Enhanced Model of Collaboration and Social Capital: Hampton Roads All Hazards Advisory Committee: A Replication Study

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Enhanced Model of Collaboration and Social Capital

Hampton Roads All Hazards Advisory Committee:
A Replication Study

By

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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
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DOCTOR OF PHILOSOPHY

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ABSTRACT

ENHANCED MODEL OF COLLABORATION AND SOCIAL CAPITAL
HAMPTON ROADS ALL HAZARDS ADVISORY COMMITTEE:
A REPLICATION STUDY

Adale M. Martin
Old Dominion University, 2020
Director: Dr. Juita-Elena Yusuf

To address the call for improving the understanding of collaboration in public policy, this dissertation is designed to validate a study by Morris, Gibson, Leavitt, and Jones (2013), entitled, The Case for Grassroots Collaboration: Social Capital and Ecosystem Restoration at the Local Level. The Enhanced Model of Collaboration (EMC), which was developed to explore collaboration and social capital deriving from grassroots efforts, will be applied to examine agency-based regional collaboration in southeastern Virginia.

The population for this study is the members of the Hampton Roads All Hazards Advisory Committee (AHAC). Members include representatives of local, state, and federal government agencies, military, private industry, nonprofit organizations, health institutions, and universities.

The AHAC collaboration presents an opportunity to examine the extent to which the EMC can be used to explain collaboration in an agency-based collaboration. Using both collaboration and social capital theories, this concurrent mixed methods case study investigates the constructs in the EMC, which includes context, process, output, outcomes, and social capital in a regional emergency management committee (REMC). The data is collected through interviews, documentation analysis, and a web survey. The survey and interview questions are modified from the original study to accommodate the distinct context of the Hampton Roads AHAC setting.
Findings from this study contribute to a general understanding of agency-based collaboration and social capital at the local government level. As a replication study, this research also serves to validate propositions of the original study as well as strengthen and clarify research findings in relation to collaboration and social capital. The results of this study provide evidence that the Enhanced Model of Collaboration framework is limited in its capacity to research collaboration and social capital constructs in an agency-based setting. Therefore, the Enhanced Model of Agency-Based Collaboration (EMAC) is proposed to accurately examine, research, and evaluate agency-based collaboration settings.

The All Hazards Advisory Committee members are practicing collaborative governance, decision making, and utilizing collaboration as a means to achieve regional emergency management funding and planning goals. Social capital is found to be a central tenet of AHAC’s collaboration and is evident in the formation, process, outcome, and feedback loop. Increased knowledge in this area may lead to institutional and organizational processes that allow multisector agency-based collaborations to increase sustainability and capabilities over time.
To my husband, Roy B. Martin IV who has encouraged me to be the best version of
myself, and for tolerating me when I am not, and to my boys t’Roy and Jackson Sledge who
inspire me daily.
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Thank you, Dr. John Lombard for telling me to, “Keep up the momentum” as I completed my oral comprehension exam. Those words resonated with me and pulled me through many long typing sessions.

I would be remiss if I did not thank my original dissertation committee members, Drs. John Morris, Bill Leavitt, and John Kiefer. My interest in collaboration policy began when I was a research assistant to Dr. Morris. I spent many hours researching articles on the grassroots efforts of The Elizabeth River Project, Lynnhaven River Now, and the Nansemond River Watershed.

Many thanks to my friends and family for their encouragement. I am especially grateful for daily talks with my mother, Marcell who has always reminded me that “I can do anything I put my mind to.” Thanks, Mom.
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time to pursue my goals in education. t’Roy and Jackson, I hope your childhood memories are
filled with music, dancing, and laughter, and not just me sitting in front of the computer.
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CHAPTER I
INTRODUCTION AND OVERVIEW

Introduction

Local emergency management agencies play a significant role in emergency management and often need to act under difficult circumstances. They are responsible for implementing various laws that guide all emergency functions, including mitigation, preparation for, response to, and recovery from emergencies and disasters. These actions can be compounded by technical and scientific uncertainty, coordination among multiple jurisdictions and levels of government, increased involvement of stakeholders, power dynamics that impact decision-making, and financial constraints that may limit local government activities (Norris-Tirrel & Clay, 2006). Considerable variation in the hazards and vulnerabilities that communities face adds to the demands on local emergency management programs (Charles, 1988). With over eighty-nine thousand official government units in the United States (U.S. Census Report, 2012), the nature of emergency management operations also varies from one jurisdiction to another due in part to funding, population size, and leadership. Intergovernmental relations in the U.S. are central to the practice of a federal system of government, which involves complex patterns of formal and informal interactions and interdependence between levels of government (Cameron, 2001). “The resources and expertise needed to develop, implement, operate, and maintain an effective emergency management system demand intergovernmental cooperation” (Waugh, 1994, p. 256). Because disasters are not bound by borders, collaborative emergency management that involves stakeholder representatives from multiple sectors, jurisdictions, and levels of government is a topic worthy of more study.
Collaboration Typology

Moore and Koontz (2003) examined whether significant differences exist when collaboration groups are differentiated into group types based on their membership composition. Comparisons across group types revealed variations of influence on policy and that different group types report different accomplishments (Moore & Koontz). This discovery lead to the development of a typology of collaborative partnerships, which included three group types: citizen-based, agency-based, and a combination of the two types (citizen-agency). Citizen-based groups are primarily composed of individual citizens who come together because of a shared interest. Citizen-based collaborations are appropriate when issues are broad in scope and require wide community support. In agency-based collaborations, the primary participants are representatives of existing organizations, which contribute technical expertise and resources directly to the collaborative effort (Kenney, 2000; Rahm, 2002). Agency-based collaborations include a wider diversity of interests and are more appropriate when the issue is complex and requires little public involvement. Agency-based groups are particularly useful in providing planning expertise and tools needed to influence policy decisions. In cases where both public awareness and technical resources are needed to address a complex issue, then a combined citizen-agency group is the best collaborative design.

Knowing which collaborative group design is most likely to achieve certain goals helps organizations make informed decisions about whether the group should be citizen-based, agency-based, or mixed. In emergency management, emphasis has been placed on the importance of collaboration among public, private, nonprofit sectors and all levels of government, but grant funding incentives provide the financial resources and guidance to develop and maintain state and local level programs. Moore and Koontz (2003) explained that government is increasingly
seeking existing collaborative partnerships and providing incentives as a means for achieving governmental goals (Moore & Koontz, 2003, p. 457). Grant funding can be used to increase local government capacity by supporting program management and operations, obtaining tools and resources, coordinating joint training and exercises, and developing outreach and marketing campaigns (FEMA’s Grant Program: Making Collaboration Possible, 2011). Emergency management grant funding is discussed further in the resource discussion.

**Enhanced Model of Collaboration**

In *The Case for Grassroots Collaboration* by Morris, Gibson, Leavitt, and Jones (2013), the Enhanced Model of Collaboration (EMC) is presented as a framework to examine watershed restoration efforts of grassroots collaborations for three separate nonprofit agencies in the Chesapeake Bay region of Southeastern Virginia. Morris et al. specifically focused on grassroots efforts and the role of social capital in the formation and operation of these collaborative institutions. Morris et al. concluded that citizen-based grassroots collaborations are particularly challenging yet effective means for accomplishing mutual stakeholder goals. The Enhanced Model of Collaboration (EMC) provides a framework for the analysis of collaboration. Drawing from collaboration literature and David Easton’s (1965) systems model, the EMC aims to explain “what conditions create these partnerships, how they operate, and why they continue to proliferate” (Morris et al. 2013, p. 20). A collaboration is defined by its implementation of the collaboration process. The EMC presents collaboration is a cyclical process that is incrementally changing as the context and focus of the collaboration changes. According to the EMC framework, collaboration includes a set of preconditions (contextual variables) that define the setting for collaborative action. The collaborative process includes a set of variables that describe the actions of participants. Their collective actions result in three changes: changes in
social capital, short term changes in emergency management (output), and long-term changes in emergency management quality (outcomes). “All three ‘results’ categories are linked to the contextual variables through a set of feedback loops” (Morris et al. (2013), p. 21). The feedback loop is described as the “dynamic component in which previous actions inform current actions, which in turn inform future actions” (Morris et al. (2013, p. 21). As participants engage in collaborative efforts that produce results and gain trust in each other, which enhances the level of social capital. The initial successes of the group encourage others to join and/or support the actions of the collaboration, which beget more trust building, establishes legitimacy, and increases the collaboration’s capacity to address new issues.

Social capital was found to have played a significant role in these efforts. The study examined social capital as an antecedent, a process variable, and an output of the collaborative process. “The more citizens organize themselves, the greater the level of social capital and stewardship generated in the community” (Morris et al., 2013, p. 218). The authors also suggested that context and setting are important factors for motivating local level grassroots collaborations. People and organizations are more likely to collaborate when their efforts have a local impact. They recommend that future research replicate the EMC framework in different situations, conditions, and settings.

The purpose of this study is to test the validity of the EMC by exploring the extent to which the EMC can be used to explain collaboration in an agency-based collaboration. Using both collaboration and social capital theories, this concurrent mixed methods case study investigates the constructs in the EMC, which include context, process, output, outcomes, and social capital in a regional emergency management committee (REMC). The data is collected through interviews, documentation analysis, and a web survey. The survey and interview
questions are modified from the original study to accommodate the distinct context of the Hampton Roads AHAC setting.

Findings from this study contribute to a general understanding of agency-based collaboration and social capital at the local government level. As a replication study, this research also serves to validate propositions of the original study as well as strengthen and clarify research findings in relation to collaboration and social capital. Increased knowledge in this area may impact how collaboration affects policy implementation and lead to improvements in collaboration practices.

**Emergency Management**

Comprehensive emergency management is an approach to establishing inclusive local practices by establishing detailed and well-understood plans of action and having written agreements among multiple stakeholders before a disaster occurs. Multiple stakeholder perspectives contribute to a more comprehensive approach to mitigation, planning, response to, and recovery from disastrous incidents. Agency-based collaborations provide a setting for exchanges among multiple stakeholders that can “constructively explore their differences and search for solutions that go beyond their own limited visions of what is possible” (Gray, 1989, p. 5). When effective, collaboration reduces conflict and litigation, increases trust among stakeholders, leads to shared ownership and authority, increases community capacity to address problems, and leads to better management of resources (Nam, 2008).

Disastrous events and policy decisions have significantly shaped disaster management operations and the U.S. government’s involvement in emergency management. Despite increases in federal disaster assistance and mandated emergency management standards, recent events have revealed deficiencies in intergovernmental coordination. During the terrorist attacks...
on September 11, 2001 breakdowns in intelligence sharing and insufficient response capabilities lead to massive reorganization of federal government agencies and programmatic restructuring. Hurricanes Katrina, Rita, and Wilma (2005) revealed that despite efforts to improve intergovernmental relations profound organizational failures permeated all levels of government. “Most of the leadership difficulties are caused by the fragmentation of power in cities and regions: authority, responsibility, and the ability to act have become so diffuse that no one person or group can successfully address difficult issues” (Chrislip & Larsen, 1994, p. 19). The Post-Katrina Emergency Management Reform Act of 2006 initiated an all hazards risk-based approach to emergencies and focused on increasing intergovernmental and multi-organizational collaboration.

Multiple research disciplines including sociology, political theory, organizational and network theories, decision making sciences, and public administration and policy (Drabek, 2003; Rosenthal, 2003, Comfort, 1988; Petak, 1985; Quarantelli, 1998; Kapucu, 2006; Keifer & Montjoy, 2006) contribute to improving understanding of the complex environment in which local emergency management agencies function. Emergency managers and researchers have joined efforts to seek innovative and pragmatic strategies for managing incidents more safely and effectively. This emergence of mutual interest was in part initiated by the joined efforts of the National Association of Schools of Public Affairs and Administration (NASPAA) and the Federal Emergency Management Association (FEMA) in 1984 (Comfort, Waugh, & Cigler, 2012). Due to the complex nature of disasters and the uncertain conditions that arise, intergovernmental and cross-sector intervention is necessary for ensuring a comprehensive approach. Emergency management cannot be a function of local emergency management
agencies alone. More research that focuses on improving interpersonal relationships, interoperability, communication, and resource sharing are needed (Garnett & Kouzmin, 2007).

Localities are the front line of defense against disastrous incidents. Citizens often have high expectations for their safety and security, which requires local emergency management agencies to effectively manage resources to quickly respond and promptly begin recovery once an incident occurs (Canton, 2007). This type of resilience requires persistent collaborative partnerships with the foresight to identify and plan for potential risks (mitigation). Network collaboration is more likely to occur in salient policy areas where the potential for crisis is probable (Gray, 1989). Emergency managers are the drivers of these emergency management activities and benefit from the technical and practical expertise of community stakeholders and lessons learned from past experiences (Choi, 2008; Comfort et al., 1999; Kapucu, 2006). This concerted effort requires risk assessments from multiple perspectives, development of mutual risk avoidance strategies, and full commitment to pursuing shared goals (Drabek, 1987; McLoughlin, 1985; Gazley & Brudney, 2005; Kapucu, Arslan, & Collins, 2010). Collaboration is the best option for collective decision making when it involves the people who are most affected by the outcomes (Gray, 1989). Emergency management policies that are developed from the ground up are more effective because they empower local citizens and community leaders to stay safe until emergency personnel can respond. Encouraging community responsibility for risk reduction and less reliance on state and federal assistance leads to resilient communities (Choi, 2008).

The AHAC is the agency that coordinates regional emergency management planning in Hampton Roads. The AHAC is a subsection of the Hampton Roads Planning District Commission (HRPDC). The HRPDC is one of 21 planning district commissions in the
Commonwealth of Virginia. It is a regional organization representing seventeen local governments. Planning district commissions are voluntary associations and were created in 1969 pursuant to the *Virginia Area Development Act* and a regionally executed Charter Agreement. The HRPDC was formed in 1990 by the merger of the Southeastern Virginia Planning District Commission and the Peninsula Planning District Commission (Hampton Roads Planning District Commission, 2015). The HRPDC serves as a resource of technical expertise to its member local governments concerning regional issues such as: emergency management, economics, housing, planning, and water resources.

This dissertation explores the extent to which the EMC framework can be used to explain collaboration in the AHAC setting. The AHAC focuses on regional efforts concerning emergency management. There are sixty-six (66) members, which includes representatives of local, state, and federal government agencies, military, private industry, nonprofit organizations, health institutions, and universities. Seventeen (17) of the members represent localities in the Hampton Roads region. The AHAC members meet bi-monthly and regularly participate in regional and state training and exercises to prepare for natural, technical, and man-made disastrous incidents.

**Research Purpose**

This dissertation is a differentiated replication of research by Morris et al. (2013) entitled, *The Case for Grassroots Collaboration: Social Capital and Ecosystem Restoration at the Local Level*. Morris et al. applied the Enhanced Model of Collaboration (EMC) to explore grassroots efforts that support nonprofit organizations focused on improving environmental conditions in the Chesapeake Bay watershed of southeastern Virginia. In all three case studies explored, Morris et al. found that collaboration and social capital were key factors in successfully
achieving organizational goals. Their findings state that, “grassroots collaborations provide a vehicle through which communities can work together to address environmental problems” and “the more citizens organize themselves, the greater the level of social capital and stewardship generated in the community” (Morris et al., 2013, p. 218).

The purpose of this dissertation is to validate the extent to which the EMC can be used to explain collaboration in an agency-based setting by applying the EMC framework to a regional emergency management committee (REMC). This study examines collaboration and the role of social capital and discusses whether social capital in an agency-based collaboration is as important to the collaboration process as that of a grassroots collaboration setting.

Replication of Morris et al.’s (2013) methodology is important for a number of reasons, including, 1. determination of generalizability; 2. application of results to a different real-world situation; and 3. inspiration of new research combining findings from both studies. The results from this study will contribute to policy makers general understanding of collaboration and social capital at the local government level. It will also serve to validate the original study as well as strengthen and clarify research findings in relation to collaboration and social capital. Increased knowledge in this area may impact how collaboration affects policy change and lead to improvements in collaboration practice.

**Research Questions**

This study will investigate three research questions. 1. To what extent can the Enhanced Model of Collaboration framework be used to explain collaboration in an agency-based setting? 2. How are the All Hazards Advisory Committee members using collaboration to implement emergency management policy? 3. What is the role of social capital and its effect on collaboration among AHAC members? To answer these research questions, the analysis will
focus on several key factors identified by the Enhanced Model of Collaboration framework, including context, process, outputs, outcomes, and social capital.

**Study Structure**

This study contains five chapters. This chapter introduces the research and provides a general overview of the problem. Chapter II reviews the relevant literature, which discusses collaboration and social capital theories, followed by a review of the Enhanced Model of Collaboration framework. Chapter III contains the research design and methodology. It includes the qualitative and quantitative data analysis plans and the limitations of the study. Chapter IV presents the results of the mixed methods study by describing the findings according to the constructs of the Enhanced Model of Collaboration framework, which includes the context, process, output, outcomes, and social capital. Chapter V presents key findings from the agency-based collaboration study and then compares them to major findings of the seminal grassroots collaboration study. This section reports the major findings and implications and suggests areas for further research.

**Significance, Relevance, and Impact of the Study**

This single case study analysis has a great deal to offer as a means of understanding the relationship between collaboration and social capital and explaining their roles in different settings. The EMC, which was developed to explore collaboration and social capital deriving from grassroots efforts, is applied to examine agency-based regional collaboration in southeastern Virginia. By validating the EMC framework, this research serves to advance the development of collaboration and social capital theoretical application and inform the design and implementation of government programs.
This research challenges Robert Putnam’s notion that despite evidence that people are spending more time in the workplace, social capital in the workplace has not increased. This study contends that a collaborative workplace setting is more conducive to social capital than bureaucratic structures. Collaborations are reasonably different than the traditional corporate institutions in Putnam’s study. This study contends that the traditional corporate setting facilitates division of labor and competition among co-workers, which leaves little room for professionally grounded and substantial interpersonal relationships to develop and therefore stifles social capital in the workplace.

In a democratic society, public administration scholars believe that the motivations and structures of government and nonprofit organizations differentiate them from their corporate counterparts. Morris et al. (2013) found that when no one owns a public problem or solution, institutions that are more civically focused adopt a “stewardship” role by assuming the planning and management of resources. Emergency management is an example of this phenomenon. Participants in public institutions have an innate public service motivation or a desire to serve the public and link their personal actions with the overall public interest. Perry and Wise (1990) defined public service motivation as “an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations” (p. 368). Government-based collaborations, such as the AHAC provide a nonthreatening professional environment for the potential development of trust and relationship building, successful partnerships and social capital. This case study of regional collaboration and social capital involving multiple sectors, jurisdictions, and levels of government will contribute to scholarly research, public problem solving, and organizational practices.
Collaboration and social capital are fundamental components of emergency management policies and practice. This study reinforces the notion that collaboration is an emergent social process that depends greatly on the interpersonal skills of an organization’s members. The professional social capital that develops during the collaboration process is imperative to the emergency management field because collaborative stakeholders need to be confident that the decisions made during the planning process will be implemented when a disaster occurs. In short, emergency management collaboration promotes resiliency, and in severe instances, save lives. As localities continue to manage public services under increasingly complex circumstances, social capital may be a principal indicator of an organization’s achievement of goals and long-term sustainability.
CHAPTER II
THEORETICAL FRAMEWORK AND REVIEW OF RELEVANT LITERATURE

Theoretical Framework

The theoretical model that will be tested is the Enhanced Model of Collaboration, which was developed by Morris, et al. (2013) to investigate the concepts and themes that are important for understanding how and why public collaborations operate the way they do, what factors are important indicators of success, and how these elements are linked together. The theoretical foundations for the EMC include both collaboration and social capital theories. Social Capital was found to be a central tenet of collaboration and is examined through the EMC lens as a precondition, resource, product, and recursive condition of the collaboration process.

Enhanced Model of Collaboration

Morris et al. (2013) developed the EMC framework by applying collaboration and social capital theoretical variables to the respective phases of the collaboration process. These phases are linked, simultaneously occurring, and recursive. “The model includes a dynamic component in which previous actions inform current action, which in turn informs future actions” (Morris et al., 2013, p. 21). The contextual variables describe preconditions of collaboration at two policy levels: the national and local levels. The national level includes the national laws and policy initiatives that define national politics (Kingdon, 1984). Local level policy is embedded in the larger policy arena of the state and includes factors that are specific to the local community. These factors include political culture, nature of the problem, resources, and social capital.

Morris et al. (2013) includes political culture as a factor that describes the political environment in which a collaboration exists. Elazar (1984) defined political culture as “the particular pattern of orientation to political action in which each political system is imbedded”
Political culture can vary from state to state and town to town. Elazar found that political culture was established by migration and settlement patterns of different religious groups in the early 20th century and varied accordingly. Political culture is determined by the underlying values that affect the decision-making processes that governments use to adopt and implement policies. It influences who can participate in decision making and the acceptable forms of government action and institutions. Elazar identified three major categories of political culture - individualistic, moralistic, and traditionalistic.

- The individualistic culture describes a government that is strictly utilitarian in its functions. Government’s role is limited and primarily concerned with private interests to keep the marketplace functioning. Political competition is partisan. Politicians’ motives are less concerned with the good of society and in favor of self-serving to advance themselves professionally. Collective citizen demands are put off in favor of individual mutually assuring relationships. Corruption is tolerated in order to get things done.

- The moralistic culture is the opposite of individualistic. It emphasizes the commonwealth and the public interest. Politics revolves around issues. Politicians run for office to advance issues to improve the lives of citizens. Citizen participation in politics is seen as a public service. Corruption is not tolerated because bureaucracy is a means to achieve the public good.

- A traditionalistic culture describes a government that maintains the existing social and economic hierarchy. It is characterized by an ambivalent attitude toward the marketplace and the common good. Politicians come from society's elite and have a family obligation to govern. Since ordinary citizens (non-elites) are not expected to participate in politics,
the political competition is grounded in rival factions within the elite class. Bureaucracy is viewed with suspicion because it interferes with personal relationships. Morris et al. concluded that the political culture in Hampton Roads is mixed and evolving. Hampton Roads includes seventeen geographically connected localities, in which citizens live, work, and socialize among multiple localities seamlessly and without notice to political cultural differences. The AHAC serves all localities in the region and therefore includes a mix of the three abovementioned types of political culture. This study regards political culture as a constant and does not analyze it as a variable.

The collaboration process responds to demands and supporting influences from its environment (contextual input). The collaboration process factors include the roles of stakeholders and conveners, resources, rules, and governance structure. Collaborative action occurs during this process of decision making (or not) directed at changing some aspect of the socio-political environment. The collaboration process produces three kinds of results: short term changes (outputs), long term changes (outcomes), and changes in social capital. Output is a primary measure of the collaboration’s performance and includes plans and agreements, scientific reports, and establishment of standards. Outcomes are identified by the extent to which the implementation (or not) of outputs influence changes in ethics, behaviors, and quality of the environment. All three “results” categories are linked to the contextual variables through the feedback loop. The generation of social capital among the members becomes a motivating factor that fortifies the participant’s commitment to the collaboration and its purpose. Contrarily, degradation of social capital would be detrimental to the collaboration’s existence. These constructs of collaboration: context, process, outputs, outcomes, and social capital are collectively analyzed using the Enhanced Model of Collaboration (EMC) framework. The EMC
A premise of the EMC Framework is that Collaboration is a long-term endeavor that facilitates stakeholders who are committed (technically, professionally, socially) to resolve challenges that arise both in and outside of the organization setting. Public collaboration affects both the participants and the community that it serves. As goals are reached and the conditions of social problems are amended, the collaboration alters the socio-political context in which the it operates. In effect, as policy and program changes are implemented, the collaboration’s
purpose evolves to address new concerns, which perpetuates its legitimacy as an effective socio-political institution.

Emergency management involves “the organization and management of resources and responsibilities for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation” (UNISDR, 2009). Under the Homeland Security Act of 2002, the U.S. Department of Homeland Security (DHS) was tasked with coordinating with state and local government personnel, tribal territories, agencies, authorities, and non-profit and private sectors to ensure adequate planning, equipment, training, and exercise activities for emergency management operations. Both the White House and Congress recognized that the DHS would require a large staff and budget to effectively achieve its goals. Notably, state and local governments lacked the capacity to effectively train for and implement national emergency management strategies. The Homeland Security Grant Program (HSGP) was established in 2003 as a main mechanism to fund these efforts. The DHS uses empirical risk analysis and policy judgments to select the geographic areas eligible for grants within this program. The State Homeland Security Program (SHSP) grantees are guaranteed a specified minimum percentage of available grant funds (GAO-09-168R, 2008). This funding is awarded annually to maximize the ability to prevent, prepare for, respond to, and recover from major events such as terrorist attacks, major disasters, and other emergencies.

The Emergency Management Assistance Compact (EMAC) (Public Law 104-321) was established in 1996 as a system that allows states to send personnel, equipment, services, and commodities to help disaster relief efforts in other states. EMAC establishes a mutual aid agreement system that is a key component of the National Incident Management System (NIMS), which provides the framework for emergency response. Mutual aid agreements provide
a firm legal foundation for cross-jurisdictional resource sharing that is vital to emergency management planning and preparedness. Mutual aid agreements establish regional collaborative relationships among states, localities, nonprofit, and private sector organizations to provide assistance across jurisdictional boundaries should disaster response exceed a jurisdiction’s capabilities. “The jurisdictions involved and the policing chief executives must agree to the plan’s key components, and each participating jurisdiction’s governing body must approve the agreement” (Bureau of Justice Assistance, 2005, p. vii). Regional mutual aid agreements can be tailored to meet specific needs and quickly deploy a broad range of resources in a more efficient and cost-effective manner than acquiring duplicate services in each jurisdiction that may be infrequently used.

Collaboration encourages social order and good faith among a complex network of stakeholders. Groups that work collaboratively are more likely to obtain greater resources, recognition, and reward when facing competition for finite resources (Leydesdorff & Wagner, 2006). Multi-organizational collaborations “in public policy and management are important means of enriching and coordinating resources, developing and sharing new ideas, and overcoming the difficulties of working individually” (Kapucu & Demiroz, 2011, p. 550).

**Collaboration**

Collaboration research is a growing field that aims to uncover the dynamic and complex nature of a prominent and deliberate form of governance. Much of the literature portrays collaboration as a new phenomenon that is increasing in incidence and significance. Some scholars have declared that this is an era of new governance, which requires a broader form of governance network to address public needs and problem solving (Salamon, 2002; Eggers & Goldsmith, 2004; Stoker, 2006). Researchers have examined several applications of these
efforts, including collaboration as a management process (Agranoff & McGuire, 2001; Gray, 1989), a performance tool, (Agranoff, 2006), a governance choice (Ansell & Gash, 2008), a policy choice (Koontz & Thomas, 2006) a mandate by policy makers (Rodriquez, Langley, Denis, 2007) an institutional catalyst for social change (Pasquero, 1989), and a facilitator of voluntary grassroots advocacy for ecosystem restoration (Morris et al., 2013). Kettl (1996) argues that the most important change to government employee functions in the last century has been that they must now develop critical relationships with external agency partners. As traditional government functions are increasingly shared among nongovernment actors, a concerted focus on sustainable interpersonal relationships is essential. It is evident that collaboration is an intriguing area of research and that there is much to learn about how it can be employed to improve facilitation of policy objectives.

Defining collaboration is important to theory building and should encompass relevant aspects from the diverse research available on the topic. Pending the development of a commonly accepted definition of collaboration, the following definitions were selected by the authors of the EMC to provide an overview of the most relevant characteristics of what a definition of collaboration would include. The following scholarly approaches serve as an introduction for exploring the characteristics of collaboration that contributed to the theoretical underpinnings for the EMC framework.

- [Collaboration is] a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible. (Gray, 1989, p. 5)

- Collaboration is defined as an interaction between participants who work together to pursue complex goals based on sharing interests and a collective responsibility for interconnected tasks which cannot be accomplished individually (McNamara & Morris, 2012, p. 391)
Collaboration is a process in which autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions. (Thomson & Perry, 2006)

The latter two definitions expand on Gray’s influential work on the topic. These are slightly different interpretations of collaboration that offer partial, but valuable perspectives. These definitions should be regarded as working definitions that are open to modification by future scholars. The broader scope of collaboration literature suggests some overarching elements that may lead to such revisions while contributing to a comprehensive theory of collaboration.

Similarly, many scholars have devoted some thought about whether a definition of collaboration should include all known elements or just the commonly cited ones. Dr. John Morris raised this question in a graduate seminar class (2012), which produced a list of frequently identified factors of collaboration in academic publications. These factors included: everyone contributes resources to the joint effort, trust, common goals, assumption of shared risk, voluntary participation, mutual benefit for all participants, interdependence, non-hierarchical organizational structure, and social capital (Morris et al, 2013). Participants in a collaboration commit to a common goal, contribute resources, and actively engage with one another to work for that goal (Gray, 1989, Pasquero, 1991; Westley & Vrendenburg, 1991) in a manner that is mutually beneficial to all participants and not only a few (Thomson & Perry, 2006; Pasquero, 1991). Because collaboration is a long term commitment, participants must be convinced that other participants are acting in good faith and are trustworthy partners in the collaborative effort. Collaborators must value interdependence (Sharfmann, Gray & Yan, 1991) and be mutually reliant on each other. As collaborators, they should consider each participant’s roles and responsibilities when making decisions. They cannot act unilaterally or in exclusion of
fellow participants. All participants should contribute resources to provide the capabilities necessary to pursue their shared goals (Gray, 1989; Pasquero, 1991). Collaborators assume some degree of risk and may be more willing to accept risk because it is aggregated among all participants (Gray, 1989). Given the nature of collaboration, the governance structure is relatively flat (not hierarchical) so that leadership and the responsibilities of the collaborative are shared. Lastly, social capital is a fundamental tenet of collaboration and the community that is developed through the collaboration process. The social capital that is generated through interpersonal relationships is necessary for accomplishing mutual goals (Morris et al, 2013.).

Developments in collaboration research contribute to improving the understanding of what constitutes as collaboration versus other types of partnerships or networks. As a result of the increased interest and contributions of scholarly research on collaboration, Gray (1991) revised her own 1989 definition to include the implied importance of organizational structure and shared rules and norms. Gray elaborates, “Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain” (p. 146). This definition is appropriate for this case study because organizational structure, shared rules and norms will be analyzed as essential factors of the collaboration process and social capital. Therefore, they should not be assumed.

Scholars, policy makers, and practitioners alike are beginning to understand that addressing tough social problems in a democratic society requires collaboration from all sectors in order to deal effectively and humanely with the challenges (Bryson, Crosby, & Stone, 2006). Literature on cross-sector collaboration describes it as a necessary and desirable governance strategy for addressing many of society’s most complex public challenges (Agranoff & McGuire,
Bryson et al. (2006) define cross-sector collaboration as activities that invoke “partnerships involving government, business, nonprofits and philanthropies, communities, and/or the public as a whole” (p. 44). Cross-sector collaboration may lead to sustainable solutions for “wicked problems” that permeate all aspects of society (e.g. safety and security, poverty, climate change) and require multi-organizational involvement (Gray, 1989; Huxham, 1996; Roberts, 2000; Huxham & Vangen, 2013; Bryson et al., 2006). Gray (1989) explains that multiparty collaboration is “a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible” (p. 5). Bryson et al. define the cross-sector collaboration process as “the linking or sharing of information, resources, activities, and capabilities by organizations in two or more sectors to achieve jointly an outcome that could not be achieved by organizations in one sector separately” (p. 44). Stakeholders bring different perspectives, expertise, information, authority, and resources to the collaborative. These differences are negotiated and managed through the collaboration process. Studying a collaboration system should reveal patterns that help to explain the importance of interpersonal exchanges in this type of setting. The extent to which these entities become a collaboration may vary over time and among different policy domains.

A primary critique of collaboration literature is that multiple applications of collaboration makes it difficult to coordinate a multidisciplinary discussion to develop a theory that merges collaboration research with practice. For the most part, collaboration research remains housed within separate disciplines and problem domains. Identifying common concepts would help to bridge multidisciplinary approaches and understanding of how to collaborate and factors for
successful collaboration. Commonalities among these various perspectives could provide the foundation for distinguishing the unique qualifications of a collaboration. As all facets of society become more intertwined, social problems are likely to grow increasingly more complex and more expensive to manage. The growing importance of collaboration research reflects the everyday inability of a single actor to manage complex social problems. By drawing appropriately from multiple fields of collaboration studies, collaborators may find a new understanding of complex social problems and reach solutions that were otherwise unknown.

Moore and Koontz (2003) examined whether significant differences exist when collaboration groups are differentiated into group types based on their membership composition. Comparisons across group types revealed variations of influence on policy and that different group types report different accomplishments (Moore & Koontz). This discovery lead to the development of a typology of collaborative partnerships, which included three group types: citizen-based, agency-based, and a combination of the two types (citizen-agency). Citizen-based groups are primarily composed of individual citizens who come together because of a shared interest. Citizen-based collaborations are appropriate when issues are broad in scope and require wide community support. In agency-based collaborations, the primary participants are representatives of existing organizations, which contribute technical expertise and resources directly to the collaborative effort (Kenney, 1997; Rahm, 2002). Agency-based collaborations include a wider diversity of interests and are more appropriate when the issue is complex and requires little public involvement. Agency-based groups are particularly useful in providing planning expertise and tools needed to influence policy decisions. In cases where both public awareness and technical resources are needed to address a complex issue, then a combined citizen-agency group is the best collaborative design.
Knowing which collaborative group design is most likely to achieve certain goals helps organizations make informed decisions about whether the group should be citizen-based, agency-based, or mixed. In emergency management, emphasis has been placed on the importance of collaboration among public, private, nonprofit sectors, and all levels of government, but grant funding incentives provide the financial resources and guidance to develop and maintain state and local level programs. Moore and Koontz (2003) explained that government is increasingly seeking existing collaborative partnerships and providing incentives as a means for achieving governmental goals (Moore & Koontz, 2003, p. 457). Grant funding can be used to increase local government capacity by supporting program management and operations, obtaining tools and resources, coordinating joint training and exercises, and developing outreach and marketing campaigns (FEMA’s Grant Program: Making Collaboration Possible, 2011). Emergency management grant funding is discussed further in the resource discussion.

Most scholarship on collaborative governance is predominantly rooted in environmental watershed and land use regulations, where agency-based collaboration is directly tied to federal leadership and policies. In Clare Ryan’s (2001) article, “Leadership in Collaborative Decision-Making,” she examines the role of the U.S. Environmental Protection Agency (EPA) as a regulatory agency in the collaborative policy-making process. Ryan’s study found that unlike citizen-based collaborations, agency-based collaborations require the agency to take on multiple roles, such as expert, analyst, stakeholder, facilitator, and leader in a collaborative decision-making process. The EPA must merge these various perspectives into a complex leadership role beyond the traditional statutory authority or technical expertise to meet the multifaceted demands of an agency-based collaboration setting.
Ryan (2001) also discusses the theoretical origins of the different and often concurrent roles that agencies can play in an agency-based collaboration setting: expert, rational decision maker, stakeholder, facilitator, and leader. As experts, agency bureaucrats are viewed as “apolitical and scientific” and “insulated from the political process.” Rational choice theories assume that agencies determine “all relevant values and preferences of society as a whole can be known and weighed” to inform rational judgments that will achieve the most efficient outcomes. As stakeholders, agency representatives view decision-making as unarguably “political and based on bargaining” and mutual agreements, which goes against the “neutral technocrats” as rational theory suggests. As a facilitator, an agency is a “mediator or balancer of interests,” weighing the competing interests of other parties and assessing the facts and policies that influence the decision-making process. Lastly, the collaboration setting requires a unique leadership style; one that can “safeguard the process, facilitate interaction, and patiently deal with high levels of frustration.” The role of an agency in an agency-based collaboration is complex and requires the representative to wear as many “hats” as the collaborative setting demands. Overall, the agency consistently plays an active role in the collaboration and provides some degree of oversight. Consistent with Moore and Koontz’s typology of collaboration, the agency-based collaboration is more conducive to policy decision making than grassroots collaboration when the issues are complex and require the technical expertise, political support, and resources to accomplish its goals.

The Enhanced Model of Collaboration (EMC) framework was initially designed to explain grassroots collaboration in the Chesapeake Bay watershed of Southeastern Virginia. Drawing from collaboration literature, the EMC framework provides a fundamental view of the collaboration processes that has been proposed to explain how stakeholders collectively come
together to make decisions, come to judgments, share resources, and solve problems. Prior to
initiating this study, a compatibility analysis was conducted to assess whether the EMC
framework was a good fit for analyzing an agency-based collaboration. The analysis confirmed
that the EMC constructs commonly present in a collaboration process (context, process, outputs,
outcomes, and social capital) were present in the AHAC collaboration and therefore could be
applied to a comprehensive analysis of an agency-based collaboration process. The extent to
which the EMC framework can be used to explain collaboration in an agency-based setting is
presented in Chapter IV and discussed in Chapter V.

**Social Capital**

Collaboration literature also reveals that social capital is a central component of
collaboration. The EMC displays social capital as a factor in the formation, process, outcome
and feedback of a collaboration. Social capital initiatives are associated with enhanced civic
engagement, governance, knowledge, and innovation. They are implemented to build resilient
and sustainable communities and to influence social and political change. Collaborative efforts
require a significant commitment of time, expertise, and tangible resources. Collaboration
participants share common goals and they are likely to have some degree of knowledge of the
other participants in advance. “There must be a baseline level of social capital available in order
to initiate collaborative behavior” (Morris et al., 2013, p. 29).

Credibility and integrity are also important underlying factors. Potential collaborators
must be able to trust the other stakeholders before making the commitment to participate in a
collaboration. Once the collaboration is formed, participants should demonstrate their
trustworthiness to convince others that their actions are in good faith. This study proposes that
social capital will increase as a result of the positive interaction of the participants throughout the
collaboration process and as a result of attaining organizational objectives. As social capital emerges, it will become evident in the culture of the organization and the community in which it serves. A benefit to realizing the advantages of social capital is the creation of sustainable relationships that will continue to develop new ways to refine socio-political challenges in the future.

Social Capital theory is commonly linked to discussions about civic engagement, community building, and civil society. Morris et al. (2013) uses Robert Putnam’s (2001, p. 19) definition of social capital, which states that,

connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called “civic virtue.” The difference is that “social capital” calls attention to the fact that civic virtue is most powerful when embedded in a dense network of reciprocal social relations.

Robert Putnam’s research suggests a correlation between social capital and civic engagement. Putnam posits that civic engagement in the U.S. has declined since the 1960s, which coincides with the decline of social capital. He explains that the social capital deficit trend is reflected in lower participation in organized institutions such as, political, religious, community, and professional organizations. He attributes the decline to various changes in society; from technological changes such as television and the internet to changes in the structure of the American economy. Changes in American society have produced a culture of independence where people are increasingly isolated socially and prefer to access social connections through informal rather than formal means. Therefore, fewer people are actively participating in structured activities and organizations, which reduces opportunities for social capital development.
Social capital research is grounded in the role of human interaction in social settings and influence on civic engagement (Morris et al., 2013; Putnam, 2001). However, the concept of social capital offers enormous potential for better understanding multilevel management and organizational phenomena (Payne, Moore, Griffis, & Autry, 2011, p. 492). Social capital’s relationship to performance has been analyzed at the individual (Seibert et al., 2001), team (Tsai, 2000), and organizational (Stam & Elfring, 2008) levels. Payne et al. (2011) posit that applying social capital theory at multiple levels of organizational analysis may offer a better understanding of group management and organizational phenomena (Payne et al., 2011). Social capital theory suggests that social capital has considerable benefits for a range of economic and sociological outcomes. Social capital is a function of brokerage opportunities in a network (Burt, 1997; Coleman, 1988) and goodwill that is caused by social relations that can be mobilized to facilitate action (Adler & Kwon, 2002).

Both social capital and collaboration rely on networks of individuals who work together to achieve a common goal. Social capital has been found to influence social behavior in various settings, including: citizen-based (grassroots) efforts for ecosystem restoration and environmental policy changes (Morris et al, 2013), positive facilitation of resource exchange (Gabbay & Zuckerman, 1998; Hansen, Podolny, & Pfeffer, 2001; Tsai & Ghoshal, 1998), cross-functional team effectiveness (Rosenthal, 1996), reductions in organizational dissolution rates (Pennings, Lee, & van Witteloostuijn, 1998), and increases in interorganizational learning (Kraatz, 1998).

Morris et al. (2013) found that an initial level of social capital is necessary to prompt the generation of social capital in a community. When citizens organize themselves, the grassroots effort becomes a catalyst for trust building and reciprocity between participants. “Trust between
participants is enhanced by their participation in the collaborative process” (Morris et al., p. 224). Successful citizen-based efforts with clearly defined goals lead to greater levels of social capital and legitimacy in the community. Legitimacy denotes a level of authority, which leads to more access and political influence. Social capital is necessary in grassroots collaborations because it legitimizes the organization and its role in the policy process.

Collaborations are dependent on networks of individuals where social capital norms of trust, reciprocity, and efficacy are developed to support and sustain collaborative processes (Morris et al., 2013). As collaborations became more active in their communities, they create opportunities to generate additional social capital. Trust is an expectation that others will be cooperative, honest, and in accordance with shared social norms that allow for socio-economic transactions. Any group in which there is extensive trustworthiness is able to accomplish much more than a comparable group without trustworthiness (Coleman, 1988). Social capital also drives efficiencies by reducing the amount of time and energy expended during negotiations and consensus building. Elevated social capital means that less time is spent confirming trustworthiness and potential for mutual benefit. Essentially, social capital theory suggests that positive social interaction generates goodwill among individuals, which can then function as currency for many purposes.

Morris et al. refers to work by Zev Trachtenberg and Will Focht (2005) which explains that stakeholder participation in a collaboration is influenced by trust judgements, which fall into two categories: social trust and official trust. Social trust refers to the level of trust among stakeholders and is based on a perception that other stakeholders will also participate in the collaboration. Official trust refers to the level of trust between stakeholders and public officials and is based on the stakeholder’s perceptions of how well officials honor their responsibility to
act as stewards of stakeholder interests. When applying this typology of trust in an agency-based collaboration where the stakeholders are public officials, social and official trust are closely linked.

Social capital is also tied to the idea of stewardship. Stewardship is the responsibility for overseeing and protecting something considered worth caring for and preserving. As a steward, one does not own the object or problem. Civic problems indicate responsibility is shared among a community. Citizens gain a personal connection to the location of the problem and the community that has been developed through social capital and stewardship. “The commitment to place reflected in BIMBY (Because It’s My Back Yard) may prove to be a more sustainable motivating force than NIMBY (Not in My Back Yard)” (Morris et al., 2013, p. 226).

Research has found that homogeneous networks have higher levels of social capital than heterogenous networks. Social Capital’s core components: mutual trust, norms of reciprocity, and networks link citizens together and enables them to pursue a common goal more effectively. A study by Coffé (2009), which focused on the relation between community heterogeneity and social capital, found that the level of social capital is significantly and negatively related to the level of heterogeneity in a network. “Social capital is likely to be weaker in heterogeneous communities because people have more trust in and feel more comfortable interacting with others who are similar to themselves, for example in terms of race and ethnicity” (Coffé, 2009, p.156).

*Social Capital in the Workplace*

In his book entitled, *Bowling Alone* Putnam (2001) explored social capital and the impact that economic changes have had on the family structure and the workplace. Putnam explained that broad economic changes since the 1960s made it more difficult for families to meet their
essential needs with one income. The need for more income caused more people to join the paid workforce, particularly women. Not only are more people working, but they are also spending more time at the workplace. A 40-hour work week is the standard in the United States. Yet a recent Gallup poll reported that adults employed full time in the U.S. report working an average of 47 hours per week (Isidore & Lubby, 2015). If people are working nearly a full day more per week, then this naturally leaves less time for socialization outside of the workplace.

Putnam posited that since more people are working outside the home than a generation ago, perhaps they have simply transferred more of their friendships, civic discussions, and community ties from residence-based to workplace-based networks (Putnam, 2001, p. 85). “These days people get about 90 percent of their social connections from the workplace” (Putnam, 2001p. 86). This statement suggests that perhaps people are integrating their socialization and vocation in one setting: the workplace.

Despite the extra time that is reportedly spent at the workplace, establishment of team project practices, and personalized office space, Putnam stated that “I [Putnam] know of no evidence whatsoever that socializing in the workplace, however common, has actually increased over the last several decades. Americans’ most important personal networks are not centered mainly at the workplace” (Putnam, 2001, p. 87). Putnam posits that the reason for less social interaction, despite more time being spent in the workplace, results from a breach in the implicit employment contract. The employment contract is the unwritten understanding that as long as an employee performs their job requirements, they would remain employed at the same firm. Downsizing, restructuring, reengineering of firms in the 1980s-90s lead to mass layoffs and increased distrust of employers. Job insecurity caused employee anxiety and has left employees to focus more narrowly on their own jobs and less on social relationships.
Burt (1997) discovered that when contemporary organizations shift away from bureaucratic structure (with layers of formal control) in favor of a flatter structure (negotiated informal control), it impacts social capital among managers. Burt (1992) defines social capital as the “friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital” (p. 9). In market terms, “invested capital, multiplied by the going rate of return, equals the profit to be expected from the investment” (Burt, 1992, p. 58). A person who invests their social capital into a group setting has a higher rate of return than a person who does not. Burt explains that coordination costs that were once mandated through a hierarchical structure, are transferred to individual managers who are responsible for “coordination across broader domains” (Burt, 1997, p. 360).

The flatter structure creates a higher level of uncertainty, stress, and potential conflict, but also opportunities to develop social capital. The flatter organizational structure enables managers to focus on teamwork and consensus decision making, which increases opportunities for social interaction and new perspectives on professional development. Burt (1997) found that managers with fewer peers were in a better position to “read the diverse interests in their organization to define needed policy and to know who can be brought together productively to implement policy” (p. 345). A manager that is not beholden to “corporate convention or a boss” can find value in relying on collaborative relationships and social capital development (Burt, 1997, p. 345). “The shift away from bureaucracy is a shift to social capital as the medium for coordination within the organization” (Burt, 1997, p. 359). When coordination involves information sharing, common interests, and mutual goals, as in a collaborative setting, the more successful participants are ones that have established social capital and will have better access to information and resources. By applying the EMC to an agency-based collaboration, this study
examines indicators of social capital as demonstrated through pro-social behaviors and the presence of collective output.
CHAPTER III
RESEARCH DESIGN AND METHODOLOGY

This chapter explains the research design and both qualitative and quantitative methods employed to collect data and discover themes that would support this research. The qualitative methods include individual interviews and document analysis. The quantitative method includes the AHAC Collaboration and Social Capital web survey. This study has been approved by the ODU Strome College of Business, Human Subjects Review Committee (#917679-1).

Research Design

This single case study uses a mixed methods research design. “A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2013, p. 15). Because this is an embedded single case study, more than one unit of analysis is analyzed. At the first level, the unit of analysis is the AHAC and the collaborative partners that participate to accomplish their mission. The next level of analysis is of the individual actors within the AHAC organization with particular attention to factors that determine levels of social capital, which includes motivations, contributions, expertise, and actions within the organization.

This single case study represents a critical test of the EMC framework and validation of its findings in the seminal study. This study uses concurrent exploratory strategy. The AHAC is a common case of regional emergency management collaboration and will increase understanding of REMC collaboration by examining the contextual and operational conditions in which it exists. The AHAC collaboration was selected because it exhibits the characteristics of a collaboration that satisfies the EMC theoretical framework.
Preliminary data collected via informational interviews and document analysis provides historical and contextual description. The demographic and variables that support the social capital construct data are collected from the AHAC participants via web survey. The interview questions and survey instrument are modified versions of the original study by Morris et al. (2013). Participant responses are coded to ensure anonymity.

Population

As previously indicated, the population for this study is the participants of the All Hazards Advisory Committee (AHAC), a multisector regional emergency management committee in Hampton Roads. Below, Figure 2 displays categories of the multisector stakeholder organizations that contribute to AHAC’s collaboration. Hampton Roads is a region in the southeastern Virginia. AHAC has sixty-six (66) members, which includes representatives of local, state, military, private and nonprofit organizations, health institutions, and universities. Seventeen (17) of the members are emergency managers who represent localities in the Hampton Roads region. Historical and descriptive data was obtained from AHAC administrative staff through personal interviews, email correspondence, and documents. A link to a web survey, entitled, “AHAC Collaboration and Social Capital” was distributed to the AHAC members. The diagram below illustrates the network of stakeholders that are included in the Hampton Roads AHAC. The AHAC organization implements the “whole community” philosophy to engage stakeholders and experts from multiple sectors in building a more resilient community.
Data Collection

Several sources of data were used for this study. This section describes the interview, survey, and document analysis collection methods employed. The interview and survey instruments are modified versions of the original study by Morris et al. (2013). The order, quality, and clarity of the interview and survey questions were developed under the advisement of the dissertation committee. HRPDC supplied the AHAC member roster, which was used to distribute the online survey and other necessary communication regarding survey reminders and scheduling interviews. Interview and survey responses were coded to preserve the anonymity of the respondents’ identity.
Interviews

A major source of data for this study were individual interviews of AHAC members. Interviews were conducted with All Hazards Advisory Committee (AHAC) members and Hampton Roads Planning District Commission (HRPDC) staff using the snowball sampling method. The purpose of interviews was to collect background, history, and contextual information regarding the organization. Eight interviews were conducted between June - September 2016, which included one HRPDC employee, five local emergency managers, one nonprofit organization representative, and one college professor. Each interviewee has a role that contributes to the AHAC collaboration.

I was able to gain access to the AHAC members by following a chain of command at the HRPDC. First, I approached the HRPDC Assistant Emergency Management Planner to obtain permission to conduct the study. Once approved, I contacted the HRPDC Regional Emergency Management (REM) Administrator and AHAC Chairman for their authorization to attend AHAC meetings, interview members, and distribute the survey. The AHAC Chair invited me to attend the subsequent AHAC meeting to introduce myself and my research plans to members. AHAC members were welcoming and generally interested in the topic and intent of this study.

Following the meeting, I began to schedule individual interviews with the local emergency managers. They were scheduled over email correspondence. I sent each interviewee a description of the dissertation and an ODU Interviewee Informed Consent document to sign in accordance with IRB regulations. Interviews were conducted individually in office settings and were recorded with consent and subsequently transcribed. The transcripts of the interviews were reviewed to identify important themes consistent with the EMC framework.
In order to build rapport with interviewees, questions were presented in a conversational style. After a brief discussion of the purpose of the research and receipt of a signed consent form from the interviewee, I began the interview and tried to keep to a one-hour timeframe. I used a semi-structured interview protocol, which allowed for unscripted follow up questions to be asked in order to gain pertinent insight and details. At the conclusion of each interview, the interviewee was given the opportunity to share additional thoughts that they had that were not discussed. They were also asked to name other individuals who were important to the AHAC collaboration and should be contacted. These individuals were subsequently contacted and interviewed. Names were often mentioned multiple times and were either already interviewed or on my list to contact.

Survey

Social capital is a construct that cannot be measured directly but can be inferred from its indicators. The indicators are factors that have an impact on social interactions and therefore allow social capital to occur. The purpose of the survey was to capture indicators such as demographic descriptors, levels of social interaction, trust, and commitment to place that support the collaboration and social capital construct variables. As previously stated, the survey instrument, entitled, “AHAC Collaboration and Social Capital” is a modified version of the original study by Morris et al. (2013) and was reviewed by the dissertation committee.

Part of the survey was developed by the Civic Engagement in America Project at Harvard’s Kennedy School of Government to measure why and to what extent citizens are willing to get involved in local civic activities. It was developed as an efficient way for researchers to measure citizens’ level of active engagement in local affairs and is the most widely used such instrument in the United States. More than 30,000 Americans have
participated in the survey in cities across the United States. A link to the web-survey was distributed via email to the AHAC members and the HRPDC REM Administrator.

Other questions ask about interest and participation in the All Hazards Advisory Committee (AHAC). These questions were developed by the researcher under the advisement of a research committee and will be used to better understand participation in this local effort. The survey included 31 multiple choice questions and one option to provide an open comment. Due to the sensitive nature of some questions, respondents were permitted to opt out of answering individual questions. The entire survey was estimated to take about 10 minutes to complete.

Participants were given two weeks to complete the survey. Responses were closely monitored and assistance with technical difficulties was provided as needed. Below is Table 1., which illustrates the timeline of the survey data collection process:
Table 1. Survey Data Collection Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 12</td>
<td>The “AHAC Collaboration and Social Capital” survey was distributed via email to all AHAC members and the HRPDC REM Administrator with a deadline of August 26 to complete the survey.</td>
</tr>
<tr>
<td>August 22</td>
<td>Individual reminders were emailed to those who had not completed the survey.</td>
</tr>
<tr>
<td>August 26</td>
<td>The first deadline to complete the survey.</td>
</tr>
<tr>
<td>August 29</td>
<td>Non-respondents were notified via individual emails of an extension to complete the survey by September 2.</td>
</tr>
<tr>
<td>August 29-September 2</td>
<td>Individual reminders were emailed to those who had not completed the survey.</td>
</tr>
<tr>
<td>September 2</td>
<td>The second deadline to complete the survey.</td>
</tr>
<tr>
<td>September 2-22</td>
<td>Individual phone calls and emails were sent to non-respondents to remind them to complete the survey.</td>
</tr>
</tbody>
</table>

Multiple phone calls and emails were key to gaining more survey responses. Telephone conversations were valuable because they provided an opportunity to address any reservations or questions regarding the survey.

Answers to survey questions were aggregated with other members of the All Hazards Advisory Committee. All individual responses were kept strictly confidential and coded so that no respondent could be individually identified. Participants were encouraged to contact me directly if they had any questions. Forty-four (44) of the sixty-six (66) potential respondents participated in the survey, which is a 67% response rate. Representatives from nearly all Hampton Roads localities participated in the survey.
Morris et al. (2013) described the importance to place as a motivator for citizens to “protect their immediate surroundings from perceived harm…because the problems are local, immediate, and salient” (p. 13). Morris et al, terms this motivation as “BIMBY”, which stands for “Because It’s My Backyard.” BIMBY is used to describe situations where the potential or additional harm from inaction motivates like-minded citizens to initiate or get involved with efforts that directly address the problem. The nature of the emergency management profession implies that AHAC members are committed to actively making the Hampton Roads region a safer place. It is supported by the longevity of their service. Twenty-four (24) survey participants have worked with regional emergency management under the HRPDC since before 2009, including 7 respondents who began before 1999. A more detailed description of the AHAC survey responses will be discussed in Chapter IV.

Document Analysis

Because AHAC is a government-based collaboration under the HRPDC regional subdivision of the Commonwealth, the organization exists in a political and bureaucratic environment. The context in which AHAC operates is contingent upon federal, state, and local policies, which were reviewed using online sources including: organizational and government websites, Google searches, academic databases, and news journals. With permission from AHAC, I was able to review policies, meeting agendas, the membership roster, and planning documents. Documents were reviewed to identify EMC constructs and themes identified from the interviews and meeting observations and information to produce the data that is presented in the results section of this case study.
Potential Errors and Bias

Potential errors and biases that could occur with survey research include coverage error, sampling error, and measurement error, and response bias. These errors and biases cannot be eliminated completely, therefore the researcher will attempt to minimize these errors.

Coverage Error

Coverage error is a type of bias that does not give all members of a population an equal chance of being selected for the survey. Coverage bias will be minimized in this study because the web survey will be distributed to all known members the AHAC. If members of the population are unable to access the web survey, then alternative survey formats will be made available.

Sampling Error

Sampling error occurs when the sample size is too small to adequately infer survey results to non-respondents. This case study focuses exclusively on the members of the AHAC, which is under 70 people. The survey questionnaire will be administered to the full population, which will also serve as the sample size. The results reflect the results of the AHAC members, but do not suggest the same results for anyone outside this group.

Measurement Error

Measurement error occurs because of a poorly designed survey instrument. Most commonly, errors result from poor question wording, faulty assumptions, and imperfect scales. The survey tool in this case study is a modified version of the social capital survey that was used in a previous study. The questions will be adapted to the extent that is needed for the context of this case study.
Response Bias

Response bias is the effect of nonresponses on survey estimates (Fowler, 2002). Bias means that if non-respondents had responded, their responses would have substantially changed the overall results. To minimize response bias, the responses will be monitored using wave analysis. The wave analysis procedure requires the researcher to examine select responses periodically to determine if average responses change (Leslie, 1972). A deadline for submission of the survey will be established and conveyed to the members. Reminders will also be periodically sent to non-respondents.

Confidentiality & Anonymity

Maintaining confidentiality of information collected from research participants means that only the investigator can identify the responses of individual subjects. Identifying information (name, address, phone number) are not relevant to this research. Any identifying information that was provided by participants was kept confidential. Email addresses were used to distribute the web-survey, however participant responses were coded to protect confidentiality of information.

Limitations

Limitations of this single case study derive from the scope of the single case study which opens the opportunity for threats to both conclusion and external validity. First, this study assumes that there is a relationship between collaboration and social capital constructs based on theoretical foundations. This relationship is a logical inference. However, this study does not account for other factors outside of social capital to explain the foundations for trust, honesty, and reciprocity. There is the potential that the small sample size makes the measured amount of social capital in the group unreliable. Secondly, while the findings are applicable to furthering
the understanding of collaboration and social capital constructs, the unique results from this single case study threaten external validity because they cannot be directly generalized to other regional collaborations.

Morris et al. administered a collaboration and social capital survey to identify whether indicators of social capital were present among volunteers of grassroots watershed collaborations. However, the research team found the results to be impracticable. Therefore, the survey results presented in Chapter IV and analyzed in Chapter V are unique to this study of agency-based collaboration and cannot be mapped to the seminal study of grassroots collaboration and social capital. In addition to the setting, the inclusion of the Collaboration and Social Capital survey results account for the differentiation of the two studies.

The EMC framework developed by Morris et al. is designed as a descriptive model that integrates components of collaborative governance to identify a system of interlinked descriptive constructs to indicate whether an organization exhibits conditions conducive to collaboration. The interlinked descriptive constructs include context, collaboration process, output, outcomes, and social capital. It is a conceptual framework that can be applied to researching, practicing, and evaluating collaboration in various policy domains and settings. It is not a predictive model, nor does it quantify levels of collaboration. The EMC framework tells the story of what is occurring at a point in time and can help to understand the interaction of variables are contributing to the outputs and outcomes. The EMC framework provides the structure for this case study that examines whether the EMC grassroots collaboration constructs are generalizable to the AHAC agency-based collaboration setting.

Furthermore, the original research plan included interviews with the Virginia Department of Emergency Management (VDEM) Administrator and additional local emergency managers.
However, these interviews were cancelled due to storm preparations for Hurricane Matthew, which was making its way up the east coast as a category 4 hurricane (Hurricane Matthew Virginia Impacts). Hurricane Matthew was reclassified as a post tropical cyclone by the time it approached Virginia’s coast during October 8-9, 2016. In Hampton Roads, the populated areas of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach were the hardest hit. Naval Air Station Oceana reported that Matthew generated 75 mph wind gusts and accumulated rainfall of 12.16 inches in Virginia Beach. State and local emergency management operations were deployed to prepare citizens on Virginia’s east coast for Matthew’s impact and subsequent recovery efforts. The population of this study was directly involved in these deployment efforts and were therefore not available to be interviewed.

Diagram 3 is below and illustrates how the Enhanced Model of Collaboration framework would appear in an emergency management setting. This diagram provides a snapshot of how collaboration constructs are categorized in an agency-based collaborative emergency management setting.
Figure 3. Enhanced Model of Collaboration Framework for Emergency Management

Table 2 illustrates the variables and data mapping table and is displayed on the following three (3) pages. The table aligns each inquiry, method of inquiry, and the variable that corresponds with the EMC framework for emergency management.
Table 2. Variables and Data Mapping

<table>
<thead>
<tr>
<th>Inquiry</th>
<th>Data Source</th>
<th>Variable(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Background Information</td>
<td>Documentation Analysis</td>
<td>National, State &amp; Local Policies, Agendas, History</td>
</tr>
<tr>
<td>- When was the AHAC formed and who was involved?</td>
<td>Interview Question</td>
<td>Agendas, History</td>
</tr>
<tr>
<td>- What factors influenced the formation of the AHAC?</td>
<td>Interview Question</td>
<td>History</td>
</tr>
<tr>
<td>- What do you think are the most important events in the history of the AHAC?</td>
<td>Interview Question</td>
<td>History, Efficacy</td>
</tr>
<tr>
<td>- In your opinion, in what ways is the HRPDC helping the AHAC to achieve its mission?</td>
<td>Interview Question</td>
<td>Efficacy, Legitimacy</td>
</tr>
<tr>
<td>- The Hampton Roads jurisdictions are geographically connected. Political culture is labeled as mixed (individualistic, moralistic, traditionalistic) and is held constant because the participants in this study live, work, and recreate in multiple Hampton Roads jurisdictions regularly. For more information, see Morris et al., 2013, p. 27-29 &amp; 219-220.</td>
<td>--</td>
<td>Political Culture</td>
</tr>
<tr>
<td>- Does the AHAC have a specific set of goals to achieve?</td>
<td>Interview Question</td>
<td>Nature of the Problem</td>
</tr>
<tr>
<td>- Do you feel that all stakeholders in emergency management are represented in the process?</td>
<td>Interview Question</td>
<td>Resources, Social Capital, Stakeholders</td>
</tr>
<tr>
<td>- What, if any, other regional collaborations were in existence before the AHAC?</td>
<td>Interview Questions</td>
<td>History, Social Capital, Legitimacy</td>
</tr>
<tr>
<td>- How is the AHAC funded?</td>
<td>Interview Question, Document Analysis</td>
<td>Resources</td>
</tr>
<tr>
<td>- I think the All Hazards Advisory Committee has the resources needed to accomplish its mission.</td>
<td>Survey Question</td>
<td>Resources</td>
</tr>
<tr>
<td>- How are participants selected?</td>
<td>Interview Question, Document Analysis</td>
<td>Stakeholders &amp; Roles, Governance Structure</td>
</tr>
<tr>
<td>- How are committees selected?</td>
<td>Interview Question, Document Analysis</td>
<td>Stakeholders &amp; Roles, Governance Structure</td>
</tr>
<tr>
<td>- How are the leadership positions selected?</td>
<td>Interview Question, Document Analysis</td>
<td>Stakeholders &amp; Roles, Governance Structure</td>
</tr>
<tr>
<td>- Do you feel that all stakeholders are represented in the process?</td>
<td>Interview Question</td>
<td>Stakeholders &amp; Roles</td>
</tr>
<tr>
<td>- Was there someone who led the charge to organize the AHAC?</td>
<td>Interview Question</td>
<td>History, Conveners</td>
</tr>
<tr>
<td>- How is the AHAC structured?</td>
<td>Interview Question, Document Analysis</td>
<td>Governance Structure</td>
</tr>
<tr>
<td>- How are goals selected?</td>
<td>Interview Question, Document Analysis</td>
<td>Governance Structure</td>
</tr>
<tr>
<td>- What assessment tools do you have in place to measure changes influenced by the AHAC on emergency management policy and practice?</td>
<td>Interview Question</td>
<td>Plans, Agreements, Partnerships, Scientific Reports &amp; Projects</td>
</tr>
<tr>
<td>- Describe any plans, reports, and projects that have been a product of the AHAC.</td>
<td>Interview Question</td>
<td>Plans, Agreements, Partnerships, Scientific Reports &amp; Projects</td>
</tr>
<tr>
<td>- Has the AHAC influenced new regulations, policy changes, or in emergency management?</td>
<td>Interview Question</td>
<td>Changes in Quality Standards</td>
</tr>
<tr>
<td>- Describe the types of training &amp; exercises that AHAC members participate in.</td>
<td>Interview Question</td>
<td>Education &amp; Awareness</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Data Source</td>
<td>Variable(s)</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>- Has the AHAC influenced operational changes in emergency management?</td>
<td>Interview Question</td>
<td>Changes in Ethics &amp; Behaviors</td>
</tr>
<tr>
<td>- My views on emergency management issues have changed since I joined the All Hazards Advisory Committee. - I think the activities of the All Hazards Advisory Committee have had a positive impact on regional emergency management.</td>
<td>Survey Question</td>
<td>Changes in Ethics &amp; Behaviors</td>
</tr>
<tr>
<td>- In your judgement, has the quality of emergency management policy and practice changed as a result of the AHAC activities? Examples? - In your judgement, is Hampton Roads a safer and more secure region because of the impact of the AHAC?</td>
<td>Interview Question</td>
<td>Changes in Emergency Management Quality, Efficacy</td>
</tr>
<tr>
<td>- What is your perception as to how the participants generally interact with each other (demonstrate trust, transparency, inclusive discussion)?</td>
<td>Interview Question</td>
<td>Trust</td>
</tr>
<tr>
<td>- Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? - How much do you think you can trust people in your neighborhood? - How much do you think you can trust the police in your local community? - How much do you think you can trust the elected officials in your local community? - How many times in the past twelve months have you had friends over to your home? - How much do you think you can trust people in the All Hazards Advisory Committee? - How much of the time do you think you can trust the NATIONAL government to do what is right? - How much of the time do you think you can trust the STATE government to do what is right? - How much of the time do you think you can trust the LOCAL government to do what is right? - How many times in the past twelve months have you been in the home of someone of a different neighborhood or had them in your home? - How many times in the past twelve months have you been in the home of someone you consider to be a community leader or had one in your home?</td>
<td>Survey Question</td>
<td>Trust</td>
</tr>
<tr>
<td>- I feel that I have an active voice in the All Hazards Advisory Committee. - How interested are you in politics and national affairs? - How interested are you in politics and state affairs? - How interested are you in politics and your local community’s affairs? - I think there is a role for government regulation to help prepare communities for potential threats.</td>
<td>Survey Question</td>
<td>Legitimacy</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Data Source</td>
<td>Variable(s)</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<td>---------------------------</td>
</tr>
</tbody>
</table>
| - Involvement in the All Hazards Advisory Committee has resulted in the following: 1: Mutual aid agreements (MAA) between jurisdictions 2: Continuity of Operations (COOP) plans 3: Emergency Management Assistance Compacts (EMAC) 4: Grant awards 5: Disaster Service Contracts 6: Public/Private Partnerships  
- Working collaboratively with multiple sectors (government, non-profits, businesses, hospitals, universities, and military) is the best way to ensure the safety and security of communities. | Survey Question   | Reciprocity               |
| - How many times in the past twelve months have you volunteered?  
- How many times in the past twelve months have you attended any public meeting in which there was discussion of town or school affairs?  
- How many times in the past twelve months have you worked on a community project?  
- Are you currently registered to vote?  
- Not including weddings and funerals, how often do you attend religious services?  
- In the past twelve months, have you served as an officer or served on a committee of any local club or organization?  
- How many times in the past twelve months have you attended a political meeting or rally?  
- Has participation with the All Hazards Advisory Committee made you feel more connected to your community? | Survey Question   | Commitment to Place       |
| - Besides the All Hazards Advisory Committee, do you participate with any other emergency management groups?  
- Has participation with the All Hazards Advisory Committee made you feel more connected to other participants in the AHAC?  
- How many times in the past 12 months have you attended any club or organizational meeting (not including meetings for work)? | Survey Question   | Social Capital            |
This chapter explained the research design with details of both qualitative and quantitative methods employed to collect data. A mixed methods approach to research is key to contextualizing participant experiences in a real-world setting. Individual interviews and document analysis, and observations of meetings provided individual perspectives that are valuable to identifying the motivations, feelings, and expectations of AHAC participants. The data captured from the AHAC Collaboration and Social Capital web survey validated the extent to which collaboration and social capital is present in AHAC. The case study results will be presented in Chapter IV and organized according to the constructs of the EMC theoretical framework.
CHAPTER IV
RESULTS OF THE STUDY

Introduction

Chapter III discussed the research designs of the seminal study on grassroots collaboration and this differentiated replication study on agency-based collaboration. This chapter presents the results and findings from the agency-based collaboration study, which includes both the qualitative stage and quantitative stages.

The qualitative stage of this study relies on interviews, document analysis, and observation of committee meetings to explain the extent to which collaboration is present among AHAC members. The researcher used semi-structured interview protocols developed from the EMC theoretical framework. The in-person interviews were conducted by the researcher between August and November 2016. Snowball sampling was used to identify AHAC members who were knowledgeable about AHAC history, operations, goals, and culture. The sampling frame for the eight interviews included five local emergency managers, a regional emergency management administrator, one scientist who developed collaboration scoring methodology for state funding allocation, and one representative of a regional higher education partner agency.

An online quantitative survey was also administered to all AHAC members and the REM Administrator to explore perspectives on collaboration and the presence of social capital. Survey questions were distributed to the AHAC members via a web-survey. Survey participants were able to opt out of specific questions at their discretion. The total number of online surveys completed was 44 (N=44); which is 67% of the population.

The population for this study is the sixty-six (66) members of the All Hazards Advisory Committee (AHAC), which includes representatives of local, state, regional, and federal
government agencies, military, private industry, nonprofit organizations, health institutions, and universities. Seventeen (17) of the members represent localities in the Hampton Roads region.

The central purpose of this dissertation is to determine to what extent the Enhanced Model of Collaboration framework can be used to explain collaboration in an agency-based setting. To demonstrate that the Enhanced Model of Collaboration is a viable framework for explaining agency-based collaboration, this chapter is organized according to the constructs of the EMC theoretical framework: context, process, output, outcomes, and social capital. It begins by explaining the historic circumstances that led to AHAC’s formation. As a government-based collaboration AHAC exists in a context of national, state, and local laws and policy initiatives that govern the domain in which it operates. Embedded in local context are the history of the regional governance, political culture, the nature of regional emergency management problems in Hampton Roads, and the amount of social capital present in the community at the onset of the collaborative efforts. The EMC collaboration process addresses organizational structure, the role of stakeholders, conveners, resources, and rules and governance. Next, this section will discuss outputs, which Morris et al. describe as “intermediary causal mechanisms between collaboration process and collaborative outcomes” (Morris et al. 2013, p. 43). Regional emergency management outcomes are determined by the efficacy of the collaboration in influencing changes to emergency management systems and practices as well as social structures that increase social capital. Additionally, this study looks at how the All Hazards Advisory Committee members are using collaboration to implement emergency management policy and the role of social capital and its effect on collaboration among AHAC members.

The final section of Chapter IV lists key findings from the grassroots collaboration study to examine the extent to which the similar findings were also present in the agency-based
collaboration. A combined analysis of the findings from the grassroots and agency-based collaboration studies will be discussed in Chapter V.

**Context**

*History of Regional Government in Virginia*

In Virginia, Planning District Commissions (PDCs) are political subdivisions of the Commonwealth that were formally established by the Virginia Area Development Act (VADA) (a.k.a. Hahn Commission) in 1968 to “foster intergovernmental cooperation by bringing together local elected and appointed officials and involved citizens to discuss common needs and determine solutions to regional issues” (Planning District Commissions, 2012). Largely fueled by the economic boom of post-World War II, localities recognized a need to work together to manage common growth and infrastructure concerns that transcended local boundaries. During that time, many states that were experiencing similar trends toward establishing regional authorities through local coordination. Instead of a bottom-up initiative, Virginia’s regional planning efforts were orchestrated from the top-down by the General Assembly and administered by the Division of State Planning and Community Affairs (DSPCA). Virginia PDC boundaries were established based on criteria that a region would satisfy the Standard Metropolitan Statistical Areas by the U.S. Census, a minimum of three independent governments, a population of at least 100,000 people, and have a geographic boundary small enough that the driving distance for commission members be reasonable (Regional Governance Promise and Performance, 1973). The Virginia PDC boundaries were quickly drawn and publicly announced in July 1969.

The VADA does permit Virginia PDCs the autonomy to “determine the number of commissioners, terms of office and method of selection, voting rights, dues, frequency and
Virginia PDCs are required to develop regional strategic plans with input from stakeholders, review local grant and loan applications to state and federal agencies, provide technical assistance to localities, identify opportunities and conduct studies on issues of regional significance, and advise on shared public services which include but are not limited to: economic and physical infrastructure development; solid waste, water supply and other environmental management; transportation; criminal justice; emergency management; human services; and recreation. The Virginia Association of Planning District Commissions (VAPDC) is a nonprofit organization that provides resources to foster coordination and cooperation among PDCs, localities, and state and federal agencies.

Hampton Roads Planning District Commission

The HRPDC, one of 21 Planning District Commissions in the Commonwealth of Virginia, is a regional organization representing seventeen local governments in the southeastern region of the state. It was formed in 1990 by the merger of the Southeastern Virginia Planning District Commission and the Peninsula Planning District Commission. The seventeen local jurisdictions include the cities of: Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Virginia Beach, Suffolk, and Williamsburg; the counties of Gloucester, Southampton, James City, Surry, York, Isle of Wight; and the town of Smithfield.

According to the Code of Virginia/Regional Cooperation Act 15.2-4200, voting representation on the HRPDC Commission includes one elected official and the Chief Administrative Officer (CAO) from the member localities. Additional representation is based on population with one representative for each 50,000 people or portion thereof. Commission
representatives are appointed by the governing body (City Council or County Board of Supervisors) of the member localities.

Member governments contribute an annual contribution to the HRPDC at a $0.80 per capita rate as approved in FY2013. According to a community profile report sponsored by the HRPDC which featured data provided by the Virginia Employment Commission, U.S. Census Bureau, and the Bureau of Labor Statistics (last updated on 11/9/17), there are 1,666,310 people living in Hampton Roads. The most populated jurisdictions are Virginia Beach (437,907), Norfolk (245,115), and Chesapeake (237,940).

The EMC framework includes a set of contextual variables that “define the setting for collaborative action” (Morris et al, 2013). The historic context from which the AHAC collaboration was formed supports the EMC context component of the model because it identifies AHAC’s origin as an agency-based collaboration with roots in regional government. The AHAC is under the authority of the Hampton Roads Planning District Commission and includes entities in the southeastern region of Virginia. The contextual elements describe the intentions, influences, and motivations that shape AHAC’s formation. Specifically, the Virginia Area Development Act (VADA) established regional Planning District Commissions in Virginia to foster intergovernmental cooperation pertaining to issues of regional significance. In this case, the AHAC members collaborate to address pertinent emergency management issues of regional significance.

Initial Social Capital

Regional multi-stakeholder collaboration is difficult to achieve without a sufficient level of initial social capital (Morris, et al., 2013). Stakeholders gain resources from connections to one another, which can generate mutual trust, norms, and communication. This section
describes the foundations of social capital in the Hampton Roads emergency management community and a political landscape that reinforced regional collaboration and social capital.

During the 1980s, Fire Chiefs and Emergency Coordinators in Hampton Roads began planning for large-scale emergencies that could impact more than one jurisdiction. They identified a potential risk and decided that the best way to mitigate the risk was to coordinate with colleagues across the region to build a network of both expertise and resources. These actions are characterized as the “initial social capital” that formed a regional emergency management network and eventually became the Hampton Roads Emergency Management Committee (HREMC). The Fire Chiefs and Emergency Coordinators exhibited mutual interests, goals, and trust to become involved in the initial stages of collaboration. As described by one interviewee,

The concept was that all large-scale emergencies, most large-scale emergencies handled were disasters, were not jurisdiction-specific, were across jurisdictional lines. We all realized that it takes a good collaborative, cooperative effort to be able to effectively prepare for, respond to, and recover from a major disaster. So, back in the 80’s, we established HREMC. It originally started as a networking group among the emergency managers of Hampton Roads.

The HREMC evolved to include essential private entities, such as, Dominion Power, Cox Communications, Verizon, and military facilities that regularly participate in HREMC meetings. The HREMC was the initial regional multi-stakeholder professional networking organization and predecessor of the All Hazards Advisory Committee (AHAC).

During the 1990s, the HRPDC added a Regional Emergency Manager position to coordinate regional efforts. Just as the existing Regional Transportation Manager oversees the Regional Transportation Technical Advisory Commission (RTTAC), the Regional Emergency Manager would oversee the Regional Emergency Management Technical Advisory Commission
Both the HREMC and REMTAC functioned under the coordination of the HRPDC regional emergency manager.

The terrorist attacks on September 11, 2001 dramatically impacted emergency management operations nationwide. As one interviewee explained, “It changed the trajectory in emergency management and disaster response.” Instead of planning for “if” a disaster occurs, HREMC & REMTAC began preparing for “when” a disaster occurs. Since Hampton Roads emergency coordinators and fire chiefs had previously established relationships and communicated regularly, they were ready to quickly apply new the federal initiatives to regional emergency management planning.

Initial social capital’s influence on the formation of regional emergency management initiatives in Hampton Roads supports the EMC context component of the framework. Morris et al. (2013) contend that social capital is a central tenet of collaboration. Collaboration is a challenging endeavor that requires social trust. Social capital is essential to the initial formation of collaboration because it depends upon existing social trust among founding stakeholders. The foundational actions of the Fire Chiefs and Emergency Coordinators in Hampton Roads are evidence of the presence of social capital that facilitated their agreement to collectively pursue regional emergency management initiatives. Their efforts culminated in the institutionalization of regional emergency management under the HRPDC authority.

*Emergency Management Policy and Collaboration*

In 2011, FEMA initiated a “whole community” initiative that encourages a less government-centric approach to emergency management by engaging the full capacity of the private and nonprofit sectors, including businesses, faith-based and disability organizations, and the general public, in conjunction with the participation of local, tribal, state, territorial, and
federal governmental partners. (Whole Community Approach, 2011). As described in the document,

Whole community is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests. By doing so, a more effective path to societal security and resilience is built.

Whole community strategies include having first-hand knowledge of the complexity of local communities, recognizing their capabilities and needs, fostering relationships with community leaders, building and maintaining partnerships, empowering local action, and leveraging and strengthening social infrastructure, networks, and assets (Whole Community Approach, 2011, p. 4). The whole community approach is intended to empower community members as a starting point for long-term relationship building that would lead to a more resilient environment.

Also, in 2011, Hampton Roads became one of 10 regional jurisdictions in the nation to be selected for the Regional Catastrophic Preparedness Grant Program (RCPGP). This multi-year grant program is managed by FEMA to assist localities with developing a planning process that is inclusive of all community stakeholders. It supports a framework for the development and sustainment of communication, coordination, and unity of effort in support of the National Preparedness Framework (NPF). The RCPGP sites are expected to develop new regionally coordinated plans focused on the scenarios deemed most appropriate for their region and prepare for the implementation of those plans by addressing the need to train, exercise, and evaluate and improve the plans as needed.

In 2013, a Joint Legislative Audit and Review Commission (JLARC) study was conducted to review the “ongoing planning and preparedness efforts throughout the Commonwealth with regard to homeland security and emergency management” in part for the
The purpose of improving the grant management and monitoring processes as recommended by a federal audit (JLARC Study, 2013, p. 3). Previous concerns with VDEM’s oversight of homeland security grants were identified in a November 2012 audit conducted by the DHS Office of Inspector General that found several infractions, including: insufficient policies and procedures to monitor grant recipients throughout the grant performance period; grant recipients’ procurement and management procedures did not comply with federal, state, or local requirements; the State did not award funds to grant recipients in the federally required timeframe; and not all grant funds were expended within the grant performance period.

As a result of the JLARC study, VDEM has identified corrective actions to address the grants monitoring process that would ensure grant funds are used for stated purposes and in compliance with all government requirements. The following statement from the JLARC (2013) study identifies how VDEM has chosen to realign the grant allocation process,

VDEM and the Office of the Secretary of Veterans Affairs and Homeland Security have improved the allocation process by considering the level of risk addressed by a project to help prioritize funding decisions, using the Secure Commonwealth Strategic Plan to determine which initiatives will be funded with grants, and requiring all grant-funded projects to be submitted collaboratively on a regional basis. (JLARC Study, 2013, p. viii)

The VDEM released an informational flyer addressing its reorganization and revised approach to grant funding in the commonwealth. It explains that the stakeholder-driven peer review process for State Homeland Security Program (SHSP) grants will now include a revised scoring formula that will determine which projects receive funding. The revised scoring formula now “places greater weight on regional collaboration” and will be reviewed to “ensure the project aligns to the current regional priorities, as deemed by the stakeholders” (VDEM Reorganization FAQs, 2015).
In Hampton Roads, the peer-reviewed grant rating process is implemented at an annual stakeholders meeting. A new evaluation tool was developed at the Virginia Modeling Analysis and Simulation Center (VMASC) by its lead scientist. The scientist “built a collaborative tool for the purpose of getting grant money that incorporates everyone's values and preferences into a model, and then evaluates proposals for grant money against the criteria that the group themselves have generated.” The scientist explained that historically, the VDEM-funded projects that would potentially result in the largest risk reduction for the region and/or state without accounting for the cost of the project. Under that method, very few projects were funded. As one interviewee explained, “The problem is HRPDC wasn’t taking cost into consideration.” Under the new evaluation tool, the projects are ranked according to the stakeholder’s predetermined values and preferences, then presented with the costs and risk reduction ranking. At this point, stakeholders have the opportunity to engage in negotiations before the projects are presented for the final selection process. The output determines which regional projects are funded.

This new grant funding methodology has been adopted statewide and has changed the grant funding landscape for localities. Whereas, previously, only a few expensive projects were funded, the new system, which considers associated costs and the benefits (risk reduction) of the projects means an increase in less expensive projects are considered for funding. The scientist explained that under the new system, “I showed almost 40 grants got funded compared to 24 previously.” More smaller projects potentially access security needs over a broader geographic region and reach populations that were previously under served.

Additionally, the new grant funding system incorporates stakeholder preferences and requires projects to be regionally supported. Grant applications to VDEM that demonstrate cost
sharing with organizations or businesses emphasizing community participation, regional collaboration, and investment are eligible to receive a priority rating up to 150 points; more than any other criteria scoring category. The new funding policy reinforces regional collaboration and provides yet another forum for AHAC to collectively advocate for Hampton Roads.

Hampton Roads Regional Catastrophic Preparedness Team (2014) conducted a report that concluded the multitude of planning initiatives and grant programs in Hampton Roads has unintentionally resulted in an unwieldy number of planning organizations and working groups. This report’s findings validated complaints from emergency management personnel across Hampton Roads. They felt inundated with meetings that included the same people discussing similar topics. “Until we made the AHAC transition the local participants were almost 100% the same individuals” said one emergency manager. Emergency managers perceived that they spent the most amount of their time attending regional meetings and not enough time on their local responsibilities. The time away made them incapable of focusing on their “day job.” When asked, “Do you feel like you’ve developed a relationship with the other representatives where you can call on them?” one emergency manager laughed and replied, “Yes. Sometimes we spend more time with each other than our own staff.”

A study by Collins et al. (2015) revealed that the Hampton Roads region annually spends approximately $2.1 million and 34,000 man-hours on emergency management meetings including exercises and transportation of personnel to them. The analysis highlights the resource requirements of these meetings in terms of monetary value of time spent. These meetings facilitate important discussions that allow for coordination between emergency management related organizations before an incident happens. As one interviewee noted, “However, with shrinking budgets and greater responsibilities, all these meetings might not be possible in the
future. The number of man hours lost to meetings and travel had a diminishing impact on regional capabilities. By reducing the number of meetings and associated costs, the money may be reallocated to resources needed to satisfy the growing list of responsibilities.

Federal policy initiatives focusing on “all hazards” and “whole community” coupled with the regional reports by the HRRCPPT and Collins et al. (2015) justified the unification of efforts and the establishment of the regional All Hazards Advisory committee (AHAC). As stated by an AHAC leader,

What AHAC is doing is really trying to merge the effort that is going on independently at the State level, the Governor’s office, and all these local people that are popping up doing stuff everywhere. Nobody’s talking. Nobody’s coordinating. Nobody’s collaborating. Everybody’s saying, “I got a great idea.” So, AHAC’s role in that is really to kind of tie together, lace together, lash them together where we can.

The AHAC assumed the missions of the Regional Emergency Management Technical Advisory Committee, the Hampton Roads UAWG, the Hampton Roads Regional Catastrophic Planning Team, the Hampton Roads Metropolitan Medical Response System Oversight Committee, and the Hampton Roads Interoperable Communications Advisory Committee. Combining these committees reduced duplication of efforts, enhanced collaboration, and establish a governance structure with the necessary flexibility to augment disaster prevention, preparedness, response, recovery, and mitigation in the Hampton Roads region. Importantly, it streamlined discussion and planning amongst a broad group of stakeholders (AHAC Stands Up, 2015).

The Regional Catastrophic Preparedness Grant Program (RCPGP) steered Hampton Roads emergency management efforts toward a more efficient model of collaborative regional emergency management by providing guidelines and resources to identify vulnerabilities and corresponding gaps in regional capabilities, establishing regional planning processes, and linking operational and capabilities-based planning to resource allocation. One recommendation was to
expand these efforts by restructuring the HREMC. Building upon the objectives and relationships established by the HREMC would enhance regional preparedness capabilities and possibly recapture consideration for the UASI Grant that was discontinued in 2014.

The Urban Areas Security Initiative (UASI) is offered under the Homeland Security Grant Program, which was established in 2003. The HSGP is the main funding mechanism to that helps fulfill one of the core missions of the Department of Homeland Security by enhancing the country's ability to prepare for, prevent, respond to and recover from potential attacks and other hazards.

The Urban Areas Security Initiative (UASI) assists high-threat, high-density Urban Areas in efforts to build and sustain the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism. The UASI program is intended to provide financial assistance to address the unique multi-discipline planning, organization, equipment, training, and exercise needs of high-threat, high-density Urban Areas, and to assist these areas in building and sustaining capabilities to prevent, protect against, mitigate, respond to, and recover from threats or acts of terrorism using the whole community approach. (UASI Grant Program, 2019)

The UASI grant is allocated to select U.S. cities that face the most significant threats and have demonstrated their ability to effectively prepare law enforcement in their respective region to prepare for, prevent and respond to pre operational activity and other crimes that are precursors or indicators of terrorist activity. It is awarded annually for high risk areas to develop enhanced and sustainable capacity to prevent, protect against, respond to, and recover from acts of terrorism. The recipients of the UASI program include the highest risk urban areas in the country, which are divided into the highest risk areas (Tier I) and the remaining areas (Tier II). Funding levels for the grant are determined by Department of Homeland Security’s risk methodology and effectiveness.
The Hampton Roads Emergency Management Committee (HREMC) was rebranded as the Hampton Roads All Hazards Advisory Committee (AHAC). In October 2014, the HRPDC approved the charter for the AHAC. The AHAC held its first meeting on March 24, 2015. In 2016, the AHAC voted to adopt the HREMC bylaws and objectives to “promote interjurisdictional and interagency coordination of emergency management and foster emergency preparedness in the Hampton Roads area” by providing “a forum for net-working, collaboration, the exchange of information and experience, and advancement of appropriate technology among the Hampton Roads emergency management officials and individuals with emergency management responsibilities.”

Agency-based collaboration takes place in a broad context of national and state laws and policy initiatives. National political agendas shaped the context and history of how AHAC was formed, which supports the context component of the EMC framework. This study’s results showed how Federal Emergency Management Agency (FEMA) policies have shaped and incentivized emergency management collaboration among localities in southeastern Virginia. Hampton Roads has benefited financially and politically from the “whole community” strategy, Urban Area Security Initiative (UASI), and the Regional Catastrophic Preparedness Grant Program (RCPGP), which invested millions of dollars in federal grants to develop a comprehensive regional emergency management infra-structure and procured local resources and training to support it.

Political Culture

A study by Morris et al. (2013) looking at multi-stakeholder grassroots collaboration concluded that political culture in the Hampton Roads region is mixed and evolving. The name “Hampton Roads” has been the subject of a contentious identity crisis among residents,
businesses, and legislators for several decades. Regional labels including “Tidewater”, “Coastal Virginia”, and “Greater Norfolk Region” are used, but currently trail “Hampton Roads” as the most widely used name. Each regional term refers to different geographic boundaries, Hampton Roads being the most broadly inclusive. It includes seventeen geographically connected localities, in which citizens live, work, and socialize among multiple localities seamlessly and without notice to political culture differences. The Social Capital survey that was administered to all AHAC members revealed that when respondents were asked if they lived in a different city, town, or county than they work, the response was 50% “yes” (n=21) and 50% (n=21) “no.” These results are worth noting because it validates the mixed political culture in Hampton Roads. The AHAC serves all localities in the Hampton Roads region and therefore includes a mix of moralistic, individualistic, and traditionalistic types of political culture as described by Elazar (1984).

Nature of the Problem

The nature of the problem is an important element in regional emergency management collaboration. It contributes to how the perceived problem is identified and determines the goals, strategies, and operating principles of collaboration efforts (Morris et al., 2013, p. 29).

AHAC provides a forum for discussion about regional emergency management concerns. The local emergency managers and other regional stakeholders work together to identify vulnerabilities and develop plans and procedures that prepare the region for a large-scale disaster. When a significant disaster impacts more than one locality, relationships and agreements are already established and increase the likelihood for an effective regional response effort.
In 2007, FEMA identified Hampton Roads as a high-threat, high-density urban area and has awarded federal funding to build and sustain the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism and natural disasters. The grant funding was dispersed across localities to support projects that address emerging threats and support projects that enable continuous operation of critical business and government functions. In 2015, changes made to the UASI grant funding formula resulted in the defunding of Hampton Roads region. The UASI funding formula changed, but the threat levels and regional emergency management needs in Hampton Roads have not. The primary goal of the AHAC is to leverage the expertise and political capital of the local emergency managers and relevant stakeholder organizations to determine the goals and strategies that will lead to the reestablishment of a sustainable regional funding source in Hampton Roads. The nature of the problem is an important element of the local state of affairs and supports the context component of the EMC framework.

Collaboration Process

Stakeholders and Roles

The Hampton Roads All Hazards Advisory Committee (AHAC) is under the authority of the Hampton Roads Planning District Commission (HRPDC) that serves the southeastern region of the Commonwealth of Virginia. The HRPDC has no formal governing authority but serves as a conduit for the localities to collectively focus on regional efforts such as obtaining grants, administrative support, and mapping regional priorities. The HRPDC employs a Regional Emergency Manager and a Regional Emergency Management Administrator to provide administrative support, grant management, program development, logistical management and research for resources and supplies, as well as organizing training, planning, and exercises for
regional initiatives. All emergency management and supporting personnel and equipment are locally funded, managed, and maintained by their respective locality.

The Hampton Roads AHAC includes four subcommittees: Inclusive Emergency Planning, Public Information, Inoperable Communications, and Resiliency and Mitigation. The AHAC meetings are held bi-monthly on the second Tuesday of the months of February, April, June, August, October and December at the Hampton Roads Planning District Commission Regional building in Chesapeake, Virginia. Meetings are open to the public.

Hampton Roads AHAC members include a total of 66 members. Any individual with emergency management responsibilities in the Hampton Roads area is eligible for membership (bylaws, 2016). Membership status is divided among voting and non-voting. There are 17 voting members from the respective HRPDC member localities and one representative of the Governor’s Office of Public Safety and Homeland Security. Non-voting AHAC members represent multiple stakeholder organizations that have emergency management responsibilities in the Hampton Roads area. Lifelong membership is offered to members in good standing at the time of their retirement who remain as committee advisors in a non-voting capacity.

Assembling the right mix of stakeholders is essential to the success of a collaboration, particularly in an agency-based collaborative setting. Effective stakeholders have the ability to leverage resources and influence decision making. Linking recourses to stakeholders’ contributions is vital to an effective collaboration process (Gray, 1989). Local emergency managers are AHAC’s primary stakeholders and voting members. They bring the technical expertise and resources that would be employed should a disaster of regional significance occur. Therefore, the AHAC stakeholders support the collaboration process component of the EMC Framework.
**Governance Structure**

The AHAC governance structure is led by elected offices, which include: Chair, Vice-Chair, and Secretary. These three positions also make up the executive committee. The Chair presides at meetings and has direct supervision of the executive committee. The Chair has the authority to appoint ad-hoc and standing committee members. The Vice Chair shall act in the absence of the Chair. The Secretary’s duties include preparing and maintaining all records of meetings, activities, and the member directory, and conducting official correspondence of the committee per the AHAC bylaws (2016).

The AHAC is an agency-based organization that operates in the southeastern region of Virginia, referred to as Hampton Roads. Decisions are made by gaining the consensus of eighteen voting members, which include emergency managers of the respective seventeen (17) HRPDC localities and one representative from the Governor’s Office of Public Safety and Homeland Security. One emergency manager explained that decisions are consensus driven because “they have to be, or we'd never get off the dime. Regional emergency management issue framing includes a diverse geographic region that impacts large populations. The emergency manager added that “at the end of the day, we all have one vote. So, our vote counts just as much as Isle of Wight.” AHAC’s collaborative decision-making structure requires deliberation, some degree of compromise, and commitment to the greater good of the region.

AHAC collaboration activities are policy oriented. As a government-oriented agency, bureaucratic structure is inherent to AHAC operations. Emergency management policies are supported by the Federal Emergency Management Agency (FEMA), managed by the Virginia Department of Emergency Management (VDEM), and implemented by the local emergency management agencies. The AHAC agenda reflects local obligations determined by FEMA and
VDEM policies as well as local emergency management initiatives that may be shared or considered regionally. Voting members are emergency managers who are accountable to their respective local emergency management agency for reporting regional training, exercises, planning, and fiscal responsibilities.

According to the AHAC Collaboration and Social Capital survey, most, but not all, respondents believe collaborative governance, as opposed to authoritative governance, is beneficial to Hampton Roads. Over 78% of survey respondents agree that “The best way to accomplish the All Hazards Advisory Committee goals is through a commitment to dialogue and a melding of ideas.” In contrast, twenty-two (22%) percent of survey respondents agree that “The best way to accomplish the AHAC’s goals is through clear, authoritative leadership.” To a certain degree, AHAC exhibits both governance methods by implementing a deliberative decision-making process embedded in a broader bureaucratic structure.

The governance structure is important for the success of the AHAC collaboration to meet its goals. AHAC operates according to by-laws that dictate the governance structure and governing roles. The by-laws set the qualifications for voting and nonvoting members as well as the decision-making procedures and subcommittees. The AHAC governance structure satisfies the collaboration process component of the EMC framework.

The next section identifies and discusses the role of AHAC’s conveners; individuals who play a role in the collaborative leadership process.

**Conveners**

Conveners play a vital role in the collaboration process because they are instrumental in gathering resources and support from key stakeholders. Conveners can be informal leaders, facilitators, policy entrepreneurs, and/or champions who “identify an issue and recognize that
collaborative problem solving may lead to a better outcome” (Morris et al., 2013). The convener can also serve in a formal leadership capacity, such as the case of the AHAC Chair. However, it is the characteristics of the person and not the position title that identifies him/her as a convener.

Interview responses point to the emergency managers of Chesapeake, Virginia Beach, and Norfolk exhibit characteristics of a convener individually and collectively. Individually, interviewees recognized that these three conveners provide vision, energy, commitment, credibility, and the appropriate skill set for effective leadership above and beyond what is expected from a typical member. The conveners of AHAC’s stakeholders satisfy the collaboration process component of the EMC framework because their prominent actions aid in motivating key stakeholders, resources, and advancing the AHAC agenda. One emergency manager describes how the Emergency Managers are driving regional collaboration in Hampton Roads,

I think you’re going to find it in some of the younger emergency managers…. It’s really just about kind of the new guard coming in and saying hey, instead of having our own little kingdoms, let’s share some stuff. At the core of it, these people really believe that we all as a region should be helping each other. These people believe in it.

The local government emergency managers’ belief in AHAC translates into a commitment to doing what it takes to accomplish regional goals. Collectively, the conveners are important motivators for setting the course and inspiring others to recognize the value in collaboration and its impact on regional emergency management in Hampton Roads.

A convener’s “do what it takes” approach sometimes means working independently. The AHAC Chair described working between the monthly AHAC meetings “to make some progress and make it quick, because if it’s an AHAC initiative, we’re going to have a lot of discussion at
the meeting. We’re going to get that ball rolling and then I’ll politically go back to AHAC and say, “This is what has evolved since our last meeting.” The convener’s commitment “to get that ball rolling” on his/her own time may not overtly express collaboration, but it does support the notion that “conveners are participants that serve multiple roles such as leader, negotiator, and facilitator” (Morris et al., 2013, 31). The AHAC Chair demonstrates a capacity to navigate between these three roles when needed in order to advance AHAC’s agenda.

AHAC conveners play an influential role in agenda setting and advancing regional emergency management goals and objectives. Hampton Roads’ localities are the main contributors to HRPDC and major influencers of AHAC’s agenda. The AHAC conveners represent some of the largest localities in the region. Thus, the conveners have substantial influence over AHAC’s activities. Aligning AHAC and local priorities is a political and necessary part of the basic dynamic of agenda setting as explained by this emergency manager,

For the most part the jurisdictions are driving the AHAC agenda setting. I think HRPDC would have a hard time getting participation from localities if HRPDC were setting the agenda and the agenda wasn't in line with what our CAOs are discussing. It needs to line up. There's a CAO meeting with the HRPDC that the Regional EM Administrator attends. If he comes back and says, "Well, they talked about this...." Well, we should have it on our agenda then, because at the end of the day that's who we should be in line with.

It is essential that AHAC and the local priorities align because participation in AHAC is voluntary. Localities must be willing to support and participate in AHAC for the collaboration to proceed, particularly with their biggest contributors. If HRPDC’s goals do not align with local goals, it could ultimately impact HRPDC’s funding and call its necessity into question.

According to research by Curtis, Schindler, and Wright (2002), leadership and government funding attribute to the top two critical factors in a collaboration. The findings of this study support the importance of the conveners’ leadership and government funding in
agency-based collaboration. AHAC conveners demonstrate their leadership by expending their time and influence on garnishing support for AHAC initiatives. The next section explains AHAC’s dependence on government resources, grant programs, and the HRPDC to finance their regional initiatives.

**Resources**

AHAC is an agency-based collaboration and therefore receives “a majority of their resources through government entities, grant programs, and municipal government membership dues.” (Morris et al. 34, 2013) AHAC is the most recent and comprehensive attempt at regional emergency management collaboration under the authority of the HRPDC. As a result, AHAC has benefited from previously established interjurisdictional agreements and relationships. Funding sources for AHAC are managed through the HRPDC in the form of federal and state grants and a local government membership tax. HRPDC provides a designated Regional EM Administrator for AHAC that is funded by the local membership tax, while localities provide the technical expertise and materiel resources to support AHAC regional planning initiatives. Local resources are shared according to mutual aid agreements that are established ahead of an emergency for anticipated response needs to efficiently deploy resources outside of their jurisdiction when needed. As one emergency manager explains,

> There is a mutual aid agreement between them (Hampton Roads Fire Chiefs) was developed through the HRPDC, and that umbrella covers emergency management functions too. We have that, but we don't have formal EM mutual aid agreements outside of that. We all consider the Fire Chiefs’ mutual aid agreement covering it.

The interjurisdiction mutual aid agreements are one example of how localities acquire resources regionally.

Government grants such as the Urban Area Security Initiative (UASI) and Regional Catastrophic Preparedness (RCP) federal grant programs were awarded to HRPDC to fund
regional emergency management initiatives. These grants were divided among the Hampton Roads localities to supplement local emergency management funding to increase their emergency management capabilities. Regional grant funding has a significant impact on regional emergency management capabilities and collaboration. As one emergency manager explains,

A lot of what we do regionally is driven by money. When we had the UASI Grant1, we had the Urban Area Working Group and State and Homeland Security funding. When we had a bit more money, we tended to work together a little bit more. Collaboration tends to be very grant focused.

Most localities have the professional expertise and equipment to provide emergency management services within their jurisdictions. However, government grant funding for regional initiatives provides the extra financial resources localities need to develop capabilities and continuity that address regional preparedness gaps.

The amount of grant funding matters. In 2007, Hampton Roads was designated as a UASI Tier II urban region and received $7,800,000.00. UASI funding allocations declined each year until fiscal year 2014 when Hampton Roads was only awarded $1,000,000.00 and was subsequently removed from the UASI program. According to the HRPDC, two changes to the UASI funding formula resulted in Hampton Roads’ removal from the UASI grant program. 1.) The UASI grant program requires a Threat and Hazard Identification and Risk Assessment (THIRA) to determine urban funding levels. In FY2015, changes in weights of certain risk components by DHS resulted in Hampton Roads decreasing in rank for eligibility. 2.) Beginning in FY2015, Congress inserted language into DHS appropriations bills that limited UASI funding

\[\text{1 The Urban Areas Security Initiative (UASI) is a Department of Homeland Security grant program that assists high threat, high-density urban areas in efforts to prevent, protect against, mitigate, respond to, and recover from acts of terrorism. (Retrieved on February 2, 2020 from https://www.fema.gov/media-library-data/158174195872-79070cb6fc8c1cc551fe3137284419e4/FY_2020_Grant_Programs_Directorate_Information_Bulletin_446_Final_508AB2.pdf.)}\]
to the urban areas representing 85% of the nation’s risk. These changes resulted in the defunding of over half of the previously funded urban areas, including Hampton Roads.

The UASI funding formula changed, but the threat levels and regional emergency management needs in Hampton Roads have not. A risk assessment looks at potential threats and vulnerabilities that currently exist and rates the degree of loss that may result from a natural or manmade disaster. However, the UASI risk assessment does not account for the presence of federal military installations such as Naval Station Norfolk, Naval Air Station Oceana, Langley Airforce base, Naval Amphibious Base Little Creek or 32 Department of Defense facilities. Norfolk is home to the North Atlantic Treaty Organization/Supreme Allied Commander Transformation headquarters. According to HRPDC, the changes in the UASI formula does not adequately consider the potential economic loss if the Norfolk International Terminal or “the many bridges and tunnels that, if attacked, would cause a substantial impediment to the flow of goods and services on the east coast, and impact the mobility of the naval fleet in the area”.

(HRPDC, UASI)

Hampton Roads localities used the UASI funding to build resources and capabilities that are required by the National Preparedness Goal (NPG). The NPG 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 risk. The NPG document outlines the critical core capabilities necessary for every level of government to meet in order to achieve safe and secure communities. The UASI grant funds helped Hampton Roads to build NPG core capabilities. “Without continued UASI funding, Hampton Roads is at risk of losing previously built capabilities totaling over $36 million. While local governments are
attempting to sustain these capabilities, they have very limited resources to do so” (HRPDC, UASI).

For fiscal year 2016, the Virginia Governor allocated $61,113,469 to the Virginia Department of Emergency Management (VDEM) for personnel positions and for the state’s special fund account for disaster recovery. The VDEM works with local government, state and federal agencies and voluntary organizations to provide resources and expertise through the five mission areas of emergency management: prevention, protection, mitigation, response, and recovery (VDEM, 2018). This means that in addition to losing major grant funding, the Commonwealth only funded four out of the five critical mission areas. Prevention, protection, mitigation and response were not funded (HB30, 2014).

Regaining UASI grant funding became a top priority for AHAC members. AHAC members shared concerns about sustaining the capabilities that were developed now that the UASI funds are gone. One Emergency Manager stated that, “UASI's been the big thing on the AHAC agenda of late, obviously that's significant for our area. It's a huge loss to lose that grant program and the coordination that we do with the Homeland Security grants.” Some localities were able to assume the ongoing maintenance expenses of the equipment purchased under the UASI grant, as described by one AHAC leader,

We’re all fighting a sustainment battle. We’ve built up this capability and then the money goes away and the capability is still there, but who’s maintaining it? When those tires go out, who’s going to replace those? We’ve got $10 million worth of equipment and the city is paying for that upkeep right now.

Other localities, like Suffolk, could not afford to maintain the equipment purchased under the UASI grant and chose to sell it. As noted by an AHAC leader interviewed, “The Incident Management Teams (IMT) in Suffolk built up a lot of equipment, and then the funding went away for some of those teams. They legitimately sold their trucks on eBay.” Another
emergency manager explained, “The days of buying whatever we want or hiring somebody are very minimal now because the city has to be able to accept the sustainability piece.”

Instead of dismantling or abandoning regional emergency management activities completely, local emergency managers agreed to continue collaboration efforts under the All Hazards Advisory Committee (AHAC). The foundation for collaboration was already established through the multi-disciplinary interaction on the Urban Area Working Group and Regional Catastrophic Grant planning. As one interviewee stated,

Yes, the loss of the UASI grant is obviously what drove the creation of AHAC. We built a lot of capabilities with UASI funds, had a lot of groups in the region working on homeland security planning and getting a lot of federal money. When the UASI grant dropped out, everybody was standing around going, “What are we going to do?” There were like five of us that came together and said, “Hey, we’ve got to figure this thing out for the future.” So, we set up the framework for AHAC.

The decision to quickly set up the AHAC demonstrated Hampton Roads’ commitment to regional emergency management collaboration and pursuit to reestablish UASI funding. Consolidating the regional emergency management committees into one AHAC has worked out well for the stakeholders who have less meetings to attend. One interviewee noted that he has “noticed more engagement on behalf of the members, because we're not meeting as much, so when we do meet, the content is richer, it's a lot better attendance.”

The AHAC facilitated the ongoing regional collaboration efforts that were established by the UASI grant.

Since AHAC became operational, the Hampton Roads AHAC members have been meeting with members of Congress, Virginia Senators and Delegates, VDEM personnel, local elected officials and administrators, emergency management professionals and the Hampton Roads Planning District Commission to restore the critical UASI funding for regional emergency preparedness projects. On September 27, 2016, the AHAC collaboration invited Virginia
Senators and Representatives in Congress, Virginia Senators and Delegates, VDEM Director and Administrator, and local elected officials to an in-person meeting to discuss how the removal of UASI funding has impaired regional emergency management capabilities in Hampton Roads. They also discussed the criteria that are making and breaking the case for Hampton Roads as a viable candidate to restore the UASI funding in the fiscal year 2017. The AHAC members contended that though AHAC continues to operate in a regional capacity, the localities cannot sustain capabilities previously acquired under the UASI designation unless UASI funding for training and exercises to support the capabilities is restored.

AHAC members describe a culture of reciprocity and resource sharing. AHAC members feel comfortable calling each other when they need resources. For example, an interviewee states that “There is a lot of collaboration sharing contacts for good contractors.” Sharing resources is particularly beneficial to rural localities, such as Isle of Wight County, where the emergency manager began working with the County as an accountant and was appointed to a part time emergency manager position. This emergency manager from a rural community explains the benefit to participating in AHAC:

One of the struggles I have is that I'm a one-person shop. It’s a fairly significant luxury when you look state or nation-wide. A lot of the other emergency managers are half time at best. I don't have the time to deal with the day-to-day issues and the planning and implementation. So, it's really good to be able to see what the other localities that have a bigger staff and capability are doing and beg, borrow, and steal as frequently as possible.

Regional emergency management collaboration has facilitated shared experiences, better understanding of each stakeholders’ strengths and challenges. AHAC conveners are able to rally stakeholders and resources in ways that add value across jurisdictions. One emergency manager clarifies, “We don't have UASI funding coming in, but we have this capability that exists.
Whether it's resources, or collaboration capabilities, or planning meetings, we need to continue further with this positive process.”

The AHAC resources are a sub-element of the collaboration process and satisfy this component of the EMC framework. As an agency-based collaboration, AHAC relies on government entities, grant programs, and municipal government membership dues to provide resources. AHAC is under the authority of the HRPDC, which manages regional funding allocations and provides a designated Regional EM Administrator. Under the UASI grant funding, the localities were able to afford technology for improved interoperability in communication, tactical equipment, and regional exercises. Once the UASI funding was discontinued, the localities could not absorb the costs into their local budgets. Any regional plans that the emergency managers had made were downgraded. The regional tax that is paid into the HRPDC, government grant programs, and mutual aid agreements offset direct costs to localities for regional emergency management initiatives and response to a disaster of regional significance.

The next section addresses the relationship between HRPDC, AHAC, and the localities that pay into regional services in Hampton Roads.

**HRPDC and AHAC**

The AHAC is managed by the Emergency Management department of the HRPDC regional authority. As previously stated, the HRPDC manages the financial and administrative resources for the AHAC collaboration. One AHAC leader described the relationship between HRPDC and AHAC as “a pretty complicated relationship actually; a financial relationship, so that always makes it complicated.” The financial relationship refers to the annual per capita tax that localities pay to HRPDC for regional services and administrative support. The interviews
revealed that some emergency managers are unsatisfied with the status of the current arrangement; particularly the most heavily populated localities that pay the most into HRPDC expressed frustration. One emergency manager stated that HRPDC is not providing a level of expertise that is commensurate with the funding fees localities are paying into it. This AHAC leader explains, “What we get is meeting management, where what we really need is regional collaboration, regional planning, and plans that cannot be written from our localities’ perspectives.” Another emergency manager proposed that the heavily populated localities figure out, “other ways to work together than going through the PDC. We can use those funds elsewhere.” This emergency manager explained that the locality would not increase their financial contribution to HRPDC. “All of our Chief Administrative Officers (CAOs) said no because the value added is not there at this point.”

Concurrently, less populated localities experience more benefit from participating regionally. Many of the emergency managers in less populated localities work in a part time capacity. AHAC provides an opportunity to meet and learn from the more heavily populated localities, as described by this emergency manager, “I go to all of these regional meetings to understand what level of capabilities I have, what level of capabilities somebody else might have or might not have.” Regardless of the size of the jurisdiction, regional meetings facilitate information sharing. If a locality lacks a resource and a significant incident occurs in that area, then the surrounding jurisdictions know they need to deploy there to help. While the larger localities understand their role in the collaboration to help back-fill smaller localities with less capabilities, the smaller Hampton Roads localities are “piggybacking” the larger localities’ plans and resources.
A portion of each locality’s per capita dues fund the HRPDC Regional Emergency Management (EM) Administrator. “My job would basically be to convene the stakeholders to make the various things happen. I provide support to those efforts, whatever they may be. I make sure that the regional efforts have an added benefit.” The Regional EM Administrator works closely with the AHAC Chair to schedule meetings and relay updates between the HRPDC Board of Directors and AHAC leaders. AHAC members expressed that a reliance on one person in this administrative role puts the onus on the Regional EM Administrator’s credentials and experience to effectively lead regional emergency management initiatives. One interviewee describes this as a management deficiency on behalf of HRPDC,

The problem is the way the HRPDC manages emergency management. They don’t have any experience in emergency management. The expertise that they had before, or the resources that they were able to bring to bear, it is not there anymore.

Without viable experience among the HRPDC staff, they are not equipped to provide regional guidance and managerial support specific to emergency management. Their support is limited to solely administrative tasks. As a result, the management of regional emergency management initiatives is shifted to the AHAC conveners or they are delayed altogether. As a leading emergency manager explicitly states, “I don't see what the value is in the regional emergency management person. There is no benefit to [my city].” Another emergency manager shared similar sentiments, as follows:

There’s nothing that happens from the PDC in between monthly meetings. At the meeting you came to, those presentations are people I brought. The projects that we’re all working on are stuff that local emergency managers are working on together. PDC isn’t directing anything. So that’s the sort of frustrating thing that I talk about.

AHAC members want the HRPDC to make regional emergency management as much a priority as other regional objectives. “The reality is that PDC is focused on their two big priorities: the
military and transportation, and emergency management, public safety, and homeland security are the bottom priority,” said one leading emergency manager. As another leading emergency manager stated, “If you want to treat Emergency Management seriously and really drive that train, then you have to have the right people in the right positions. To just fill them with people without that expertise, then it’s not doing a good service for anybody.” A leading emergency manager explained, that the AHAC collaboration is in its early stages and the Regional EM Administrator’s workload may grow as the AHAC’s goals develop. If the UASI grant funding is restored, then the AHAC activities will accelerate and there will be more plans to write, and more grants, regional trainings, and exercises to manage. The tenuous relationship between HRPDC and AHAC threatens organizational legitimacy and collaborative efforts. When stakeholders are not receiving access to the regional resources that they expect, HRPDC runs the risk of losing stakeholders and the local resources that they bring to the collaboration. As AHAC pursues more regional initiatives, the HRPDC will need to adjust its administrative support to scale.

**Output**

Output is demonstrated by a short-term change in the collaboration’s performance. It can include the development of plans and agreements, scientific reports, and establishment of standards. This section describes the two accomplishments that the AHAC members produced in the early stages of the collaboration: a Regional Hazard Mitigation Plan and the reallocation of UASI funding in Hampton Roads. Formulating emergency management plans is essential for AHAC because government funding programs require them. “The AHAC as a group only writes one plan and that’s the mitigation plan,” said an emergency manager in the interview. Federal funding is essential to implementing regional plans.
The Robert T. Stafford Relief and Emergency Assistance Act requires State, Tribal, and local governments to develop and adopt FEMA-approved hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance and federal grants. AHAC is working on their first regional collaborative product; the development of the Hampton Roads Mitigation Plan (2017). AHAC hired Salter’s Creek Consulting, Inc. out of Hampton, Virginia to develop the first regional hazard mitigation plan by combining six mitigation plans into a single regional plan. The six separate plans and their year of adoption include: Southside Hampton Roads Hazard Mitigation Plan (2011), City of Franklin All-Hazards Mitigation Plan (2011), Southampton County All-Hazards Mitigation Plan (2011), Peninsula Hazard Mitigation Plan (2011), City of Chesapeake, Virginia Hazard Mitigation Plan (2014), City of Poquoson, Virginia Hazard Mitigation Plan (2015) This regional Hazard Mitigation Plan was adopted by each of the participating communities in early 2017. A copy of each locality’s resolution adopting the Plan is included in Appendix B. The 494 page Plan and 403 page appendices can be downloaded from the HRPDC website at https://www.hrpdcva.gov/library/view/620/2017-hampton-roads-hazard-mitigation-plan-and-appendices/.

In addition to developing a regional emergency management plan, AHAC crafted a legislative agenda. Members are actively lobbying the Virginia General Assembly, VDEM, and FEMA on policies and grant programs. Working collaboratively gains more attention from public administrators and elected officials because as one emergency manager indicated, “the fact that there's force in numbers. I think we have affected change over the last ten years with the HRPDC and bringing programs here.” The reestablishment of Hampton Roads in the UASI grant program is top priority. AHAC hosted a meeting of local, state, and federal administrators and elected officials at the HRPDC regional office. They discussed the UASI grant program, the
impact of losing previous UASI funding, and how changes in the UASI award criteria will affect its application to the UASI program moving forward. At the conclusion of this study, the U.S. Department of Homeland Security (DHS) announced the reinstatement of the Urban Area Security Initiative (UASI) grant program in the Hampton Roads region by awarding it $1 million for the 2017 fiscal year.

Accomplishing a goal in the early stages of a collaboration positively impacts trust and social capital. The consolidation of the regional Hazard Mitigation Plan was that accomplishment for AHAC. The process of merging the local plans into one regional plan incorporated input from AHAC voting members who represent a diverse geographic area with a large population. It was a fairly simple task that included all of the localities over a short timeframe. Collaboration is difficult and early wins such as the Hazard Mitigation Plan generate organizational legitimacy. The Hazard Mitigation Plan was the first AHAC collaborative accomplishment and supports the output sub-element of the collaboration process according to the EMC framework.

Outcomes

Outcomes are identified by the extent to which the implementation of outputs influence changes in ethics, behaviors, and quality of the setting. One leading emergency manager stressed that the timing of this study makes it “too early to say” whether the development of the Hampton Roads Mitigation Plan will have any lasting or profound influences. One emergency manager shared, “I think some of the benefit is having gone through the process.” Having gone through the process of creating the first regional Hazard Mitigation Plan was a valuable experience toward establishing legitimacy. At this phase of the organization’s development,
AHAC members are participating, communicating, and showing interest in regional emergency management collaboration.

The AHAC Collaboration and Social Capital survey includes a series of questions about stakeholder interest in public affairs that are intended to link “interest in public affairs” to “civic engagement” and the concept of legitimacy. Below is Table 3, which displays the aggregated responses of “level of interest in national, state, and local political affairs” from the survey. Morris et al. investigated whether interest in public affairs may be an important indicator of civic engagement in grassroots collaboration. The higher the respondent’s interest in public affairs, the more likely they are to engage in public policy processes. In grassroots collaboration, civic engagement establishes legitimacy of a collaboration’s processes and outcomes. In a government-based collaboration, the level of civic engagement is presumably established because it is a fundamental obligation. The survey results are indicative of this high level of civic engagement. The table below indicates that AHAC respondents are unequivocally interested (somewhat to very interested) in political affairs at all levels of government: local (98%), state (100%), and national (98%).

### Table 3. Level of Interest in Political Affairs

<table>
<thead>
<tr>
<th></th>
<th>Strongly interested</th>
<th>Somewhat interested</th>
<th>Neither interested nor uninterested</th>
<th>Somewhat uninterested</th>
<th>Strongly uninterested</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Politics</td>
<td>57.5%</td>
<td>40.0%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>State Politics</td>
<td>42.5%</td>
<td>57.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Local Community Politics</td>
<td>60.0%</td>
<td>37.5%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
As government employees, some AHAC members are strongly associated with the collaboration network. Private businesses and nonprofit organization members benefit from their inclusion in the AHAC meetings, discussions, and influence on the collaboration process and outcomes. The members have a vested interest to ensure the AHAC collaboration output contributes to legitimacy of regional emergency management in Hampton Roads. However, respondents were not strongly invested in the role of government regulation in helping to prepare communities for potential threats. Just under half (47%) of respondents somewhat agree that there is a role for government regulation to help prepare communities for potential threats. Diagram 4 includes the pie chart below which depicts the breakdown of the responses. There were zero respondents (0) who strongly disagreed with the role of government regulation.

Figure 4. Views on Government Regulation

![Pie chart showing responses to the statement: I think there is a role for government regulation to help prepare communities for potential threats.]

- Strongly agree: 29%
- Somewhat agree: 47%
- Neither agree nor disagree: 17%
- Somewhat disagree: 7%
- Strongly disagree: 0%
The AHAC Collaboration and Social Capital survey included questions examining the efficacy of AHAC by looking at changes in views, behavior, and the emergency management environment in Hampton Roads. These criteria can be categorized as social or environmental. Environmental outcomes are changes in emergency management practices and levels of safety and security. Social outcomes include “changes in social structure such as increases in civic engagement, volunteerism, and trust” (Morris et al, 2013, 45). In the agency-based setting, social outcomes include changes in views about the social structure such as positive views of AHAC members interaction, mutual agreements, and trust.

Outcomes differ from output in that outcomes manifest over the long-term. As a new organization, gauging the direct impact that AHAC has on outcomes is limited. Many of the survey responses regarding environmental outcomes were mixed, with a high percentage of respondents answering, “neither agree nor disagree”. When asked, whether views on regional emergency management issues have changed as a result of involvement with AHAC, the respondents expressed indifference toward AHAC’s influence on their views. Only 12% strongly agreed, 39% somewhat agreed, 41% of respondents “neither agree nor disagree” and 7% “somewhat disagree”. Again, it may be too early to tell whether AHAC or the previous HREMHC and REMTAC have effectively changed views on regional emergency management in Hampton Roads because many of the same people participated in them at one time or another.

When asked whether the activities of the AHAC have had a positive impact on regional emergency management, the responses were slightly more supportive with 71% of respondents who “somewhat agree” to “strongly agree” and only 29% “neither agree nor disagree.” The survey was administered shortly after AHAC members had completed the regional Hazard Mitigation Plan, which may have generated some optimism. The AHAC has also had little
impact on how AHAC respondents are approaching their job. Only 44% replied that they “somewhat agree” to “strongly agree” and 44% “neither agree nor disagree”. The aggregated results to these three questions are illustrated in Table 4.

Table 4. AHAC Outcomes

<table>
<thead>
<tr>
<th>AHAC Outcomes</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My views on regional emergency management issues have changed as a result of my involvement with AHAC.</td>
<td>12%</td>
<td>39%</td>
<td>41%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>I think the activities of the AHAC have had a positive impact on regional emergency management.</td>
<td>22%</td>
<td>49%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I have made changes to how I approach my job as a result of my participation with the AHAC.</td>
<td>12%</td>
<td>32%</td>
<td>44%</td>
<td>10%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Interview questions revealed that AHAC members are more optimistic about the social outcomes in regional emergency management. One AHAC member said, “I certainly think it is safer because of the fact that we have incredible relationships in Hampton Roads,” and another agrees, “at the very minimal, just AHAC members meeting makes it safer. It's better to exchange business cards before an event not during. I think that, in and of itself, makes us safer.” AHAC incorporates all emergency management stakeholders in their process, as stated by an AHAC advisor, “I can't think of any stakeholder agency that's left out. AHAC includes the people that the grant is intended to serve. It's well represented.” Importantly, AHAC members believe in the collaboration. In a short time, AHAC has laid the groundwork
for a multi-sector regional collaboration to effectively improve safety and security in Hampton Roads. Despite challenges, improving regional multi-stakeholder collaboration and emergency management capabilities for all localities in Hampton Roads remain AHAC’s highest priorities.

The EMC Framework assesses collaboration outcomes into two categories: social and environmental. The social outcomes are changes in ethics and behavior, and the environmental outcomes includes changes in environmental quality. In an agency-based setting, the social setting is the participants of the collaboration. Whereas the environmental setting is the policy domain in which it operates. AHAC participant outcomes are identified by the extent to which they engage in social capital development and collaborative interactions to promote the AHAC mission. The environmental outcomes are identified by the extent to which the implementation of the Regional Hazard Mitigation Plan, legislative agenda, and information sharing will influence changes the quality of regional emergency management.

As a new organization, gauging the direct impact of AHAC’s collaborative process will have on outcomes is limited. Many of the survey responses regarding environmental outcomes were mixed. However, the interviews revealed more promising sentiments regarding AHAC’s influence on the quality of regional emergency management. One AHAC member said, “I certainly think it is safer because of the fact that we have incredible relationships in Hampton Roads,” and another agrees, “at the very minimal, just AHAC members meeting makes it safer. It's better to exchange business cards before an event not during. I think that, in and of itself, makes us safer.” AHAC has support and ongoing commitment of 66 multi sector organizations in this collaborative endeavor, which demonstrates some level of legitimacy for the cause. AHAC has influenced the way that regional emergency management planning is conducted in Hampton Roads, which is perceived as a step toward a safer environment. Seventy-one (71%) of
AHAC survey respondents believe that the activities of the AHAC have had a positive impact on regional emergency management, which supports the outcomes sub-element of the collaboration process according to the EMC framework.

**Social Capital**

The Enhanced Model of Collaboration (EMC) displays social capital as a factor in the formation, process, outcomes and feedback of collaboration.

Social capital, defined as “features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions,” (Putnam, 1993) has been identified as a key element of collaboration. Collaboration is more than cooperating to developing new structure, sharing resources, defining relationships, and communicating. It involves creating and building organizational and social capital (Bingham, O’Leary, and Carlson, 2008, p.6). This section describes indicators of social capital in the AHAC collaboration.

The formation of agency-based collaboration requires a basic level of social capital to be present. The previous section entitled, “Initial Social Capital” describes the Fire Chiefs and Emergency Coordinators in Hampton Roads who began to question how they might respond to large-scale emergencies that impacted more than one jurisdiction. The key commonality shared by these Fire Chiefs and Emergency Coordinators in the 1980s was their professional connection to emergency management in Hampton Roads. This was a progressive approach to emergency management that demonstrated a level of trust and reciprocity among a broad network of emergency management professionals. It established a professional network that has evolved over time into what is now the AHAC. “The most important thing, I think is just those personal relationships. That all of us can call up the other. …we know what is your skillset.” When the
HREMC and REMTAC were combined to form AHAC, a high level of initial social capital was already present. The following interview responses from two leading emergency managers, illustrate how the network of emergency management professionals contributes to regional collaboration, reciprocity, and trustworthiness.

I would say that this community at the regional level and at the state level, collaborate very well. Much better than I would have thought if you would have asked me, coming off the street. I think it's because many of them have known each other for such a long time. You can retire from the fire department and maybe you get hired by a local company that does exercises, and so they're still comfortable with you. They know your pedigree.

Emergency managers work well as a region. We tend to self-separate, meaning southside, and peninsula, when we're dealing with some things, but at the end of the day, whatever you call us, REMTC, HREMC, AHAC, we're still gonna pick up the phone and talk to each other and coordinate in order to be on the same page with each other.

Overall, emergency managers expressed their support of regional collaboration. Not only does participation in AHAC generate opportunities for deliberation, mutual agreements, and grant funding, it also allows emergency managers to monitor regional activities. Local emergency managers gain access and influence to promote or protect their own political agenda. One interviewee describes how he manages this dynamic:

Certainly, I think the way that we interact is pretty productive. I think there’s transparency up to when it’s not threatening to the localities. So that as long as it’s not going to diminish my ability in the region, then I’m going to be transparent. On issues unrelated to grants, there’s 100% transparency.

Local politics plays a significant role in AHAC’s collaboration. Nonetheless, AHAC has quickly assembled stakeholders, pursued goals, and gained legitimacy as a result of the previously established culture of collaboration and social capital in Hampton Roads’ emergency management community.
AHAC was formed by consolidating several regional emergency management initiatives, making it more inclusive. Now stakeholders are having the same discussions, seeing the same presentations, and receiving the same information at the same time; together. The interaction among stakeholders generates opportunities for reciprocity. When asked across all AHAC members whether “Participation with the AHAC has made me feel more connected to other AHAC members,” 73% of survey respondents indicated that they somewhat agreed to strongly agreed. Still, 27% of AHAC participants neither agree nor disagree to somewhat disagree with this statement. These results are displayed in Table 5 below. According to the EMC, changing levels of social capital provide feedback to the welfare of the collaboration. This tepid response indicates that AHAC leadership should monitor how stakeholders are interacting, evaluate whether every stakeholder is a good fit for this organization, and assess the degree to which stakeholders’ expectations are being met.

Table 5. AHAC Participation Connectedness

<table>
<thead>
<tr>
<th>Participation with the AHAC has made me feel more connected to other AHAC participants.</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34%</td>
<td>39%</td>
<td>22%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The AHAC Collaboration and Social Capital survey found that involvement in AHAC has resulted in information sharing, public private partnerships, and grant awards. The survey revealed not all stakeholders are experiencing connectedness to their AHAC peers. However, AHAC’s inclusivity has added value to the collaboration and is creating reciprocal relationships,
Location matters. The commitment to place is a key element to social capital. Morris et al., coined the term, “BIMBY” (Because it’s My Backyard) to describe this phenomenon. BIMBY follows similar logic as “NIMBY” (Not in My Backyard). Whereas NIMBY expresses citizen opposition to locating an unsightly or dangerous civic project in their neighborhood, BIMBY expresses citizen support of hosting a positive civic project in their neighborhood for the greater good.

In Bowling Alone: The Decline and Revival of American Society, Dr. Robert Putnam searched for happiness indicators as evidence for social capital in typical social settings where people spend their time. Despite American’s spending more time in the workplace with co-workers, they reported less job satisfaction and feeling angrier at work, which has contributed to an increase in workplace incivility and aggression. “American workers are certainly no happier in the workplace today than a generation ago and probably are less happy” (Putnam, 91). Dr. Putnam’s study does not differentiate types of workplace settings in his findings.

Agency-based collaboration requires agents of respective organizations to interact with one another to achieve their mutual goals. Prosocial behavior is an important prerequisite for collaboration. Happiness is one way to measure prosocial behavior, particularly in the workplace. Just as currency is a more efficient means of transaction than barter, an elevated level of social capital among colleagues creates more efficient team interactions. While AHAC is only a portion of an emergency manager’s workplace, this study found, using the “AHAC Collaboration and Social Capital Survey,” that most (91%) of the AHAC member respondents claim that they are usually “Happy” or “Very happy”. None of the respondents indicated that...
they are “not very happy” or “not happy at all.” The elevated levels of individual happiness indicate the presence of prosocial behavior that is expressed as social capital among AHAC collaboration members. Figure 5 displays the aggregated happiness levels of survey respondents.

Figure 5. Happiness Levels of Participating AHAC Members

One interviewee who works with AHAC members described them as “very cordial and collaborative…. I would say it's surprisingly, a pleasant surprise.” Putnam also suggests that the presence of prosocial altruistic emotions and behaviors could lead to happiness, health, and longevity. This indicates that social capital is both a private (individual happiness) and a public (culture of helping) good. “Because so many of us came from or are based in public safety, there’s a natural culture of assistance and helping. It’s engrained in the fiber around here. You
try to help others.” Social capital contributes to a culture of happiness in organizations that value service.

Trust is the essential characteristic of social capital. Collaboration requires people working together in productive and meaningful ways to achieve results. The social capital literature posits that networks, trust, and norms can reduce barriers and improve the effectiveness of collaborative governance (Adler & Kwon, 2002; Coleman, 1988; Fukuyama, 1995; Putnam, 2001). Trust relationships among AHAC members directly contribute to its functionality and sustainability. The AHAC Collaboration and Social Capital questionnaire revealed high levels of trust locally and among AHAC members. The survey findings are congruent with the interview responses. This is important because “social capital may be used to facilitate network activities that strengthen the interdependence between groups through the flow of resources and information” (Busch and Oh, 217, 2014).

One survey question on trust asked, “How much do you think you can trust the following people?” Respondents were asked to rate levels of trust of people in general, people in your neighborhood, local police, local elected officials, and AHAC members. The survey showed that overall, AHAC members are generally trusting of others. Eighty (80%) percent of participants trust people in general, and zero (0%) percent indicated that they do not trust people at all. Table 6 presents the aggregated results of how much AHAC members trust certain groups of people.
Table 6. Trust in People

<table>
<thead>
<tr>
<th></th>
<th>Trust A Lot</th>
<th>Trust Some</th>
<th>Neither trust nor distrust</th>
<th>Trust a Little</th>
<th>Trust not at All</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>People in general</td>
<td>10.00%</td>
<td>70.00%</td>
<td>17.50%</td>
<td>2.50%</td>
<td>0.00%</td>
<td>40</td>
</tr>
<tr>
<td>Neighbors</td>
<td>32.50%</td>
<td>57.50%</td>
<td>7.50%</td>
<td>2.50%</td>
<td>0.00%</td>
<td>40</td>
</tr>
<tr>
<td>Local police</td>
<td>80.00%</td>
<td>20.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>40</td>
</tr>
<tr>
<td>Local elected officials</td>
<td>15.00%</td>
<td>42.50%</td>
<td>15.00%</td>
<td>27.50%</td>
<td>0.00%</td>
<td>40</td>
</tr>
<tr>
<td>AHAC members</td>
<td>51.28%</td>
<td>35.90%</td>
<td>10.26%</td>
<td>2.56%</td>
<td>0.00%</td>
<td>39</td>
</tr>
</tbody>
</table>

Respondents’ trust of the local police is at 100% (some or a lot of trust), which is essential in the context of emergency management. Emergency managers rely on local police to implement emergency management protocol daily. However, the show of trust of their fellow AHAC members is less definite. Trust levels among AHAC members is eighty-seven (87%) percent (some or a lot of trust) and nearly thirteen (12.82%) percent trust a little to neither trust nor distrust their fellow AHAC members. AHAC is a new organization and trust takes time to develop. While AHAC membership is voluntary, it is a major investment for localities. Local politics has a direct impact on the emergency manager’s decision making and level of commitment to supporting regional initiatives. As agents of the locality, the trust in the emergency manager may be impacted by AHAC members’ low levels of trust in local elected officials, which is discussed in the next paragraph.

This slim margin of mistrust among AHAC members does not impede the ability to apply the model in an agency-based setting. According to the EMC framework, the important factor is that some level of trust is present. Even a minimal level of social capital provides a baseline to improve upon. No trust at all would be more detrimental to the efficacy of AHAC and
undermine its efforts. As AHAC focuses on more collaborative pursuits, the opportunity to build mutual trust among members may occur, despite local agendas. AHAC leaders need to use their skills and influence to build trusting relationships among AHAC members and move initiatives forward.

As previously mentioned, the survey revealed that respondents have the lowest overall level of trust in local elected officials than other categories of people. The relationship between the emergency managers and the elected officials may be strained provided that AHAC relies on localities for technical, monetary, and professional resources. Because elected officials are accountable to the local citizens and not the region any skepticism as to the extent to which local constituents will support resources being allocated to regional activities could cause a degree of distrust. As an agency-based collaboration, trust in government is critical to the efficacy and authority of the AHAC collaboration. As previously stated, agency-based collaborations include a wide diversity of interests and are the appropriate forum for addressing issues that are complex. Complex environments create uncertainty, put pressure on decision makers, and require creative problem solving. The efficacy of the AHAC collaboration is dependent upon stakeholders’ ability to have open dialogue, build trust, set mutually beneficial goals, and feel comfortable with sharing risks associated with the collaboration process. Emergency managers play a pivotal role in this collaborative network as stewards of their localities and regional emergency management influencers. Emergency managers must effectively balance local and regional interests.

Interestingly, when asked, “Do you trust the government to do the right thing?” respondents indicated higher levels of trust in local government (69%) to do the right thing than the state (50%) or national governments (48%). The respondents’ elevated trust in local government, relative to state and federal governments, may be due to the respondent’s
involvement in local government and to a certain degree influence over local decisions. The aggregated responses are illustrated in Figure 6.

Figure 6. Trust in Government

Reciprocity

According to the AHAC Collaboration and Social Capital survey a majority of respondents are actively participating in collaborative behaviors. Information sharing (33%), grant awards (20%), and public-private partnerships (17%) were the top three ranked collaborative behaviors that have resulted from involvement in AHAC. Information sharing, grant awards, and public private partnerships directly impact the efficacy of regional collective activities. When AHAC members participate in these shared experiences, they become more connected with their AHAC peers, which increases reciprocity and social capital. Information
sharing among AHAC members is an important function of exchanging ideas, opinions, news, and experiences that informs collective decision making. The act of information sharing is an inherently communal experience where trust and social capital are generated. AHAC members share information via common communication methods such as email, telephone, bulletins, and in person at AHAC meetings. As previously discussed, both the state and federal grant programs require grant applications to be collaborative and regional in nature; providing incentive points to those projects that meet these requirements. Also, the AHAC membership includes representatives of 66 organizations from multiple sectors and levels of government. These diverse views contribute unique perspectives for more comprehensive discussions around regional emergency management issues. Members who are engaged in reciprocity benefit from participation and are therefore more willing to help their peers and seek “win-win” scenarios.

Figure 7. AHAC Collective Actions

Has your involvement with the All Hazards Advisory Committee resulted in any of the following?

- Mutual Aid Agreements (MAA) between jurisdictions: 9.09%
- Continuity of Operations Plans (COOP): 5.05%
- Emergency Management Assistance Compacts (EMAC): 4.04%
- Grant Awards: 20.20%
- Disaster Service Contracts: 6.06%
- Public/Private Partnerships: 17.17%
- Information Sharing: 33.33%
- None of these: 4.04%
- Other: 1.01%
- None of these: 4.04%
Other AHAC collective actions are indicated in the “AHAC Collective Actions” chart. Since many of the survey respondents have established working relationships that predate AHAC’s formation, agreements such as the Emergency Management Assistance Compacts, Continuity of Operations Plans, Mutual Aid Agreements or Disaster Service contracts may have been established prior to AHAC. While included in the survey, AHAC members may not consider these collective actions and agreements to have been influenced by the AHAC collaboration. The consolidation of local plans into a regional Hazard Mitigation Plan is evidence of AHAC’s capability to establish mutual agreements through reciprocity.

Most AHAC members agree that multisector collaboration is the best way to ensure the safety and security of communities. The aggregated results are displayed on Table 7 below. According to the survey, 61% strongly agree and 32% somewhat agreeing that statement.

As a multisector sector collaboration, AHAC has the capacity to solve complex problems, because its members draw on the resources of all the sectors: business, government, and nonprofit. Collectively, AHAC has more influence and political capital than one organization or locality.

Views on Working Collaboratively

| Working collaboratively with multiple sectors is the best way to ensure the safety and security of communities |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
| 61% | 32% | 7% | 0% | 0% |
Furthermore, AHAC members are a generally homogenous group of individuals who have chosen similar professions in emergency management in Hampton Roads. AHAC’s homogeneity and high levels of civic trust are to its benefit because the main goal of the collaboration is conformity. AHAC’s purpose is to align local policies and practices to the extent possible in order to improve interoperability and mitigate risk at the regional level. AHAC facilitates this process. The process is challenging but necessary, as described by this emergency manager,

The reason I like the regional meetings is I like to work together, because it does get us outside of the box sometimes, but it definitely has its other challenges. At the end of the day, we don't have a regional form of government. We don't have a regional EOC. We don't have regional plans, per se, as it relates to emergency management.

The EMC posited that these are the elements that should be present for the grassroots collaboration. The results show that these are also elements for agency-based collaboration. Hampton Roads does not have a regional form of government; however, each AHAC emergency manager has one vote that directly impacts regional emergency management decisions. AHAC organization is improving the collaboration process and social capital as indicated by high levels of trust, reciprocity, and transparency. The more AHAC members interact, the more they develop the prosocial behaviors indicative of social capital, which leads to a more cohesive and efficient collaboration.

The evidence of social capital among AHAC members supports the elements of social capital that permeate all stages of the collaboration process according to the EMC framework. Initial social capital was demonstrated by the Fire Chiefs and Emergency Coordinators who discussed the possibility that large-scale disasters could overwhelm local capabilities and mobilized their colleagues to assemble the first regional emergency management network in
Hampton Roads. Regional emergency management committees have evolved over the years, creating specialized networks of emergency managers. AHAC is the first inclusive and comprehensive emergency management collaboration that brings all emergency managers together to address all types of potential threats to southeastern Virginia.

AHAC provides a forum for prosocial interactions where stakeholders benefit from collaborative behaviors such as information sharing, regional grant awards, and public-private partnerships despite some stakeholders reporting moderate levels of connectedness to their AHAC peers and only 87% reporting elevated levels of trust. Emergency managers also benefit from opportunities to influence regional policy decisions and to promote or protect their own political agenda. Because collaboration is framed around what is best for the collective and not the individual stakeholders, it requires constant attention to keep participants invested and moving forward.

**Grassroots and Agency-based Collaborations: A Comparison of Key Findings**

This dissertation is a differentiated replication of research by Morris et al. (2013) entitled, “The Case for Grassroots Collaboration: Social Capital and Ecosystem Restoration at the Local Level.” Morris et al. applied the Enhanced Model of Collaboration (EMC) to explore grassroots efforts that support nonprofit organizations focused on improving environmental conditions in the Chesapeake Bay watershed of southeastern Virginia. Morris et al. administered a collaboration and social capital survey to identify whether indicators of social capital were present among volunteers of grassroots watershed collaborations. However, the research team found the results to be impracticable. In their study, evidence of social capital in grassroots collaboration settings derived from interviews with stakeholders of the nonprofit organizations and not the social capital survey. The absence of the quantitative social capital survey data
impedes the ability to make a direct comparison of their social capital findings in grassroots collaborations and the social capital survey results in this agency-based collaboration study. Despite the lack of social capital survey data, Morris et al. concluded that in all three case studies explored, collaboration and social capital were key factors in successfully achieving organizational goals based on their interview data only.

The purpose of this dissertation is to validate the extent to which the EMC can be used to explain collaboration in an agency-based setting by applying the EMC framework to a regional emergency management initiative called the All Hazards Advisory Committee (AHAC), which is also located in southeastern Virginia. This section lists major findings from the grassroots collaboration study to examine the extent to which the similar findings were also present in the agency-based collaboration. The comparison will include some distinct similarities and differences. The grassroots claims are listed in bold italic font.

*The more citizens organize themselves, the greater the level of social capital and stewardship generated in the community.*

Similarly, in an agency-based collaboration, the more that organizations organize themselves, the greater the level of social capital and stewardship generated among their community. In Hampton Roads, regional emergency management organizations have taken many forms, including the Hampton Roads Regional Emergency Management Committee, Regional Emergency Management Technical Assistance Committee, Regional Catastrophic Management Team, Urban Area Working Group, Hampton Roads Metropolitan Medical Response System Oversight Committee, and the Hampton Roads Interoperable Communications Advisory Committee. Combining these committees reduced duplication of efforts, enhanced collaboration, and establish a governance structure with the necessary flexibility to augment
disaster prevention, preparedness, response, recovery, and mitigation in the Hampton Roads region. It streamlined discussion and planning among a broad group of stakeholders.

Since the emergency managers and organizational representatives had previously established working relationships, the AHAC collaboration was quickly setup and operational. The social trust from existing working relationships, suggests that social capital was the impetus that led to collective action under the newly formed AHAC collaboration. This study found that trust levels among AHAC member organizations is eighty-seven (87%) percent (some or a lot of trust) and nearly thirteen (12.82%) percent trust a little to neither trust nor distrust their fellow AHAC members. Despite the long history of regional emergency management committees in Hampton Roads, the AHAC is a new organization and trust takes time to develop under the new leadership. As AHAC stakeholders organize themselves, the greater the level of social capital and stewardship is generated among the emergency management community

_The greater the diversity of stakeholders involved in a local collaboration, the greater the breadth of voices that can speak to policy makers, and the greater their credibility with local, state and federal officials._

This lesson also applies to the AHAC agency-based collaboration. AHAC has sixty-six (66) members, which includes representatives of the seventeen (17) emergency managers who represent localities in the Hampton Roads region, a representative from the Virginia Health and Public Safety Department, and a broad spectrum of stakeholders. AHAC stakeholders includes; the Virginia Department of Transportation, Virginia National Guard, U.S. Air Force, U.S. Army Corps of Engineers, and the U.S. Coast Guard, the Federal Bureau of Investigation, Cox Communications, Virginia Natural Gas, TowneBank, the Tidewater Consortium for Higher Education, Tidewater Community College, the College of William & Mary, National Oceanic
and Atmospheric Association, and National Aeronautics and Space Administration, and similar organizations in Hampton Roads who actively participate. AHAC exhibits greater influence on policy changes when it can unify its member base to support the same legislative agenda. Immediately after AHAC formed, the AHAC leaders drafted a legislative agenda. The AHAC legislative agenda and subsequent legislative meetings focused on reinstatement of the UASI federal grant. The collective lobbying of the 66 members, demonstrated that the greater the diversity of stakeholders who communicate a succinct message to the policy makers, the greater AHAC’s credibility is with local, state, and federal officials. The following legislative year, UASI funds were reinstated in Hampton Roads because of their collective lobbying efforts.

The presence of the grassroots organizations in an area provides an opportunity to build social capital and encourage sharing between organizations.

The presence of an agency-based collaboration provides opportunity to build social capital and encourage sharing between organizations. Agency-based collaborations provide a forum that requires organizations to explicitly interact in the collaboration process. Interaction is intentionally for the purpose of sharing between organizations. Pro-social behaviors such as sharing encourages social capital among organizations and benefits the collaboration. The AHAC members include 66 multisector stakeholders from the Hampton Roads area. The AHAC Collaboration and Social Capital survey found that a majority of respondents are actively participating in collaborative behaviors. Information sharing, grant awards, and public-private partnerships were the top three ranked collaborative behaviors that have resulted from involvement in AHAC. “Participation with the AHAC has made me feel more connected to other AHAC members,” 73% of survey respondents indicated that they somewhat agreed to strongly agreed. Still, 27% of AHAC participants neither agree nor disagree to somewhat disagree with
this statement. According to the EMC, changing levels of social capital provide feedback to the welfare of the collaboration. The presence of the AHAC collaboration in Hampton Roads provides an opportunity to build social capital and encourage sharing between multi-sector organizations with an interest in emergency management.

Having group members who are also members of other civic groups can help connect groups in a community.

This study found that some AHAC members were also involved with other emergency management committees. The Hampton Roads Emergency Management Committee, Virginia Hurricane Evacuation Working Group, and the Virginia Emergency Management Association were among the most popular. Having group members who are also members of other emergency management groups may help connect groups in a community, but that factor was outside the scope of this study. This study focused on the primary organizational stakeholders of the AHAC collaboration, which include representatives of localities and organizations that contribute the technical expertise and resources to directly support the AHAC agenda.

Committee structure matters. Committees should clearly reflect and support the group’s mission.

Rules and governance structures provide the processes and structures for decision making and management that constructively engage organizations under the AHAC collaboration. Committee and governance structures provide clear understanding of their roles and responsibilities. The AHAC governance structure is led by elected offices, which include: Chair, Vice-Chair, and Secretary. These three positions also make up the executive committee. The AHAC subcommittees include the Inclusive Emergency Planning, Public Information,
Inoperable Communications, and Resiliency and Mitigation. Each of the subcommittees reflect and support the AHAC collaboration mission.

*Successful collaboration requires respect for diverse opinions and a willingness of participants to treat others with respect.*

AHAC’s purpose is to align local policies and practices to the extent possible to improve interoperability and mitigate risk at the regional level. The 17 localities located in Hampton Roads encompasses diverse landscapes and populations: each with its own emergency management agenda. While conducting this research, respectful conversations and consideration for diverse opinions were observed.

*Education is a critical component of the work of grassroots organizations. Education is a way to bring future members into the organization and can help change behaviors of both children and their parents.*

Education and training are also critical component of the work of the AHAC agency-based collaboration. However, in an agency-based collaboration setting, training is specific to the professional development needs, such as improving interoperability and communications among emergency managers and critical stakeholders. The AHAC meeting agendas designate time for educational presentations that address professional development, vendor presentations, policy updates from VDEM and FEMA, and information sharing from localities. AHAC also hosts regional training and exercises for Hampton Roads localities that include VDEM administrators. Education and training are ways to improve emergency management policies and regional capabilities.

*Context matters. The nature of the problem in the watershed will determine who the stakeholders are and the goals of the collaboration.*
In 2007, FEMA identified Hampton Roads as a high-threat, high-density urban area and has awarded federal funding to build and sustain the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism and natural disasters. The grant funding was dispersed across localities to support projects that address emerging threats and support projects that enable continuous operation of critical business and government functions. In 2015, changes made to the UASI grant funding formula resulted in the defunding of Hampton Roads region. The UASI funding formula changed, but the threat levels and regional emergency management needs in Hampton Roads have not. The primary goal of the AHAC is leverage the expertise and political capital of the local emergency managers and relevant stakeholder organizations to determine the goals and strategies that will lead to the reestablishment of a sustainable regional funding source in Hampton Roads.

**Conveners are a critical resource in formation and operation of the collaborative effort.**

Conveners play a vital role in the agency-based collaboration process because they are instrumental in gathering resources and support from key stakeholders. Interview responses point to the emergency managers of Chesapeake, Virginia Beach, and Norfolk exhibit characteristics of a convener individually and collectively. Individually, interviewees recognized that these three conveners provide vision, energy, commitment, credibility, and the appropriate skill set for effective leadership above and beyond what is expected from a typical member. The conveners of AHAC’s stakeholders satisfy the collaboration process component of the EMC framework because their prominent actions aid in motivating key stakeholders, resources, and advancing the AHAC agenda.

**Social capital matters. Grassroots collaboration relies on initial social capital in a community to begin a partnership and successful collaboration can help build additional social capital.**
Social capital is a central tenet to collaboration in an agency-based setting. In this case, initial social capital was demonstrated by the Fire Chiefs and Emergency Coordinators who discussed the possibility that large-scale disasters could overwhelm local capabilities and mobilized their colleagues to assemble the first regional emergency management network in Hampton Roads. Regional emergency management committees have evolved over the years, creating specialized networks of emergency managers. AHAC is the first inclusive and comprehensive emergency management collaboration that brings all emergency managers together to address all types of potential threats to southeastern Virginia. Social capital serves as a feedback loop since each decision made is dependent on the levels of perceived trustworthiness and reciprocity of its stakeholders.

*Grassroots collaborations do not “own” environmental problems; the responsibility rests with the community. Grassroots collaborations provide a vehicle through which communities can work together to address environmental problems.*

AHAC provides the vehicle through which stakeholders can work together to address complex regional emergency management problems. As an agency-based collaboration, AHAC is particularly useful in providing planning expertise and tools needed to influence policy decisions. However, the regional agenda is primarily driven by the localities. Aligning AHAC and local priorities is a political and necessary part of the basic dynamic of agenda setting. AHAC does not “own” emergency management problems, but it serves as a forum for local emergency managers to collectively discuss regional agenda items, while considering the availability of various local resources and capabilities. Localities must be willing to support and participate in AHAC for the collaboration to be effective.
Expertise matters. Grassroots environmental organizations can draw on retired professionals to provide needed expertise.

Expertise matters in agency-based collaborations. The AHAC bylaws include a “lifelong membership” status to members in good standing at the time of their retirement who remain as committee advisors in a non-voting capacity. This is an effort to maintain access to the historical and institutional knowledge that retirees have acquired.

A commitment to place is a powerful motivator. A positive emphasis on place – Because It’s My Backyard – can inspire people who otherwise might not get involved.

Morris et al. examined the connection to place represented by BIMBY as an important factor in understanding how and why citizen collaborations are formed and why they can make a difference in watershed restoration. This research takes a similar approach but focuses on the role that emergency management professionals from multiple sectors play in using collaborative resolution methods to influence local public policy and practice in emergency management.

NIMBY “results from the unequal distribution of costs and benefits” among communities (Gray, p. 206, 1989). This essentially means that communities that bear the disproportionately high costs of having an undesirable facility or program in their community are more likely to raise opposition despite the degree of benefit that may be gained for the broader community. These types of disputes are often highly contentious because residents and policy leaders tend to possess a sense of connectedness to and responsibility for their community. Technical and legal resolutions often fail to address the underlying ethical, political, and social issues that drive these disputes. However, collaborative resolution of disputes “produce fair solutions by giving all the parties for whom costs and benefits can accrue, equal access to the process” (Gray, p. 207, 1989). Likewise, stakeholders are inclined to participate in AHAC, because it provides a forum
for dialogue about important topics that impact their community due to the BIMBY (Because It’s My Back Yard) affect. BIMBY is a motivating factor that mobilizes localities and stakeholders to participate in AHAC. When stakeholders are linked to a place, collaborative organizations can bring people together to find commonalities that are significant enough to work toward. Community leaders are more willing to invest in projects that they view as valuable to their livelihood, quality of life, safety and security, and the health and welfare of their community.

Furthermore, the primary stakeholders, the emergency managers who represent their locality, are taking on a broader mission beyond their primary jurisdiction. Their commitment to the AHAC collaboration is region, not local. Therefore, they are committing to a regional mission that is broader than the primary mission of ensuring safety and security of their locality. The individual emergency manager and their agency voluntarily decides to adopt a broader mission, which in this case is a regional emergency management mission. While commitment to place is important, the commitment to a broader mission is also a motivating factor to participate in an agency-based collaboration.

High-profile champions can enhance the chances that the initial formation of a grassroots collaboration will be successful.

The high-profile champions that initiated regional agency-based collaboration in Hampton Roads were the Fire Chiefs and Emergency Commanders in the 1980s. For AHAC, the Emergency Managers of Chesapeake, Virginia Beach, and Norfolk exhibited the leadership characteristics of conveners. In both situations, the initial conveners held leadership positions that afforded them the influence to clarify the purpose of and benefits from a regional approach to emergency management, identify stakeholders and leaders, and secure the high-level stakeholder support.
It is important to invite all stakeholders to the table. Not all may participate, but all efforts should be made to be as inclusive as possible.

The AHAC focuses on regional efforts concerning emergency management. It was formed to create an inclusive setting where all emergency management stakeholders could participate in a voting or non-voting capacity to discuss emergency management policies and all types of threats and/or risks that potentially threaten Hampton Roads. There are sixty-six (66) members, which includes representatives of local, state, and federal government agencies, military, private industry, nonprofit organizations, health institutions, and universities.

Seventeen (17) of the members represent localities in the Hampton Roads region. The AHAC members meet bi-monthly and regularly participate in regional and state training and exercises to prepare for natural, technical, and man-made disastrous incidents.

All AHAC meetings are open to the public.

Partnerships with local government can greatly enhance the resources available to grassroots environmental groups and can provide increased legitimacy for both the citizen group and for government.

Grassroots collaborations support independent organizations that exist outside of the government structure. Whereas an agency-based collaboration is a coordinated organization of government agencies. As an agency-based collaboration, local governments are integral participants in the AHAC collaboration, working together for the purpose of addressing complex emergency management problems on a regional level. Government participation increases AHAC’s organizational legitimacy, while also enhancing access to local resources.
Next, Chapter Five explains the research analysis, compares the results with Morris et al. grassroots key findings, and discusses the implications of the current study. Areas for future study are also identified.
CHAPTER V
RESEARCH ANALYSIS

Chapter IV presented the agency-based collaboration study results and findings of both the qualitative stage and quantitative stages. The data was collected through individual interviews, documentation analysis, and the AHAC Collaboration and Social Capital web survey. This chapter begins with comparison of findings from the seminal grassroots and the AHAC agency-based collaboration settings with an overview of distinct similarities and differences. It will be followed by a review of the research questions and a discussion of the quantitative and qualitative findings as they address the research questions.

**Grassroots and Agency-based Collaboration Comparison**

The three grassroots cases that were analyzed in the seminal study and the one agency-based case presented in this study exhibit many similarities, yet they are also different in many ways. Using the EMC framework as a guide, a brief comparison of the cases is presented. For simplicity, the comparison will combine summary findings from the grassroots collaborations and compare them with the AHAC agency-based collaboration.

**Context**

Morris et al. compared three case studies of grassroots collaboration organizations, which included Lynnhaven River Now (LRN), Elizabeth River Project (ERP), and Nansemond River Preservation Alliance (NRPA). Morris et al. selected the three organizations located in the Chesapeake Bay Watershed because they shared a common mission to reduce pollutants in the watersheds. The three grassroots collaboration settings and the AHAC agency-based collaboration setting are located in the Hampton Roads region of southeastern Virginia.
National policy agendas provide the political environment that has shaped both the grassroots and agency-based collaboration settings. The grassroots collaborations are three independent environmental nonprofit organizations that operate in the environmental waterways policy domain, which is governed by the U.S. Environmental Protection Agency (EPA). The EPA established the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL is a comprehensive "pollution diet" to restore clean water in the Chesapeake Bay and the region's streams, creeks, and rivers. The three environmental organizations rely on community volunteers to help in their efforts to reduce the Bay TMDL and related challenges to meeting the federal requirements. Similarly, the AHAC agency-based collaboration operates in the emergency management policy domain, which is governed by the Federal Emergency Management Agency (FEMA). The FEMA mission is “helping people before, during, and after disasters.” This translates to AHAC’s mission to increase safety and security in Hampton Roads by enhancing regional emergency management capabilities that help localities be better prepared to plan for and respond to disasters of regional significance.

The local context of the grassroots and AHAC agency-based collaborations serve the same communities and therefore share the same mixed political culture. Both the grassroots and AHAC collaborations rely on localities financially, politically, and in the allocation of resources. However, since the grassroots collaborations are independent non-profit organizations, these organizations operate outside of the local government bureaucracy. Therefore, they spend a lot of their efforts reaffirming their relationship with the local government leaders and negotiating waterway use, such as: waterway contamination, residential runoff and industrial pollution, waterway use policies, and access to resources. The grassroots collaborations primarily receive funding from citizen donations, membership dues, and grants, in addition to a significant about
of financial support from localities, whereas the AHAC collaboration relies solely on
government funding.

A commonality among both grassroots and the AHAC’s agency-based collaboration is
the significant role of social capital as a key component to their initial formation. What
primarily defines the grassroots collaborations is their reliance on active citizen involvement,
whereas AHAC’s relies heavily on the participation and professional expertise of emergency
managers and stakeholders. In both collaboration settings, the founders worked hard to establish
and build legitimacy for their collaborations. Both collaboration settings have relied on their
personal and professional relationships with other stakeholders to develop mutually supportive
networks to achieve their goals. Both collaboration settings depended on influential and
well-respected individuals and/or stakeholders to champion early momentum to establish
collaboration.

**Collaboration Process**

In both the grassroots and agency-based collaboration settings, the organizations adopted
by-laws, established governance structures and sub-committees to set goals, identify projects,
and implement plans. Each organization incorporated important stakeholders into their
collaborative structures. While the AHAC agency-based collaboration operates under the
regional authority of HRPDC, the grassroots organizations are registered 501(c)(3) nonprofit
entities.

Conveners play a vital role in the collaboration process because they are instrumental in
gathering resources and support from key stakeholders. Both the grassroots and agency-based
collaborations encourage a governance culture that is collaborative and non-confrontational.
This approach is important because it inspires interpersonal trust between participants and with
external stakeholders. Each of these collaborations affirm the importance of conveners in collaborative settings. Morris et al. suggest that the grassroots conveners are organizations like the Chesapeake Bay Foundation (CBF) or the Choose Clean Water Coalition (CCWC) because they “act as conduits to share information and expertise between groups.” In the AHAC agency-based collaboration the emergency managers of Chesapeake, Virginia Beach, and Norfolk exhibit characteristics of a convener individually and collectively. Each of these three conveners are advocates of the AHAC mission and work closely with one another. Interviewees recognized that these three conveners provide vision, energy, commitment, credibility, and the appropriate skill set for effective leadership above and beyond what is expected from a typical AHAC member.

**Outputs and Outcomes**

Morris et al. explain that the three grassroots collaborations “have successfully employed collaboration to achieve changes in their respective watersheds” (p. 221). In both the grassroots and agency-based collaboration settings, the age of the organization was found to be directly tied to the “breadth and depth of outputs, as well as the existence of measurable outcomes” (Morris et al, p. 222). While the ERP and LRN have robust educational programs and community events, the newly formed NRPA has initiated a few modest educational programs. Similarly, AHAC has produced the Hampton Roads Hazard Mitigation Plan and a legislative agenda, yet gauging the direct impact of AHAC’s collaborative process on outcomes is limited. Morris et al. posit that both the ERP and LRN can claim many measurable changes in environmental quality in their watersheds resulting from collaborative processes used to mobilize expertise, funding, stakeholder support and social capital. However, it is too early to identify the exact outcomes from the AHAC collaboration because it is so new.
Social Capital

The significance of social capital was evident in both the grassroots collaborations and the AHAC agency-based collaboration. These organizations have relied on social capital for the initial formation of their organizations and to generate additional social capital while building a network of stakeholders to incorporate a culture of mutually beneficial stewardship of their policy domain. In the case of grassroots collaborations, the nonprofit organizations relied on a network of citizens and stakeholder organizations to build both trust and legitimacy within their communities so that they are viewed as capable of resolving water quality concerns. In the case of agency-based collaboration, AHAC relied on a network of seventeen (17) local emergency managers and forty-eight (48) stakeholder organizations to foster greater collaboration and working relationships within the emergency management community. As an agency-based collaboration, AHAC inherently had a degree of institutional legitimacy at its inception that the grassroots organizations had to earn. The existing level of social capital provides a basis for action that can increase credibility amongst policy makers. “Social capital translates to political capital” (Morris et al., p. 225). For instance, the AHAC legislative advocacy was instrumental in the reinstatement of the UASI grant funding in Hampton Roads.

This section outlined the similarities and differences between the grassroots collaboration and agency-based collaboration settings using the EMC framework as a guide. The differences between the grassroots and agency-based collaborations are rooted in their context, resources, and composition of their participants. The grassroots collaboration relies on the support of citizens and stakeholder organizations, individual donations, membership fees, and local government funding. Whereas an agency-based organization receives most of their resources from national, state, and local government entities and municipal government taxes. AHAC
members are agents of the localities in which it serves, which brings a degree of institutional legitimacy that benefits the collaboration. Institutional legitimacy is not inherent to grassroots collaborations and must be earned. However, the three grassroots and AHAC agency-based collaborations are similar in many respects, such as in their commitment to collaboration, governance structure, operations, and the important role of social capital among both internal and external stakeholders to accomplishing their goals. Morris et al. concluded that “They are all working for a shared vision of a better community and taking a pragmatic approach…they are interested in what works.” (Morris et al., p. 224)

The next section provides a review of the research questions and a discussion of the quantitative and qualitative findings as they address the research questions.

**Research Question Discussion**

1. To what extent can the Enhanced Model of Collaboration framework be used to explain collaboration in an agency-based setting?

   The purpose of this study is to test the validity of the Enhanced Model of Collaboration (EMC) by exploring the extent to which the EMC can be used to explain collaboration in an agency-based setting. This dissertation is a differentiated replication of research by Morris et al. (2013) entitled, “The Case for Grassroots Collaboration: Social Capital and Ecosystem Restoration at the Local Level.” Morris et al. applied the EMC to explore grassroots efforts that support nonprofit organizations focused on improving environmental conditions in the Chesapeake Bay watershed of southeastern Virginia. This study applied the EMC to explore agency-based collaboration efforts that support the All Hazards Advisory Committee, which is a multisector organization aimed at improving regional emergency management efforts in Hampton Roads. Using both collaboration and social capital theories, this concurrent mixed
methods case study investigated the constructs in the EMC which include context, process, output, outcomes, and social capital among AHAC membership.

Collaboration is the approach that AHAC members are employing to expand local capabilities for the purpose of preparing for and responding to large scale disasters in Hampton Roads. Chapter IV was structured using the EMC constructs as the framework to demonstrate the extent that it can be used to explain the findings from an agency-based collaboration. The EMC framework tells the story of what is occurring at a point in time and can provide understanding of how the interaction of variables are contributing to the outputs and outcomes. The data collected from the individual interviews, document analysis, observations of meetings, and AHAC Collaboration and Social Capital survey were presented according to the EMC constructs. The EMC framework can be applied to explain the AHAC agency-based collaboration to the extent that the EMC constructs of grassroots collaboration are present in the agency-based collaboration setting. Because the EMC is a descriptive model, this study focused on identifying the EMC constructs and sub-variables of the grassroots model in the AHAC agency-based collaboration setting. It was determined that the EMC grassroots collaboration framework is generalizable to the agency-based collaboration setting to the extent that the same constructs and sub-variables are present in the agency-based setting.

However, upon further examination, the EMC’s grassroots focus is limited and does not account for sub-variables that were found to be distinct to an agency-based collaboration setting. The participants in an agency-based collaboration are acting on behalf of an agency, which creates another tier of political influence that was not depicted in the grassroots collaborations. For a full analysis of an agency-based collaboration, the evaluation tool needs to explain both the interpersonal and organizational interactions that impact a collaboration process. Therefore, the
next section introduces the Enhanced Model of Agency-Based Collaboration (EMAC) (Figure 8. P. 123) framework to more accurately examine, research, and evaluate agency-based collaboration settings.

2. How are the All Hazards Advisory Committee members using collaboration to implement emergency management policy?

The AHAC members are using collaboration to implement emergency management policy by including emergency management stakeholders in the collaboration process, practicing consensus-based decision making, collectively advocating for resources, and consolidating local emergency management plans into regional plans.

The AHAC members include 66 multisector stakeholders from the Hampton Roads area, which includes 17 local emergency managers and an administrator from the Governor’s Office of Public Safety and Homeland Security. AHAC members are autonomous participants who come from local organizations and localities within the Hampton Roads region to work together to advance shared interests and collective responsibility for regional emergency management tasks that cannot be accomplished individually. AHAC members jointly agreed on rules and structures to govern their relationships and ways to decide on regional emergency management issues. They meet formally at their bi-monthly meetings and informally between meetings to negotiate and decide on issues that brought them together. The interviews and survey responses show that the AHAC members believe in the collaborative process and have established norms and mutually beneficial agreements and interactions because of AHAC.

AHAC members are using collaboration to pursue two priorities: developing a regional Hazard Mitigation Plan and a legislative agenda that includes reestablishing UASI grant funding in Hampton Roads. Both goals benefit all stakeholders in the Hampton Roads region and require
their participation. The Regional Hazard Mitigation plan was AHAC’s first achievement and the first time that the AHAC collaboration was tested. A more arduous test of the AHAC collaboration is its influence on the Virginia General Assembly, VDEM, and FEMA to reestablish the UASI grant funding in Hampton Roads. AHAC hosted a meeting of local, state, and federal administrators and elected officials at the HRPDC regional office. They discussed the UASI grant program, the impact of losing previous UASI funding, and how changes in the UASI award criteria will affect its application to the UASI program moving forward. These are some ways that AHAC is using collaboration to implement emergency management policy.

At the conclusion of this study, the U.S. Department of Homeland Security (DHS) announced the reinstatement of the Urban Area Security Initiative (UASI) grant program in the Hampton Roads region by awarding it $1 million for the 2017 fiscal year.

3. What is the role of social capital and its effect on collaboration among AHAC members?

Evidence of social capital was found to be present at each stage of the AHAC collaboration’s context, process, output, and outcomes as identified in the EMC. As a newly formed organization, social capital played a key role in bringing stakeholders together, accepting the governance structure, selecting goals, and successfully working together to achieve the goals. Importantly, social capital served to establish trustworthiness among stakeholders and organizational legitimacy.

AHAC collaboration aligns with American sociologist Ronald Burt’s depiction of social capital in the workplace. “The shift away from bureaucracy is a shift to social capital as the medium for coordination within the organization” (Burt, 1997, p. 359). The AHAC’s flat organizational structure enables emergency managers and nonvoting members to focus on teamwork and consensus decision making, which increases opportunities for social interaction
and new perspectives on items important to regional emergency management. When coordination involves information sharing, common interests, and mutual goals, as in a the AHAC collaboration, the participants feel that their voice is being heard and considered, they have better access to information and resources, and have some control over the outcome.

The social capital that initiated regional collaboration among emergency managers in Hampton Roads predated the formation of the AHAC collaboration. The previous regional emergency management committees were specialized according to topic and included many of the same stakeholders. A study by Collins et al. (2015) revealed that the Hampton Roads region annually spends approximately, $2.1 million and 34,000 man-hours on emergency management meetings including exercises and transportation of personnel to them. Based on the study’s recommendations, the HRPDC consolidated the specialized committees to form the All Hazard Advisory Committee. Since the emergency managers and organizational representatives had previously established working relationships, the AHAC collaboration was quickly setup and operational. The social trust from existing working relationships, suggests that social capital was the impetus that led to collective action under the newly formed AHAC collaboration.

As a newly formed agency-based organization, AHAC stakeholders took immediate steps to establish a governance structure. The steps included identifying key stakeholders, accepting the by-laws, electing leadership (chair, vice chair, and secretary), creating sub-subcommittees, and setting the policy agenda. The ability to swiftly setup AHAC shows evidence of a series of trust judgements. AHAC participants are making decisions by gaining consensus among all seventeen (17) voting members. The trust judgements are evidence of social capital and its impact on the continuity of the collaboration process.
Social capital is rooted in trust and reciprocity among participants and stakeholders. Transparency is key to developing trust and reciprocal relationships. However, the AHAC Collaboration and Social Capital survey found that trust among AHAC participants was lower than expected. Interviews revealed that local CAOs have more influence than the participant in determining the AHAC agenda items. While localities are voluntarily participating in regional collaboration, full transparency is difficult when they must also compete for some resources. Essentially, localities are collaborating on some items, while competing for others, which presents the potential for hidden agendas and mutual distrust. The findings of this study demonstrate the necessity for AHAC participants to increase transparency to develop mutual trust. Full disclosure of external influencers and potential conflicts of interested among localities may improve interpersonal communication and create new opportunities for collaboration.

Regional emergency management is complex and requires technical and political expertise that the AHAC can provide. The Hampton Roads municipalities provide access to “resources such as financial, human, political, and technical capital” (Morris et al, 41). The localities implement emergency management policies and are the stewards of the financial, human, political, and technical resources. AHAC is a forum for local emergency managers to discuss mutual agreements and activation of resources regionally, while considering the availability of various local resources and capabilities. Social capital serves as a feedback loop since each decision made is dependent on the levels of perceived trustworthiness and reciprocity of its stakeholders. Therefore, explaining the role of social capital in a collaborative setting helps to identify potential limits to local contributions and political consequences should local and regional agendas misalign.
The Enhanced Model of Agency-based Collaboration (EMAC) is a modified version of the Enhanced Model of Collaboration (EMC) that Morris et al. (2013) designed to study grassroots collaboration. Both models display the systematic and cyclical nature of the collaboration process and include the same constructs: context, collaboration process, output, outcomes, and social capital. Both models begin with an analysis of the context variables as indicators of the potential for and framing of a collaboration. The collaboration process describes the organizational structure, processes, and network of stakeholders and resources that contribute to the collective mission. The outputs and outcomes are products of the collaboration process. The outputs are intermediary results that collectively impact the outcomes, or long-term changes to the policy domain, social, and physical environment. The differentiation between the two models can be found in the sub-variables and the overall structure of the model. The EMC framework falls short of explaining the progression of the collaboration overtime by not addressing the impacts of social and organization learning. The EMAC accounts for both the inter and intraorganizational interactions that influence the collaboration process. A comparison of collaboration context, process, output, outcomes, and social capital constructs and their sub-variables are discussed in this section.
Figure 8. Enhanced Model of Agency-based Collaboration

EMAC Context

The context of the EMAC identifies the conditions that contribute to the initial formation of an agency-based collaboration, the development of new actions that an existing collaboration pursues, and the ongoing policy changes that ensue as a result of outcomes and both internal and external influences. The context of the EMC framework focused on the reversal of the historically top-down policy implementation of the environmental policy domain, which was eventually challenged by an increase of grassroots policy efforts that inspired policy change from
the local level. The agency-base collaboration framework recognizes that agencies are embedded in a government structure where the federal, state, and local governments significantly influence the context of agency-based collaboration at any level of government. Importantly, the collaboration process may influence changes within the agency-based collaboration and with external organizations. As the context of an agency-based collaboration changes overtime, it must reassess its ability for action, which includes reassessing available resources. Stakeholders are a source of these resources, which ties directly to the initial social capital that remains pivotal to collaboration. Therefore, state government, organizations, and resources were added under the EMAC Context category. In summary, the Context construct of the EMAC Framework considers Federal, State, Local government, organizations, policy, agendas, history, political culture, nature of the problem, social capital, and assessment of resources as pertinent influences on an agency-based collaboration process.

**EMAC Process**

Both the EMC and EMAC frameworks identify stakeholders & roles, conveners, resources, rules, and governance structure as key variables to the collaboration process. However, the EMAC acknowledges the complexities of a greater network of stakeholders beyond the agency-based collaboration. Internal stakeholders include the active participants of the agency-based collaboration. In this case, the internal stakeholders are the voting and non-voting AHAC members. The voting members are the primary stakeholders because they are the decision makers, whereas the secondary members provide consultative perspectives. The external stakeholders are agencies that are not directly participating in the agency-based collaboration but are affected by the actions and outcomes of the collaboration. The political
culture may indicate the extent to which political agendas of internal and external stakeholders align.

Collaborative efforts require a significant commitment of time, expertise, and resources. Collaborative governance requires deliberation and consensus driven decision making. Once a decision is made, then the resources are aligned to implement the decision and support the collective mission. In addition to the local and regional resources provided to an agency-based collaboration, this study found that information sharing, grant awards, and public-private partnerships were the top three ranked collaborative behaviors that have resulted from involvement in the AHAC. As the Homeland Security Grant Program continues to incentivize regional multi-sector collaboration, an increase in collaborative interpersonal and interorganizational behaviors can be expected. A move toward regional collaboration may also encourage collaborations to acquire regionally managed resources. In sum, the EMAC collaboration process category includes: Stakeholders & Roles (internal & external), Conveners, Resources, Rules, and Governance Structure. How agency-based collaborations collectively manage, prioritize, and focus resources to achieve its goals substantiates its ability to influence policy changes.

**EMAC Output**

Koontz and Thomas (2006, 115) define collaboration outputs as the “intermediary causal mechanisms between collaboration process and collaborative outcomes.” The EMC identifies grassroots outputs as the development of plans, agreements, partnerships, scientific reports, projects, establishment of water quality standards, and education and awareness programs. EMAC also found most of the output variables apply to agency-based collaboration settings, except for “quality”. The “quality” variable is specific to the study of watershed organizations,
whose missions included reducing pollution in waterways. Setting “standards” remains a relevant output, but the type of standard should be determined by the members of the collaboration. In an agency-based collaboration setting, outputs are a result of transparent and mutually agreed upon conditions and terms, where stakeholders contribute to the development of plans, agreements, and partnerships. The scientific reports and projects and educational programs are jointly produced. Outputs are the products of the collaboration process intended to serve the mission of the collaboration.

**EMAC Outcomes**

Outcomes are the long-term effects of a collaboration’s actions and determine the efficacy of a collaboration over time. The EMAC outcomes are categorized by social and institutional changes over time. An agency-based collaboration has two sets of stakeholders internal and external. As an agency-based collaboration matures, policy and social learning should influence member ethics, behaviors, reframing of the problem, and social capital. In an Agency-based collaboration setting, long-term changes in governance, political capital, policy, practice, and organizational capability result in more effective advocacy for their policy domain and program implementation. Changes in governance may entail more organizational autonomy resulting in the AHAC participants having more influence over how they are organized, funded, and how they operate.

While social capital refers to trust building and norms of reciprocity, political capital refers to political influence that is generated through actively participating in the political process. The development of a legislative agenda and advocacy on behalf of the AHAC collaboration was an example of how the AHAC participants are already acquiring their political capital to positive ends. Morris explained that “Social capital translates to political capital”
The primary goal of the AHAC collaboration was to leverage their collective political capital to reestablish the UASI Grant in Hampton Roads. According to Sorensen and Toring (2003), political capital refers to three factors related to local political actors’ ability to engage in political decision making: the level of access that they have to decision-making processes (endowment); their capability to make a difference in these processes (empowerment); and their perception of themselves as political actors (political identity).

AHAC participants collectively prioritized their legislative needs, developed a legislative agenda, invited federal, state, and local political actors to a meeting, and presented their case for UASI grant funding. They demonstrated their organizational legitimacy as a political actor and ability to influence the political process in their favor.

This study also revealed that the AHAC regional emergency managers identified vulnerabilities and gaps in regional capabilities, which put the safety of the region at risk. AHAC’s primary focus was to increase grant funding, close the vulnerability gaps, and improve regional emergency management capabilities. Regional capabilities are the actions of acquiring the capacity to work collectively to produce long-term social and environmental changes. As the AHAC collaboration continues to pursue short-term goals, it should become more capable of generating long-term impacts on emergency management policy and practices that result in a safer Hampton Roads region. Therefore, the EMAC introduces “capability” as an important outcome indicator of agency-based collaboration efficacy.

**EMAC Social Capital**

While the evidence to support the EMC social capital construct in grassroots collaboration was limited, collaboration literature supports that collaboration is a socially constructed process and therefore maintains that the role of social capital is fundamental to
collaboration. The EMC identifies social capital through levels of trust, norms of reciprocity, legitimacy, efficacy, and commitment to place. Collaboration requires a social network of individuals who exhibit elements of social capital through their interactions and intent to accomplish common goals. Despite some local competition for resources, this study found evidence of social capital in the AHAC collaboration process that resulted in information sharing and collective agreements even in the collaboration’s early stages. Social capital remains a central tenant of collaboration and serves as a constant feedback loop that assesses the conditions of personal interactions through each phase of the collaboration process. Social capital serves as an indicator of whether individuals can agree on the nature of the problem, trust one another to commit to solving the problem, agree on the process for producing a solution, and identifying what a solution looks like. Social capital may change throughout the collaboration timeline and should be closely monitored. For this reason, social capital is appropriately displayed in the center of the EMAC framework with arrows indicating that social capital influences each stage of the collaboration while also fluctuating as a result of personal and organizational interactions throughout the lifespan of the collaboration.

Through interviews and the AHAC Collaboration and Social Capital survey, this study found that trust and norms of reciprocity were expressed through information sharing, joint applications for regional grant awards, public-private partnerships, and mutual aid agreements. Trust and norms of reciprocity can be used to create or motivate collaborative behavior and contributes to social stability within a collaboration. When the personal interactions and behaviors within the collaboration reflect prosocial values such as trust and reciprocity, it translates into organizational legitimacy. When combined with multi-sector interorganizational collaboration, the agency-based collaboration can lead to innovative regional outcomes.
Therefore, the EMAC recognizes the importance of identifying internal and external stakeholders and assessing their respective influences on an agency-based collaboration setting.

Morris et al. (2013) found that commitment to place or BIMBY (Because It’s My Backyard) is an important motivator for individuals who live in close proximity to a public problem to become engaged in efforts to resolve the public problem. This study found that BIMBY is a motivating factor that mobilizes localities and stakeholders to participate in the AHAC regional collaboration to build economies of scale in terms of building capabilities that ensure safety and security across the Hampton Roads region. However, individual local emergency managers engage in the AHAC regional collaboration because it benefits them professionally. This study concludes that emergency managers are motivated to collaborate with colleagues from across the Hampton Roads region, not because it’s their backyard, but because they are committed to the broader mission of improving emergency management regionally. While their primary job is to close vulnerability gaps in order to ensure safety and security for their locality, they benefit from participating in regional efforts where they are working in cooperation across sectors to ensure safety and security across the region, which includes their locality. In an agency-based collaboration, indicators of social capital in the forms of mutual trust, norms of reciprocity, organizational legitimacy, and efficacy are critically more instrumental when it supports a commitment to a broader mission than it is to a location.

**Summary**

An empirically validated framework of collaboration requires a systematic approach to identifying the necessary constructs that are commonly found in real-world settings. This dissertation validates that the EMC framework does not adequately explain collaboration in an agency-based setting. Therefore, the Enhanced Model of Agency-based Collaboration is
proposed as a more accurate model for research on agency-based collaboration settings. The AHAC collaboration was selected because it exhibits the characteristics of a collaboration that satisfies the EMC theoretical framework, however, in conclusion, the EMC model was limited. This study examined how AHAC members used collaboration to achieve its goals as well as the role of social capital throughout the collaboration process and inspired the Enhanced Model of Agency-based collaboration.

Data was collected via informational interviews and document analysis, which provided historical and contextual descriptions. The demographics and variables that support the social capital construct data were collected from the AHAC participants via the “AHAC Collaboration and Social Capital” survey. The survey is a modified version of the original study by Morris et al. (2013) which was distributed, but not included in the grassroots collaboration research publication.

Replication of Morris et al.’s (2013) methodology revealed that the EMC constructs accurately account for the conceptual elements typically considered to be present in a collaborative setting, which includes context, process, output, outcomes, and social capital, but the sub-variables did not adequately explain the political setting of an agency-based collaboration. Chapter IV displayed how the EMC was applied to analyze the AHAC collaboration findings. The results are consistent with the expectations found in the literature. It also demonstrates that the EMC had limited generalizability for analyzing agency-based organizations that use collaboration in real-world situations to achieve goals. Differences described in the section on the Enhanced Model of Agency-based Collaboration section support this claim.
AHAC members are using collaboration to implement emergency management policy by including emergency management stakeholders in the collaboration process, practicing consensus-based decision making, collectively advocating for resources, and consolidating local emergency management plans into regional plans.

Evidence of social capital was found to be present at each stage of the AHAC collaboration’s context, process, and output, as identified in the EMC. While social capital data in the grassroots collaboration setting was limited, this study has determined that social capital in an agency-based collaboration is at least as important to the collaboration process as that of a grassroots collaboration setting. The results from this study will contribute to policy makers general understanding of the differences between grassroots and agency-based collaboration and the central role that social capital plays in the agency-based collaboration setting.

**Suggestions for Future Research**

This dissertation is a small contribution to a growing body of literature on agency-based collaborations and emergency management. This study found that the EMC’s grassroots focus is limited and does not account for sub-variables that were discovered to be distinct to an agency-based collaboration setting. The evaluation tool needs to explain both the interpersonal and organizational roles and changes that occur throughout the collaboration process. Therefore, the Enhanced Model of Agency-Based Collaboration (EMAC) is proposed to accurately examine, research, and evaluate agency-based collaboration settings. The following section compares the EMC and the EMAC frameworks and discusses the adaptations of the EMC to form the EMAC.

The Enhanced Model of Agency-based Collaboration (EMAC) is a modified version of the Enhanced Model of Collaboration (EMC) that Morris et al. (2013) designed to study grassroots collaboration. Both models display the systematic and cyclical nature of the
collaboration process and include the same constructs: context, collaboration process, output, outcomes, and social capital. The lessons drawn from this case can help inform policy makers, and other agency-based collaborations that are engaged in the policymaking arena.

Regional collaboration has been identified as the preferred method for emergency management preparedness efforts. The Urban Area Security Initiative (UASI) grant program, administered by the Federal Emergency Management Agency (FEMA) since 2003, has provided 64 high-risk metropolitan areas funding to enhance their regional preparedness capabilities. The UASI and other grants under the Homeland Security Grant Program (HSGP) require collaborative projects that are regional in nature. Urban areas that received a UASI grant award are engaging in collaborative activities and have established interjurisdictional relationships in emergency management. This affirms how vital the understanding of regional multisector collaboration is to the future of public policy.

The Enhanced Model of Agency-Based Collaboration (EMAC) is proposed as the preferred model for future research on agency-based collaboration settings. The use of the EMAC to describe regional collaboration in emergency management across the 64 UASI regions has the potential to aid multisector organizations in understanding best practices when designing new or improving existing agency-based collaborations, establishing a political identity, as well as recognizing the integral contribution of social capital to the collaboration process. Replication of the EMAC in multiple settings will help to increase knowledge in this area and may impact how agency-based collaboration affects policy change and leads to improvements in collaboration practice.
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Difficulties Experienced during Katrina by Individuals with Special Needs and Disabilities During/After a Disaster, ASPA, Annual Conference, Baltimore, Maryland, March 11-15, 2011

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