeland security assumed more of an all hazards approach. The same was true with *Deepwater Horizon*—the nation had not imagined a disaster of this magnitude, and the umbrella of homeland security was stretched once again.

When one revisits these events from the perspective of what the United States could have sensed was possible from the available evidence, it was not so much a failure to imagine but one of coordinating and communicating actions toward preventing a threat. The United States knew that al Qaeda was a threat in the late 1990s and had major FBI and CIA units tracking its actions. Shortly before Hurricane Katrina, federal, state, and local officials in the New Orleans had conducted the *Hurricane Pam* exercise that eerily predicted many of the events that would unfold during Hurricanes Katrina and Rita. With this case, the Mexican Oil Well *Ixtoc I* experienced an underwater blowout decades before that had demonstrated the need to develop technology for stopping undersea discharges (Rufe & Moore, 2011, p. 109). In each case, the federal government was seemingly caught surprised by what happened, but it should not have been. The indicators of a threat and the need to coordinate a multiagency response to prevent a disaster were there but not enough to provoke sufficient action to prepare in time.

When a discipline is defined by the threat it is countering, the discipline can become myopically focused on that threat alone, leaving it potentially unprepared for other threats and hazards. A history of threat-based myopia can be traced through the last two decades. The terrorist attacks of 9/11 came after the Cold War where the United States was attempting to understand the new threats in the post-bipolar world. One major criticism of federal readiness in Hurricane Katrina was that DHS was too focused on terrorism to prepare for a major natural disaster. When the ISPR team completed their report, they noted the overall lack of readiness to respond to a regional spill and that plans were outdated or irrelevant to actual conditions in the region (Rufe & Moore, 2011). Defining homeland security as based upon specific threats potentially opens the nation to be surprised by the new and novel threat or hazards. However, a focus on the actions necessary for preparedness, resilience, and defense allows for adaptation.

Another objection might be concerned with the inclusion of emergency preparedness disciplines of preparedness, mitigation, response, and recovery as elements of the definition. Emergency management, as its own discipline, is separate from homeland security since not all emergency management incidents constitute threats to the homeland. However, all Homeland Security incidents include the emergency management disciplines to one degree or another. For example, mitigation is practiced in countering terrorism to protect critical infrastructure just as it is utilized to improve the resilience of residential and business structures to withstand hurricanes and earthquakes. As the definition expands beyond a specific threat, the emergency management disciplines provide a framework for categorizing homeland security actions and a system that provides a sense of stages to planning and assessing a response.

CHAPTER 6: TOWARD A MORE SECURE HOMELAND

This chapter discusses the limitations of this study, recommendations for the Homeland Security discipline, and recommendations for further research.

Limitations of This study

In conducting this study, the researcher encountered limitations in obtaining sources, application of the method, and exploring outcome-based definitions. First, the scope of sources was limited to official reports, congressional testimony, and news transcripts that were available through public sources and databases. The researcher had requested from the Coast Guard federal response documentation that included daily requests and talking points related to interactions with state and local officials under the Freedom of Information Act. At the time of this writing, the Coast Guard had not yet located the documents or authorized them for public release.

Second, the researcher noted several challenges in coding the data during analysis. In the process of coding, one challenge was that the available documents did not always overlap the same events. While the documentation allowed for an examination of federal, state, and local leader views over the course of the whole response, the existing public record did not allow for a direct comparison of statements on each event identified in this analysis. Similarly, the Congressional hearing documentation posed some challenges since each explored distinctly different issues at different times during the response with hearings focused on coordination, communication, and lessons learned. Due to the thematic nature of these hearings, the topics discussed were potentially oversampled in the coding process. Additionally, while these hearings each included representatives from each level of government, the various

committees did not consistently include the same leaders. The news transcripts provided a slightly different challenge. While there were numerous transcripts of Jindal and Nungesser making statements throughout the spill, in several instances, transcripts on broadcasts over several days featured the leaders repeating the same facts or concerns to different news outlets. In the final analysis, the researcher found that constructing the timeline and comparing statements about each event provided a clearer picture of the actions leaders desired throughout the incident response.

The researcher also found the development of an outcome-based definition from the analysis of a single case to be inconclusive. The author's intent was to examine the leaders' statements for outcome-related themes such as security, resilience, and preparedness. While the analysis found some indications of leaders acting toward resilience, such as Obama's moratorium statement, the overwhelming outcome focus of the actions recorded was aimed toward the defense or security of the Gulf. An analysis for outcomes to be reflective of the discipline of homeland security would require a study of different types of homeland security responses beyond an incident response.

Recommendations

Recommendations for the Practice

This analysis explored the definition of Homeland Security through the actions of federal, state, and local leaders during the *Deepwater Horizon* oil spill response. The findings emphasized the essential role of coordination & communication, leadership, and sensemaking as definitive actions of homeland security. The findings also suggested the necessity of building trust through proximity and intentional engagement with state and local leaders as well as with first responders. This finding suggests two necessary

practices for strengthening homeland security response: the proximity of senior leadership during responses and the regionalization of DHS to cultivate partnerships at all levels of the homeland security enterprise.

First, senior response leadership should be present in proximity to the incident operating area and not operating out of a geographically distant location. During *Deepwater Horizon*, both the PFO (DHS Secretary Napolitano) and the NIC (Admiral Allen) primarily operated out of their organizations' headquarters in Washington, DC while making frequent long trips to the area. As the first National Incident Commander (NIC), this move was consistent with the intent of OPA 90 to provide a national level leader to assist the OSC with intergovernmental, interagency, and media relations during a SONS. It would seem logical to place the NIC and the PFO in the Washington area to access government agencies that were not normally associated with an oil spill response. Yet, the distance and delays in responding to the Louisianans' requests supported the state and local leaders' narrative that federal officials and BP were preventing them from protecting their home and it was up to the Louisianans' to act. The presence of the NIC and PFO in the region would have signaled a greater commitment to supporting the impacted regions. One must note that where to station a NIC could have raised some additional interstate issues. However, a continual presence in the region would have allowed Allen to engage Jindal in the same manner he engaged Blanco during the Katrina response. To further strengthen those relationships, an ongoing presence from DHS is necessary in the region as well.

The findings from this study also suggest that DHS should revisit plans to regionalize to facilitate partnerships throughout the homeland security enterprise on a

local basis. In a discipline that is built upon coordination and communication in a crisis, a dedicated regional DHS staff would not only be able to build trusting partnerships with the state and local level leaders and responders, the staff would also be able to engage in regional planning in cooperation with the local leaders to incorporate both their knowledge of the area and their concerns and priorities. To a degree, this regionalized structure is already occurring. The Coast Guard's regional and local commands routinely engage with the local community and state leaders to advance safety, security, and environmental standards in the area. FEMA operates on a regional basis but with a much smaller staff and less penetration into local communities. Similarly, the Joint Terrorism Task Forces facilitate information sharing and operational coordination between the FBI and local law enforcement agencies. The regional DHS staff could also consist of trained response leaders able to serve as PFO, OSC, or a NIC during an incident. These predesignated leaders should be routinely engaged with key state and local officials to facilitate understanding of response policies and establishing working relationships that would allow for a more seamless cooperation across the homeland security enterprise during an actual incident.

Recommendations for Future Research

The findings of this study suggested possible future research topics that include examining the role of the president as a catalyst to cooperation, undertaking different theoretical approaches to this case study, exploring the action theory approach in other homeland security contexts, and further exploring the shaping effect of homeland security outcomes (security, preparedness, and resilience) on defining homeland security.

First, the findings of this study suggest that the president may play a vital role serving as a catalyst for interagency and intergovernmental cooperation by investing authority in a designated leader. The federal coordination of the spill pivoted on President Obama's clarification that he was in charge and the ADM Allen was the lead of the response. Similar investments of authority were noted in past Homeland Security incidents. A case study of presidential leadership and senior response leadership may provide further insight into how to generate interagency and intergovernmental coordination and collaboration during a crisis.

Second, this case study should be revisited from the perspective of collective action theory. The overwhelming threat of the *Deepwater Horizon* spill should have facilitated a more cooperative, if not collaborative, relationship between federal, state, and local leaders to end the spill and recover the oil. One should consider a study to identify factors that hindered cooperation between the three levels of government. One possible area for exploration would be the leaders' differing political agendas (e.g., environmental security versus regional employment) and political aspirations (Democratic president seeking cooperation of four Republican governors seeking the presidency) and how these might have impacted collective action. If documentation from the NIC were available, a study of how Allen overcame collective action issues in establishing and operationalizing the Interagency Solutions Group (IASG) could provide insight into interagency collaboration as well.

Third, the findings of this study should be further validated through expanding the action theory analytical approach to other types of incidents and homeland security operational situations. Since this case study only analyzed a single type of incident, a

follow-on study that compared the actions in *Deepwater Horizon* alongside a terrorist attack, cyberattack, and natural disaster would provide a comparison across multiple genres of incidents. One could further compare the actions in incidents to those involved in National Security Significant Events such as the Super Bowl or foreign dignitary visits, as well as routine operations such as daily airport operations of the Transportation Security Administration. These comparisons would provide a broad comparison of homeland security activities to validate or expand the definition suggested through this study.

Finally, further exploration of the homeland security definition should explore the shaping effect of different outcomes. In this study, the leaders' actions were generally oriented toward the defense or security of the homeland from a specific threat. Although there were some indications of resilience-seeking in the actions identified, this case alone did not provide sufficient data to further explore resilience or preparedness as the desired end of homeland security. Further exploration of these goals would assist in refining a definition of homeland security.

Conclusion

This study analyzed the actions of federal, state, and local leaders during the *Deepwater Horizon* oil spill response to identify actions that suggest the homeland security enterprise's communal definition of homeland security. The proposed definition was constructed from the actions of coordination, communication, leadership, and sensemaking while building trust through engaged partnerships at the regional level. Both trust and place became important themes in the response and in definitional homeland security. While the senior response leadership was distant and there was lack

of trust between the state and local leaders with the federal government, the spill response was uncoordinated and chaotic. Once leaders developed a sense of how to stop the spill and then decreased the distance between state and local leaders through active trust building measures, Allen began to achieve the unity of effort he sought from the beginning. This study opened with General George Washington at Newburgh, New York, seeking to close the distance of trust between his troops, the Congress, and the states while protecting the newly formed United States from the remaining British garrisons. The successful defense of the new nation depended upon trust and cooperation between the federal government, the army, and the states. Only working together could the new nation be secure. Today, the security of the American homeland depends upon trusting cooperation and coordination between the federal, state, and local governments working in a unity of effort to be ready and respond to all threats and all hazards.

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APPENDICES

APPENDIX A

Glossary of Acronyms

ACP	Area Contingency Plan
BOP	Blowout Preventer
BP	British Petroleum
FOSC	Federal On Scene Coordinator
FRTG	Flow Rate Technical Group
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness
IASG	Interagency Solutions Group
IC	Incident Command(er)
ICP	Incident Command Post
ICS	Incident Command System
LOSCO	Louisiana Oil Spill Coordinator's Office
NCP	National Contingency Plan
NIC	National Incident Command(er)
NIMS	National Incident Management System
NRT	National Response Team
OSC	On Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSRO	Oil Spill Response Organization
PFO	Principal Federal Officer
PPLO	Parish President Liaison Officer

ROV	Remotely Operated Vehicle
RP	Responsible Party
RRT	Regional Response Team
UAC	Unified Area Command
UC	Unified Command (federal incident management)
UCG	Unified Command Group (Louisiana)

APPENDIX B

Case Study Database

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APPENDIX C

Definitions of Codes Utilized in MaxQDA

Definitions of Codes

1 Outcomes

1.1 Security/ Defense

Security/ Defense represents actions focused on protection, response, or other ways of stopping or decreasing the severity of a threat during a Homeland Security incident. Security remains a vague term. For the purpose of this report, defense will also be used since the actions under this category may be construed as actions for the protection from oil.

1.2 Preparedness

Preparedness represents actions focused on equipping, resourcing, or training aimed for future (including near future) response to a Homeland Security incident.

1.3 Resilience

Resilience represents actions that aim to improve the homeland's ability to rebound from current and future incidents.

2 Issues

Issues is used to describe a specific type of response action that is discussed by leadership. Some examples of issues could include the use of dispersants, source control operations, building protective berms, etc.

2.1 Boom

Boom represents the protective oil boom deployed to prevent oil from soiling sensitive habitats or harbors. Under normal oil spill responses, boom deployment is directed by the established plan of the ACP, however in this response, boom deployment became a concern by the state and local leaders.

2.2 Berms and Barrier Islands

Berms and Barrier Islands refer to issues related to the construction of temporary or permanent physical barriers to oil coming ashore, including the barrier island project and uses of barges to block oil.

2.3 Flow Rate

Flow Rate represents efforts to estimate the volume of oil being released from the Macondo well during the spill.

2.4 VOO Fleet

Vessel of Opportunity (VOO) Fleet. Vessels hired to assist with a variety of maritime collection activities. The composition of the VOO fleet, the frequency of employment of the various vessels, and compensation were significant decision points during the response.

2.5 Jobs

Jobs represents requests for actions to employee individuals and businesses that were shut down due to the spill, such as fisheries, vacation resorts and marinas, etc.

2.6 Fisheries and Seafood safety

Fisheries and Seafood safety represent actions requested to evaluate the future ability to fish and commercially sell seafood from the Gulf.

2.7 Stafford versus National Contingency Plan

Stafford Act versus National Contingency Plan represents conflicts over who directs the action of the response, whether a bottom up Stafford Act approach or a top down NCP approach.

2.8 Source Control

This issue represents efforts to stop the flow of oil from the Macondo Well.

2.9 Dispersants

Dispersants represents actions related to the deployment of chemical compounds that break up oil.

3 YELLOW

Yellow highlighting is utilized to identify events during the spill and response that should be considered in a narrative description of events or represent issues that should be reviewed for coding during subsequent coding reviews.

4 Actions

The Action codes are thematic codes that describe the actions undertaken in terms utilized in homeland security theory, such as resilience, preparedness, communication, coordination, etc. The purpose of this code is to describe the underlying theme of the request in terms used to define homeland security. For example, when different levels of government are negotiating who will do a certain task, this would be categorized as coordination. Each subcategory has been assigned a descriptor to explain when it is assigned.

4.1 Compensation

Compensation represents any activities designed to "make them whole" again. To include reimbursement or alternative employment. Compensation was also a theme in the response to 9/11. In Disaster response, the Stafford Act and other programs assist with funding recovery expenses.

4.2 Trust building

Trust building represents actions (or the need for action) leading to an increase in trust between agencies, governmental levels, or with the public. These types of action are not explicitly discussed in the homeland security theoretical literature, however there are indications of the need for trust building in Secretary Johnson's introduction to the 2014 QHSR. The existence of counternarratives, such as the federal government colluding with the RP (Bradshaw, 2012), suggests a lack of trust in official actions and explanations for those actions on behalf of academia and the public.

4.3 Adaptability/ Flexibility

Adaptability and Flexibility represents the ability to change and adapt to new situations, change tactics, or challenge policies and plans that inhibit necessary action. Flexibility includes allowing exceptions in long standing policies to support emergent operational necessities (example, waiving the Jones Act, etc.).

4.4 Training

Training code refers to actions that constitute equipping individuals and teams with the necessary skills to perform a task or set of tasks.

4.5 Sensemaking

Sensemaking describes actions that are directed to understanding and navigating the dynamic operational environment. This code applies to descriptions of the complexity of the incident coupled with efforts to develop a proper response.

4.6 Leadership

Leadership represents actions of organizing and focusing efforts by individuals, teams, groups and agencies, as well as prioritizing actions for the collective organization.

4.7 Conflict

Conflict code represents actions or requested actions that result in conflict during the response. Conflict may be between leaders at one government level (for example, conflict between two Cabinet level secretaries) or between different levels of government (for example, between the federal and state government leaders).

4.8 Response

Response is currently a code to represent significant actions that do not necessarily fall into another action code category. These codes will be recoded during subsequent reviews of the data or this code will be further defined.

4.9 Collaboration

Collaboration represents actions where leaders "share discretion" to respond to a threat or challenge.

4.10 Communication

Communication represents actions that facilitate the sharing of information during the response.

4.11 Coordination

Coordination represents actions that facilitate unity of effort for the response, by bringing federal, state, local, and private efforts toward a specified outcome.

5 Government Level

Government level is a group of categories that identifies the level of government that is taking, considering, or requesting actions at that moment in the response operation. Government level includes Federal, State, and Local level codes.

A code for “Tribal” was considered, however tribal reservations were not widely impacted and their leadership did not contribute significantly to decision making during the response effort.

5.1 Local

Local code represents actions or desired actions by local officials. These officials include Parish Presidents and County Officials, as well as local Mayors and other officials elected to represent municipalities, cities, and towns.

5.2 State

State code represents actions or requested actions by state level actors, primarily the Governor of the state, but also includes senior representatives of the Governor’s office.

5.3 Federal

Federal code is utilized to designate actions or desired/requested actions by federal officials during the response. This designation includes all federal agencies involved in the response effort.

APPENDIX D

Frequency of Action Themes Analysis

The initial approach to analyzing the case focused on coding federal, state, and local leaders' actions identified in official reports, congressional testimony, and press transcripts. From these actions themes were identified and the frequency of these action themes was counted. In coding and analyzing the data, the researcher noted that since the documents did not always align chronologically to provide simultaneous accounts of the same incident from leaders at each level of government, there was a strong potential for oversampling themes at various levels of government. Additionally, the statements made during congressional testimony were based upon themes assigned by the individual committees, which in turn potentially inflated the frequency of coordination, communication, and leadership in the data.

The coded documents were analyzed with MaxQDA qualitative data analysis software to identify the top themes for each level of government and illustrate the relationship between themes. The top five themes for each government level are identified in Table 1 and the relationship between those themes is illustrated in Figure 4. While this approach did have the potential to overrepresent certain themes in the data, the findings were consistent with the thematic analysis of the timeline events presented in the study.

Table D1

Top Five Actions of Federal, State, and Local Leadership During Deepwater Horizon Spill Response

Ranking	Federal	State	Local
1	Coordination	Coordination	Coordination
2	Communication	Communication	Communication
3	Sensemaking	Adaptability/Flexibility	Adaptability/Flexibility
4	Leadership	Collaboration	Trust building
5	Trust building	Trust building	Leadership

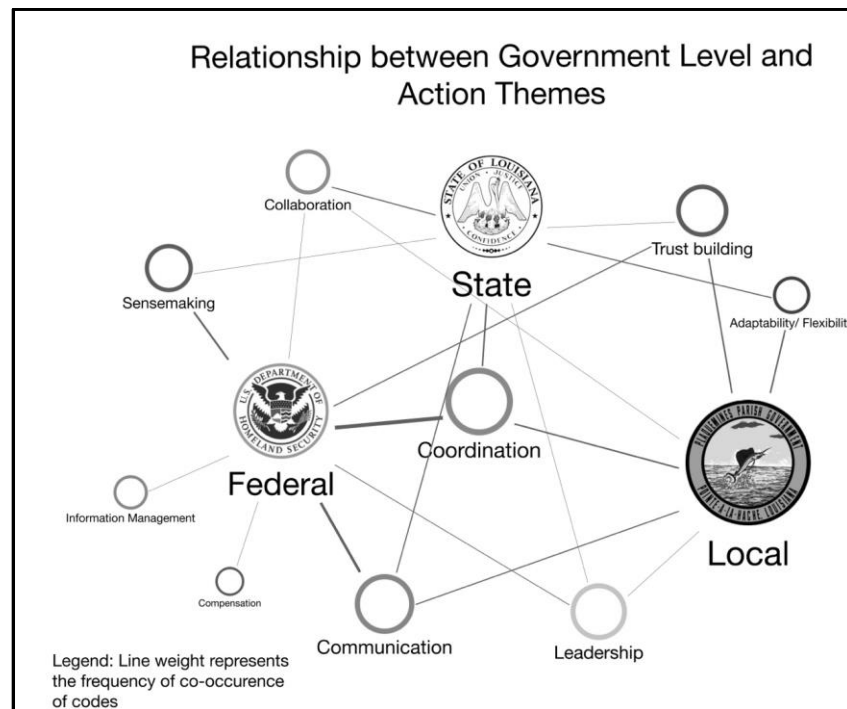


Figure D4. Relationship between government level and action themes.