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## Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

#### William Reiske

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee
Dr. Donald McLellan, Committee Chairperson,
Public Policy and Administration Faculty

Dr. William Steeves, Committee Member, Public Policy and Administration Faculty

Dr. Tanya Settles, University Reviewer, Public Policy and Administration Faculty

Chief Academic Officer Eric Riedel, Ph.D.

Walden University 2017

#### Abstract

# Factors Affecting Hampton Roads, Virginia, Elected Official Emergency Management Recovery Policy Decisions

by

William Reiske

MS, National Defense University, 1983

BA, The Citadel, 1979

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

Walden University

May 2017

#### **Abstract**

For many regions and local governments, budgetary restraints limit funds appropriated for emergency management activities to inadequate levels, and little guidance exists related to decision factors used by elected officials in identifying budget and ordinance priorities. Using Kwon, Choi, and Bae's conceptualization of punctuated equilibrium theory, the purpose of this case study was to examine how decision factors influenced Hampton Roads, Virginia, elected official disaster recovery policy between 2003 and 2012. Data were collected through review of 1,310 city documents and 10 semistructured interviews with elected officials. Data were inductively coded and analyzed using a thematic analysis procedure. Data analysis resulted in the identification of 3 decision factor themes that guided post disaster recovery in Hampton Roads: (a) establishing a sense of normalcy in terms of budget appropriations and ordinances for security, safety and quality of services short-term recovery policy, (b) budgetary resiliency to encourage the restoration of infrastructure related to long-term recovery policy, and (c) the development of self-sufficient processes that lead to an anticipatory mindset with issuance of mitigation ordinances and capital improvement appropriations policy. The findings confirmed punctuated equilibrium theory, as man-made disasters triggered shortterm recovery policy decisions. Results of the study may affect positive social change by providing local elected representatives with a "tool kit" of decision factors to consistently address post disaster recovery policy for public safety, security, and stability via the governance mechanisms of strategic planning, appropriation decisions, and assessment.

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### Dedication

I thank my loving wife Linda for keeping me on track and allowing me to complete the dissertation vice watching reality TV shows. *Find a way or make one* was my mantra, each day of this worthwhile and fulfilling journey.

#### Acknowledgments

I thank Dr. Donald McLellan, Dr. William Steeves, and Dr. Tanya Settles for guiding me through the dissertation process, Dr. Gary Kelsey for a wonderful residency program, and the dedicated and hard-working City of Chesapeake Local Emergency Planning Committee stakeholders for showing me the importance of public service.

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#### Chapter 1: Introduction to the Study

#### **Background of the Study**

The formulation and implementation of local level emergency management recovery policy continues to mature. For the case study, the disasters affecting the Hampton Roads area were national disasters as opposed to man-made disasters. Emergency management recovery policy research is an under researched area, as most authors referred to prevention, mitigation, preparedness, and response. The Federal Emergency Management Agency (FEMA) and U.S. Environmental Protection Agency (EPA) mandated mitigation, preparedness, and response, yet provided only guidance for the recovery mission area (EPA, 2014; FEMA, 2015b). The lack of a federal recovery mandate permeated to the local level of governance with the Commonwealth of Virginia and Hampton Roads communities, focusing on preparedness and response through the EPA-mandated Local Emergency Planning Committees (LEPCs; Ready Hampton Roads, 2015; Virginia.gov, 2016b). The literature emphasized emergency managers' role in recovery decisions, but offered little on elected official recovery policy decisions (Demiroz & Kapucu, 2012; Jensen, Bundy, Thomas, & Yakubu, 2014; Johnson, 2014a, 2014b; Storr & Haeffele-Balch, 2012). The background offered pertinent peer-reviewed articles and government documents about emergency management, the theoretical framework of punctuated equilibrium theory (PET), qualitative and quantitative research about decision making factors, and rationale for why the current study advanced the emergency management field of knowledge pertaining to elected official decision factors and recovery policy.

#### **Historical Perspective**

FEMA (2012, 2015b) provided the historical emergency management benchmarks that comprise the 1979 Presidential Directive to establish FEMA under the Department of Homeland Security and shift from four stages to five mission areas for a critical incident. A critical incident is defined as a man-made or natural disaster and is interchangeable with the terms disaster and friction event. The case study addressed natural disasters in Hampton Roads between 2003 and 2012 to include hurricanes Isabel (2003), Ernesto (2006), Gaston (2004), Irene (2011) and Sandy (2012) and winter storms and Nor'easters in 2009 and 2010. The seminal comprehensive emergency management (CEM) theory stages of mitigation, preparedness, response, and recovery (Drabek & Hoetmer, 1991; National Governor's Association [NGA], 1979) continue to mature at the federal level as indicated by FEMA's 2014 shift to prevention, protection, mitigation, response, and recovery mission areas (FEMA, 2015b). A review of federal and Commonwealth of Virginia emergency management documents and websites highlighted that recovery is not a mandated mission area and is loosely integrated with the other four mission areas (FEMA, 2015b; Virginia.gov, 2014). Research provided a robust accounting of positive and negative illustrations of recovery factors influencing emergency managers, the private sector, and elected representatives planning and actions in Florida, New Orleans, Missouri, New Jersey, and New York, and therefore was an excellent opportunity for analysis of Hampton Roads, Virginia, elected official recovery decision factors and policy actions (Caruson & MacMancus, 2011a; Demiroz & Kapucu, 2012; Jensen et al., 2014; Johnson, 2014a, Reeves, 2011, Smith & Sutter, 2013; Storr &

Haeffele-Balch, 2012). The research highlighted the need to aggregate decision factors for effective emergency management recovery planning and execution. I used the research to examine recovery policy factors for the Hampton Roads area elected representative population.

#### **Theoretical Foundation Through PET**

Baumgartner and Jones's (1993) PET seminal work formulated policy as gradual with occasional triggering or friction events to effect federal budget policy change. PET aligns to the circumstances of a critical incident as unplanned man-made or natural disasters disrupting the normal policy making cycle and forces representatives to think and act decisively in the delivery of community services (Jensen et al., 2014; Jones & Baumgartner, 2012). In 2012, PET qualitative and quantitative research moved to a broader application for state budgets, the setting of agendas, influences of media, and circumstances surrounding the processes of policy making (Boushey, 2012; Bruening & Koski, 2012; Kwon, Choi & Bae, 2013; Wolfe, 2012). I used the PET assumption that political institutions influence local critical incident policy decisions (Kwon et al., 2013). The political institutions research provided quantitative conclusions that institutional factors influenced critical incident policy and process decisions. The expansion of Kwon et al.'s (2013) political institutions factors PET research to other decisions factors offered an opportunity to examine how social, infrastructure, and economic recovery decision factors affect Hampton Roads elected official recovery policy. An aggregate of decision factors influencing recovery policy decision within the PET framework offered the means to expand emergency management policy formulation and decision knowledge.

#### **Decision Factors**

The decision factors embedded in the concepts of public service motivation (PSM) as defined as an affiliation for public policy making, a desire to serve the public interest, and self-sacrifice, and public values (PV) as defined as contributions to society and community factors such as time, housing, infrastructure, business, and environment provided a researchable context to examine elected official emergency management decision factors and recovery policy decisions (Andersen, Jørgensen, Kjeldsen, Pedersen, & Vrangbæk, 2012a, 2012b; Berke, Cooper, Aminto, Grabich, & Horney, 2014; Comfort, Waugh, & Cigler, 2012; Desmarais & Edey Gamassou, 2014; FEMA, 2015b; Kim et al., 2013; Perry, 1996; Ready Hampton Roads, 2015). The PSM and PV research complemented Kwon et al.'s (2013) PET assumption that political institutions influence critical incident policy decisions with research pertaining to the environment and attitudes of elected officials. The community decisions regarding social, infrastructure, and environment factors also build on Kwon et al.'s PET assumptions regarding critical incident policy decisions. The aggregate of PSM, PV, and community decision factors enabled the formation of evidence-based decision factors research for the case study.

The study provided the means to qualitatively examine PSM, PV, and community factors and Hampton Roads, Virginia, elected representative recovery actions between 2003 and 2012 within the context of the PET assumption that political institutions influence local critical incident policy decisions. The aggregation of PSM, PV, and community factors in a case study provided a unique research opportunity to examine PET application at the local governance. To address the research gap, a case study

approach and PET foundation was used to understand the political, social, infrastructure, and environmental factors that influenced Hampton Roads recovery policy decisions between 2003 and 2012 (Kwon et al., 2013; Patton, 2002; Yin, 2014). I derived results and findings from peer-reviewed emergency management research about localities within the United States and international communities; federal, state, and Hampton Roads city council meeting minutes, comprehensive annual financial reports (CAFRs); and a semi-structured interview protocol. The triangulated sourcing of knowledge (Patton, 2002) and semi-structured interview protocol offered an evidence-based means to examine the research problem of PSM, PV, and community factors that influenced Hampton Roads, Virginia, elected recovery policy decisions following a disaster between 2003 and 2012.

#### **Problem Statement**

The problem in the Hampton Roads region of Virginia (as defined as Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg) referred to governance of emergency management recovery policy decisions (Berke et al., 2014; Government Accountability Office, 2012; Olshansky & Johnson, 2014). Local community recovery policy triggered by a critical incident has become an increasingly significant emergency management capacity and capability issue due to declining budgets (Comfort et al., 2012; FEMA, 2012; Olshansky & Johnson, 2014; McEntire, 2012; Reeves, 2011; Smith, 2011). Despite federal recovery guidance, Hampton Roads, Virginia, elected officials do not possess a reusable, broad base of decision factors from which to derive recovery policy decisions (FEMA, 2012; Virginia.gov, 2014). This problem impacted short and long-term Hampton Roads elected

official recovery policy decisions (FEMA, 2012). Singular research regarding institutional, community, and economic decision factors affecting local level recovery policy emphasized the need to further study factors influencing recovery policy decisions (Berke et al. 2014; Caruson & MacManus, 2011a, 2011b; FEMA, 2012; Kwon et al., 2013). The case study examined an aggregation of decision factors that influenced Hampton Roads representative recovery policy decisions between 2003 and 2012 that informed the emergency management phenomenon knowledge.

#### **Purpose of the Study**

The purpose of this case study was to expand upon Kwon et al.'s (2013) PET conclusion that local level political institution factors informed and triggered emergency management decisions. To address the gap, a case study approach extrapolated upon Kwon et al.'s PET research conclusions that local level political institution factors influenced policy decisions to an aggregation of PSM, PV, and community decision factors. The aggregated examination of Hampton Roads elected representative decision factors following a local level critical incident provided for a deeper understanding of the decision factors that contributed to local level recovery policy actions (Andersen et al., 2012a, 2012b; Berke et al., 2014; Comfort et al., 2012; Desmarais & Edey Gamassou, 2014; FEMA, 2012, 2015b; Kim et al., 2013; Kwon et al., 2013; Patton, 2002; Perry,1996; Ready Hampton Roads, 2015; Yin, 2014). The PET derived assumption for the case study was that an aggregated list of decision factors influenced Hampton Roads elected representative recovery decisions between 2003 and 2012.

#### **Research Question**

The following research question expanded on the PET assumption that political institution factors influenced local level emergency management policy decisions: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions?

The "how" question aligned with Yin's (2014) case study approach and the ways and means multiple level questions support research. I used Yin's five levels of questions regarding interviewees, patterns, entire study, and policy recommendations and conclusion questions to align with the research question. The Level 1 questioning pertained to the semi-structured interview protocol. Level 2 questions emanated from Hampton Roads government documentation. For example, review of the CAFRs created questions regarding how city council meetings resulted in recovery appropriations and ordinances policy decisions. The Level 3 questions informed the categories and themes that shaped the findings such as how representatives used ordinances to ensure community safety. Level 4 questions regarded information literature review knowledge such as local decision factors. The Level 5 questions emanated from the recovery policy conclusions and recommendations.

For the purpose of the research, the term *policy decision* is defined as conditions for the development of new policy or programs, nonaction, adherence to existing policy, or revision of policy (Cairney & Heikkila, 2010) through ordinances and appropriations, and the recovery mission area is defined as the revitalization of housing, critical infrastructure, and the environment (FEMA, 2015a).

The subordinate questions were formed from the review of local government emergency management documentation and PSM and PV research literature, and provided context for the generation of semi-structured interview questions (Appendix A).

SQ1: What factors affected policy formulation? The intent was to capture the day-to-day environment and expand Kwon et al.'s (2013) PET political institutions decision factor conclusions. I probed to ascertain what factors affected elected representative recovery policy for critical incidents defined as man-made or natural disasters.

SQ2: How did current policy procedures and organizational structures influence recovery actions for the critical incidents between 2003 and 2012? The questions explored the inherent checks and balances decision factors in policymaking and the PET principle of a trigger event influencing the status quo policy making environment (Baumgartner & Jones, 1993; Kwon et al., 2013).

SQ3: Why did political, PSM, PV, and community factors advance or impede recovery policy formulation? The line of questioning primarily pertained to Perry's (1996) and Andersen et al.'s (2012a, 2012b) research about community service and civic duty related decision factors.

#### **Theoretical Framework**

I expanded upon Kwon et al.'s (2013) public policy and administration PET research assumption that political institution factors influenced post emergency management policy decisions. The seminal PET centered on the assumption that policy formulation is a gradual process, highlighted by a trigger event to act (Baumgartner & Jones, 1993), and it is what Yin (2014) termed *organizational theory*. The research

immediately following Baumgartner and Jones's (1993) seminal work referred to federal level punctuated equilibrium in regards to budgets and organizations (Bruening & Koski, 2012; Givel, 2010; Pump, 2011). A significant shift of PET research from the federal to local government level between 2010 and 2013 highlighted the opportunity to examine local community handling of trigger events (Bruening & Koski, 2012; Givel, 2010; Kwon et al. 2013; Tilcsik & Marquis, 2013). The nonmandated recovery mission area emulated the PET assumption of gradual governance with a required triggering event for elected officials to make policy decisions (Baumgartner & Jones, 1993; FEMA, 2015a).

Kwon et al.'s (2013) PET research provided a direct connection to the research question and problem with hypothesis and conclusion regarding factors that influenced emergency management policy decisions. Although Kwon et al. used a quantitative approach, their recommendations to future study of recovery factors offered an opportunity to further PET local level emergency management decision factors research. The research question offered the means to expand on Kwon et al.'s research conclusion pertaining to institutional factors influencing emergency management decisions to a broader examination of decisions factors comprising PSM, PV, and community services decisions factors that elected officials used to formulate recovery policy actions. The "analytic generalization" of the conclusions and findings (Yin, 2014, p. 41) advanced PET for local level recovery policy decisions.

#### **Definition of Terms**

Commonwealth of Virginia and State of Virginia are interchangeable.

Community factors are defined as infrastructure, business, environment, and housing that influence elected official policy decisions. The term is interchangeable with social capital.

Comprehensive annual financial reports (CAFRs) is defined as the annual reports city managers provide to city council members for approval in the administration of local level government (Virginia.gov, 2016a).

Critical incident is defined as a man-made or natural disaster (FEMA, 2015a.). For the purpose of this research, critical incident, disaster, trigger event, or friction event are interchangeable.

Emergency management mission areas comprise prevention, protection, mitigation, response, and recovery (FEMA, 2015a).

Local Emergency Planning Committee (LEPC) is a federally mandated committee for the state and local level to prepare and respond to hazardous material critical incidents (EPA, 2014).

*Mitigation* is defined as actions to prevent damage to housing, infrastructure, and the environment. The federal level mitigation guidance focuses on identifying and minimizing community risk and vulnerabilities from a natural or man-made disaster (FEMA, 2015a).

Normalcy within the context of the case study is what Johnson, Goerdel, Lovrich, and Pierce (2015) and Storr and Haeffele-Balch (2012) termed the restoration of social capital. Within the case study normalcy is defined as the return of community services and quality of life within weeks and months following a disaster.

*Policy decision* is defined as conditions for the development of new policy or programs, nonaction, adherence to existing policy, or revision of policy (Cairney & Heikkila, 2010).

Public service motivation (PSM) concept is defined as an affiliation for public policy making and desire to serve the public interest. Perry's (1996) PSM test has served as the seminal test from which researchers define PSM from the perspective of public servant employees, organizations, and elected representatives.

*Public values (PV)* concept is defined as public sector, stakeholder, and citizen contributions to society. The contributions comprise such factors as trust, transparency, and honesty (Andersen et al., 2012a, 2012b; Kim et al., 2013).

Preparedness is defined as the actions taken to prepare for a critical incident. The federal level preparedness guidance covers natural and man-made disasters within the FEMA protection mission area (FEMA, 2015a).

Prevention is defined as actions to deny, delay, or stop a terrorist act (FEMA, 2015a). This study did not address the prevention mission area within the context of terrorism, but rather natural disasters.

*Protection* is defined as actions to minimize damage from a terrorist attack. The federal level protection guidance focuses on means to prevent a physical or cyber-attack (FEMA, 2015a).

*Recovery* is defined as short-term and long-term actions to revitalize housing, infrastructure, and the environment (FEMA, 2015a, 2015b). The federal guidance comprises infrastructure, housing, services, and economic recovery. The specific tenets of

recovery decision factors pertain to practical tasks and considerations that apply to the restoration of community services (Andersen et al., 2012a, 2012b; Berke et. al., 2015; FEMA, 2015c; Kim et al., 2013; Ritz, 2011).

Resiliency is defined by FEMA (2016) as communities absorbing disasters with an integrated approach, and within the context of the study is the ability of city departments and community to find ways to plan, resource, and adapt to future disasters in the region.

*Response* is defined as action immediately following a critical incident (FEMA, 2015a).

Self-sufficiency is defined by FEMA (2016) as individuals being self-sufficient or ready for a post disaster environment, and for the purpose of the case study how best Hampton Roads elected officials fund departments (City of Chesapeake, 2008), plan for unique city-wide risk and vulnerabilities (City of Hampton, 2011; City of Newport News, 2004b), and assess sustainability (Participant 1, personal communications, September 5, 2016) long after the disaster passes through the region.

Social capital is defined as economic, institutional, and infrastructure restoration, and the role of local level stakeholders (Johnson et al., 2015; Storr & Haeffele-Balch, 2012). Social capital and community factors are interchangeable.

Stakeholders are defined as key contributors to the execution of the mission, tasks, and decision formulation (Bryson, 2011). Emergency management stakeholders comprise elected officials, city department heads, citizen groups, city managers, nonprofit organizations, and local business leaders (Marley, 2014).

Terrorism is defined as a tactic or technique to achieve change or influence behavior through a violent or disruptive act (START, 2013).

#### **Assumptions, Limitations, and Delimitations**

Assumptions, limitations, and delimitations offered the means to explain non demonstrated research elements and research validity, reliability, methodology, and bias mitigation (Walden University, 2017b).

#### Assumptions

I assumed that emergency management is a maturing field of study. The uncertainty of a man-made or natural disaster precluded the ability to qualify all decision factors associated with a critical incident. As such, I aggregated decision factors to provide evidence-based knowledge to Hampton Roads elected officials. The application of the research to similar areas or the entire Commonwealth of Virginia will likely require a quantitative study of the research problem and research question.

#### Limitations

It is recognized that the intended qualitative purposive sampling of Hampton Roads elected representatives, specifically mayors and council persons' vice Commonwealth of Virginia elected representatives, limited the scope. The results of the examination of Hampton Roads elected representative recovery policy and decision factors may be important to similar communities or the entire State of Virginia. A followon study to compare and contrast communities or application to the entire Commonwealth of Virginia offers the means to better qualify the results and conclusions

of the research. It is understood that community emergency management recovery policy will change based on federal and state mandates and citizen needs.

Another limitation of the research centered on the content validity of the PSM test, which is mitigated by test—retest reliability administration (Perry, 1996; Teddlie & Tashakkori, 2009). The closed-ended PSM test inhibited the participants to voice explanations. I mitigated the test limitations by applying aspects of the test within the semi structured interview protocol. The insertion of elements of the test unique to elected officials in the semi structured interview process enhanced trustworthiness of the test as it applied to elected officials vice public servants.

#### **Delimitations**

The delimitations related to the scope and defined boundaries within my control as the researcher comprising the research question, theoretical perspective, and population selection.

I researched how decision factors contributed to Hampton Roads elected official recovery policy decisions by examining the common reality of local experiences, documentation, and viewpoints (Patton, 2002; Yin 2014). The use of the PET assumption that critical events trigger policy decisions (Baumgartner & Jones, 1993) aligned to the research question. More specifically, Kwon et al.'s (2013) assumption that institutional factors influenced emergency management policy decisions better aligned to the research question than the public administration anticipatory theory assumptions that elected officials can foresee factors that affected policy decisions (Berke et al., 2014). The uncertainty of a critical incident precluded the selection of the anticipatory theory for the

research, and aligned best with Kwon et al.'s assumption that institutional factors influence emergency management policy decisions. I de-scoped the research from examining the entirety of the Commonwealth of Virginia elected official population to Hampton Roads elected representatives, specifically mayors and council persons for their roles as policy makers vice policy administrators. The purposive sampling provided the means to focus on how factors influenced recovery policy via elected officials familiar with emergency management policy decisions vice a random sampling whereby elected official emergency management knowledge is limited and therefore defeats the intent of the research. I collected the Hampton Roads representative emergency recovery policy decisions and experiences through a semi structured interview protocol and city government document reviews. For example, the review of CAFRs and city council meeting minutes enhanced research reliability. The data saturation and triangulation enhanced the reliability of the research and provided the opportunity for future researchers to examine recovery policy and decision factors for similar communities or the Commonwealth of Virginia (Fielding, 2011; Patton, 2002; Teddlie & Tashakkori, 2009).

#### **Significance of the Study**

The case study presented significant implications for (a) Hampton Roads representative formulation of recovery policy, (b) further defining local elected actors within the emergency management public policy field, (c) positive change in the local government consistency for addressing short and long-term recovery policy, and (d) generalizability of PET at the local level for emergency management recovery. The

nonmandated mission area of recovery requires research to better inform local community elected official actions to re-instate infrastructure, housing, and businesses (McCarthy & Brown, 2013; Olshansky & Johnson, 2014). The case study provided the means for local level officials to understand better decision factors that influence recovery planning, budgets, and policy actions. The study offered an opportunity for elected officials to be better aware of factors associated with housing, infrastructure, and environmental policy and for future researchers to explore the nature and degree local level governance decision factors affect recovery policy decisions.

#### **Summary and Transition**

The case study provided the means to qualitatively expand and confirm Kwon et al.'s (2013) PET emergency management research conclusion regarding institutional factors influencing policy into other decisions factors comprising PSM, PV, and community factors and Hampton Roads, Virginia, elected representative recovery actions between 2003 and 2012. The aggregation of decision factors through an evidence-based semi structured interview protocol offered an opportunity to enhance the generalizability of PET at the local level for recovery policy decisions. The triangulated sourcing of knowledge (Patton, 2002; Yin, 2014) ensured a defendable case study about elected officials at the local level of government.

Chapter 2 addressed the evidence-based research pertaining to PET, emergency management tenets and policy key emergency management stakeholders, and decision factors. The synthesis of the literature aligned the research problem, question, and methodology in the examination of PET via critical incidents that trigger Hampton Roads

representative recovery policy decisions. A clear and concise synthesis of the literature provided a research-based rationale for addressing the research question: How do PSM, PV, political institution, and community services decisions factors affect elected official recovery policy decisions? In the end, the literature review strengthened the intent to expand upon the current PET local level emergency management research for the examination of decision factors that influenced Hampton Roads elected official recovery policy decisions.

#### Chapter 2: Literature Review

#### Introduction

The scholarly debate about emergency management recovery continues to mature for local level stakeholders, organizations, and actors. Evidence-based journal articles and government documents primarily concentrated on citizens, business, emergency managers, and city manager decision recovery factors vice elected officials (Caruson & MacManus, 2011b; FEMA, 2012, 2015a, Jensen et al., 2014; Ready Hampton Roads, 2015; Storr & Haeffele-Balch, 2012). Peer-reviewed articles focused on the Hampton Roads area were limited, yet literature pertaining to local level recovery decision-making sufficiently represented the factors influencing post disaster policy actions (Caruson & MacManus, 2011b; Collins, Flanagan, & Ezell, 2015; Johnson, 2014a; Smith & Sutter, 2013). The research examining PET within the context of disaster recovery delivered new knowledge to the emergency management field as previous PET research focused on the federal level (Givel, 2010; Kwon et al., 2013; Tilcsik & Marquis, 2013). However, the knowledge about elected representative participation in critical incident recovery within the PET framework remained under researched.

A key focus of the literature review pertained to elected official decision factors following a critical incident. Current research concentrated on singular decision factors influencing local level decision factors such as time, regulations, institutions, business, and housing, and those authors recognized the need to address factors in a more comprehensive approach (Berke et al. 2014; Caruson & MacManus, 2011a, 2011b; FEMA, 2012; Kwon et al., 2013). The plethora of PSM and PV decision factor research

provided an evidence-based baseline for the impact to policy-making. Nevertheless, the PSM and PV factors research fell short in the examination of emergency management stakeholders, organizations, or actors (Andersen et al., 2012a, 2012b, Kim et al., 2013; Matei & Cornea, 2013; Ritz, 2011; Williams & Shearer, 2011). The application of PSM and PV concepts to emergency management recovery factors research supplemented the scholarly debate about the elected official role in recovery policy formulation and execution.

Chapter 2 provided the strategy I used to locate and analyze relevant theory and concepts and synthesize evidence-based journal articles and government documents pertaining to emergency management recovery policy and decision factors. I used the Walden University qualitative research checklist for the literature review (Walden University, 2017b). The key thrust of the literature review centers on PSM, PV, and community decision factors related to local level elected representative recovery policy actions. The alignment of the research problem, research question, and PET offered the means to synthesize the emergency management policy and decision factors studies for the identification of themes, research gaps, and relevant methodology approaches.

#### **Literature Search Strategy**

The search strategy comprised PET and terms associated with emergency management theory, definitions and policy, disaster recovery stakeholders, and public service and policy decision factors. The results of the queries delivered the current knowledge pertaining to the problem. The search process resulted in duplicative results in the identification of relevant peer-reviewed research and identification of secondary

sources. The duplicative results in the identification of peer-reviewed articles supported the intent to exhaust identification of peer-reviewed articles within the area of local level emergency management recovery. The limited, but rich local level recovery policy research was mitigated by an exhaustive review of local government recovery factors research. A secondary review of the methods previous authors used to examine emergency management problems provided potential ways and means to examine factors contributing to Hampton Roads elected official recovery policy decisions.

#### **Utilization of Databases and Search Engines**

To compile an exhaustive list of peer-reviewed articles and an acceptable level of government document sources, I evaluated databases comprising Google Scholar, Thoreau, Sage Premier, Political Science Complete, LexisNexis Academic, Business Source, Academic Search Complete/Premier, ProQuest, and Homeland Security Digital Library through the Walden Library. I communicated with the Walden University Library staff via e-mail and residencies to shape search strategies and identify key terms.

#### **Key Search Terms and Search Process**

I utilized search terms and a search process to determine (a) research outcomes, (b) the identification of central issues, and (c) exhaustive coverage of peer-reviewed articles supplemented with government documentation. The search provided a review of neutral perspectives about emergency management policy, decision factors, and public service (Randolph, 2009). The search included works published from 2011 to 2015. The search terms comprised the following:

• local level recovery, community recovery

- disaster, disaster recovery, critical incident, critical incident recovery
- emergency management official, emergency management Hampton Roads,
   emergency management Virginia
- emergency management policy, emergency management decision
- punctuated equilibrium theory, PET local level, PET community
- public service motivation, PSM elected official/representative
- public value, PV elected official/representative

#### **Theoretical Foundation**

The problem statement and research question about factors influencing elected official policy decisions following a critical incident expanded Baumgartner and Jones's (1993) seminal PET assumption that a friction event forces elected representatives to abandon gradual policy formulation for a more rapid policy construct (Howlett & Migone, 2011; Hu, 2012; Kwon et al., 2013). Baumgartner and Jones's original research focused on federal government reaction to dramatic events through budgetary policy change (Boushey, 2012; Bruenig & Koski, 2012; Givel, 2010). Qualitative and quantitative research between 2011 and 2016 implied PET-related policy making works best when multilevel governance applied to a triggering event, and that policy decision factors change from one incident to another (Cairney, 2015; Hu, 2012; Kwon et al., 2013; Prindle, 2012; Van der Heidjen, 2012). The PET research conclusions that political institution decision factors influenced critical incident recovery policy (Kwon et al., 2013) provided the opportunity to further research factors and policy choices within the context of critical incidents. I present the alignment of PET assumptions to research

similar to the current case study, a rationale for the selection of PET, and how the research question builds upon existing PET knowledge.

#### Application of PET at the Federal, State, and Local Level

A disaster or friction event is an unplanned incident that disrupts the normal policy making cycle and forces representatives to think and act decisively in the delivery of community services (Jensen et al., 2014; Jones & Baumgartner, 2012). The examination of the recovery policy and decision factors environment following a critical incident provided the opportunity to expand PET beyond the analytical generalizations surrounding state and federal PET research (Yin, 2014). For the purpose of this research review, the examination focused on PET studies' shift to lower governance levels associated with decision factors and policy following a triggering event.

The application of PET initially referred to federal budgetary policy decisions (Givel, 2010). In 2012, PET qualitative and quantitative research moved to a broader application in the areas of state budgets, the setting of agendas, influences of media, and circumstances surrounding the process of policy making (Boushey, 2012; Bruening & Koski, 2012; Wolfe, 2012). The uncertainty of a disaster permeated every facet of a community's social, infrastructure, economic, and political environment (FEMA, 2012). The variety of qualitative and quantitative local level emergency management public and private sector policy research provided an opportunity to expand PET to the analysis of emergency management recovery policy factors for local elected representatives (Givel, 2010; Kwon et al., 2013; Tilcsik & Marquis, 2013).

#### **Rationale for the Use of PET**

Although local level PET emergency management research has been limited, the extant studies provided generalizations regarding public-private resource and institutional decision factors in the determination of policy (Boushey, 2012; Jones & Baumgartner, 2012; Kwon et al., 2013; Tilcsik & Marquis, 2013; Wolfe, 2012). The PET research conclusions to commit local level public-private resources after a triggering critical incident pertained to factors associated with media influences, community leadership partnerships, regional regulations, and citizen actions (Boushey, 2012; Jones & Baumgartner, 2012; Wolfe, 2012). The quantitative research offered conclusions that institutional factors influence emergency management planning and policy making (Kwon et al., 2013). The local level dynamics between the public and private sector required further research to understand better the cognitive or motivational factors associated with a punctuated event (Tilcsik & Marquis, 2013). Although not an emergency management centered PET study, Hu's (2012) conclusion that a punctuated event is cyclical, impulse driven, and organizationally constrained aligned to the other PET critical incident literature concerning factors that have the potential to advance or impede policy decisions. The current research examining Hampton Roads elected official decision factors that affect recovery policy builds upon the generalized local level PET research regarding motivational, institutional, and community policy.

#### **Literature Review**

### **Emergency Management Theory and Policy History**

CEM theory derives from the NGA (1979) report detailing the four stages of CEM as "mitigation, preparedness, response and recovery" (p. 11). The NGA report underlined the key CEM theory assumption that critical incidents require coordinated federal, state, and local leadership attention in the provision of community services (Drabek & Hoetmer, 1991; McEntire, 2012). The next leap in emergency management maturation comprised the National Response Framework (NRF) with 15 emergency support functions (ESF) to drive federal response such as search and rescue and communications (FEMA, 2012; McCarthy & Brown, 2013). The NRF and the Stafford Act (1988) mandated organizational and procedural disaster response actions between the federal and state government (FEMA, 2012, 2015c; McCarthy & Brown, 2013). The creation of the National Disaster Recovery Framework (NDRF) recognized the partnership between federal, state, and local governments for recovery, but fell short in mandating organizational constructs like NRF. A review of the NDRF and Congressional records indicated there is no congressionally mandated recovery policy. The nonrecovery mandate has the potential to create seams between the federal, state, and local governments (FEMA, 2015b; McCarthy & Brown, 2013; Olshansky & Johnson, 2014).

#### **Recovery Research Methods and Methodology**

Qualitative, quantitative, and mixed methods research addressed emergency management recovery from a variety of approaches. The recovery research and government documentation defined recovery as goals, tasks and functions, bottom-up

decision making, and restoration of a stable community regarding housing, infrastructure, and the environment following a man-made or natural disaster (Albright & Crow, 2015; Atkinson & Sapat, 2014; FEMA, 2015c; Jensen et al., 2014; Johnson, 2014a; McCarthy & Brown, 2013; Smith & Sutter, 2013).

Qualitative. The qualitative research that aligned to the research question centered on experiences and perspectives of local stakeholder handling of recovery factors and policy. The use of semi structured interviews to examine decision factors such as social capital and the role of local level stakeholders provided an occasion to employ similar interview protocols to the current research question (Jensen et al., 2014; Storr & Haeffele-Balch, 2012). The foci of Jensen et al.'s (2014) and Storr and Haeffele-Balch's (2012) research differ, as Jensen et al.'s study more closely aligned to the research by examining the role of county emergency managers, while Storr and Haeffele-Balch's research explored the value of centralized versus decentralized community leadership. The similarities in the conclusion merit examination as both studies recommended future research of the distributed role of stakeholders in evaluating factors that best support the provision of community services. One can extrapolate the stakeholder role research recommendation to only elected representatives for a more specific emergency management study.

The next variation of qualitative studies focused on the use of case studies to examine recovery. The worth of the case studies to the research involved the examination of local community stakeholder experiences and perspectives in a contemporary (Yin, 2014) post disaster recovery environment. The examination of local level stakeholder

experiences permeated the research of Albright and Crow (2015), Johnson (2014a), and Smith and Sutter (2013). However, Jewell's (2014) research related to business leader stakeholder decision factors while the other authors took a broader analytic perspective of elected, business, and community stakeholder leader factors in the restoration of the community. The variety of factors identified by the research encompassed resource allocation, cultural needs, economic restoration, institutional reconstruction, infrastructure stabilization, and continuity of business operations (Albright & Crow, 2015, Jewell, 2014; Johnson, 2014a; Smith & Sutter, 2013). The alignment of factors to a recovery policy after a punctuated or critical incident best supported the conclusion that policy must adapt to the environment (Albright & Crow, 2015). Albright and Crow's use of semi structured interviews of elected representative policy adaptation experiences presented an opportunity to replicate the protocol for the research method.

Quantitative. A valuable derivative of the quantitative knowledge lies in the analysis of state and county level decision factors and recovery policy. The quantitative studies related to recovery planning and the importance of community or regional collaboration utilize surveys to examine state and local recovery variables associated with capability, capacity, motivation, resilience and risk (Berke et al., 2014; Caruson & MacManus, 2011a, 2011b; Chen, Chen, Vertinsky, Yumagulova, & Park, 2013; Johnson et al., 2015). The value of the quantitative survey-based research concerned the recommended future research to examine intergovernmental, intragovernmental, partnership roadblocks, social capital, capacity, prioritization, and motivational factors contributing to recovery policy.

The second grouping of quantitative research pertained to singular factors of recovery such as business, citizen contributions, financials, housing, institutions, and technical applications (Atkinson & Sapat, 2014; Corey & Deitch, 2011; Donahue, Eckel, & Wilson, 2014; Frimpong, 2011; Haimes, 2012; Kasdan, 2015; Kwon et al., 2013; Olshansky, Hopkins, & Johnson, 2012). The inconsistent state of recovery policy across the United States potentially inhibited risk assessment and long-term business restoration (Atkinson & Sapat, 2014; Corey & Deitch, 2011). The inconsistencies also surface in the identification of financial recovery turn around and processing timeframes, the effective use of civic support, and the lack of local level elected official recovery knowledge (Corey & Deitch, 2011; Donahue et al., 2014; Frimpong, 2011). An opposing perspective applied to the identification of institutional factors for emergency management policy Kwon et al. (2013). The gap in research resided in the question of how the variety of recovery decision factors contributed to local level recovery policy decisions.

#### **Research Strengths and Weaknesses**

The strengths and weaknesses of how researchers approach the problem of local level emergency management policy centered on policy making, elected representatives and decision factors. For the review, I assumed the researchers applied the CEM theory or NDRF to their respective studies (Gerber, 2015; Johnson, 2014b; NGA, 1979; FEMA, 2015c; Smith & Sutter, 2013).

# **Policy Making**

Many of the studies realize commonality in the examination of policy as a valuable contribution to local level recovery. Quantitative conclusions by Caruson and

MacManus (2011b) indicated officials making recovery policy found challenges in the inter-government and intra-government environment, which is supported by Storr and Haeffle-Balch's (2012) qualitatively derived conclusions that policy makers chose viable areas for recovery, whether the area was a metro or rural area. Smith and Sutter's (2013) qualitatively concluded that regulations need to be adjusted during recovery vice application of rigid and implacable regulations, which is like Berke et al.'s (2015) conclusions that recovery policy requires flexibility and anticipation for effective governance.

Quantitative. The strength of the research points to the sampling strategy, the relationship between decision factors and policy, and the use of a pilot study to enhance data trustworthiness. The selection of a survey justified by a purposive sampling strategy of selecting county level officials familiar with emergency management and policy enhanced reliability (Caruson & MacManus, 2011b). The sampling strategy strengthened the conclusions pertaining to inter and intra-governmental recovery challenges and the importance of the financial factors in the formulation of policy (Caruson & MacManus, 2011b). On the other hand, Berke et al.'s (2014) empirically derived conclusions on recovery planning and policy for 8 southern states remained suspect due to the failure to confirm whether the web site data were up to data and whether recovery plans data was housed in other county databases. A pilot test would have resolved data reliability and validity issues and strengthened the derivation of policy factors associated with housing and financials. Another useful example of data trustworthiness pertained to Donahue et

al.'s (2014) use of national survey data and pilot studies to strengthen the validity of the data being measured (Frankfort-Nachmias & Nachmias, 2008).

Qualitative. The strength of the qualitative research centered on examination of the experiences of officials involved in the environment of disaster recovery. The use of a semistructured interview protocol by Storr and Haeffele-Balch (2012) to examine community leader policy formulation and implementation delivered a viable example for the research. The evidence-based conclusions of Storr and Haeffele-Balch's (2012) pertaining to the value of the social capital concept or community stakeholder partnerships with nonprofits, church groups, and university partnerships aligned to Johnson's (2014) and Jewell's (2014) conclusions that leaders need to view the local community as a catalyst and recipient for effective recovery. The purposive sampling strategy of Gerber (2015) of city level emergency management knowledgeable administrators builds on Gerber et al. and Gerber and Robison's (as cited by Gerber, 2015, p. 50) research that vulnerability factors are a catalyst for policy decisions. The phone interviews of multiple local level administrators across multiple states to make sense of the length and breadth of a disaster allies to Demiroz and Kapucu's (2012) and Jewell's (2014) supposition that leaders need to translate issues into meaningful tasks and actions for community consumption (Boin et al., as cited in Demiroz & Kapucu, 2012, p. 97). One can extrapolate Demiroz and Kapucu (2012) and Jewell's (2014) conclusions that an aggregation of factors drive the formulation of meaningful local level recovery policy.

The nature of critical incidents creates weaknesses in the qualitative policy making literature based on the variety of natural disasters research. For instance, tornadoes in the Midwest tended to be more destructive than in the Mid-Atlantic region due to geography and intensity, while flooding in coastal areas requires long-term recovery vice a Midwest flash flood that required short-term response and recovery (Johnson, 2014a; Smith & Sutter, 2013). The explanation of the study limitations would have strengthened Johnson (2014a) and Smith and Sutter's (2013) overall representation of the findings and conclusions by explaining the fact that no critical incident is the same for an area or region. Another weakness of the research was the lack of consistency and association to a theoretical or conceptual framework which resulted in having to assume the researchers apply the CEM theory or NDRF to the research (Gerber, 2015; Johnson, 2014a; NGA, 1979; FEMA, 2015c; Smith & Sutter, 2013). A relevant exception was Jensen et al.'s (2014) application of CEM to the semistructured interview proposal which strengthened their conclusions that decision factors remain the enabler between the trigger event and policy formulation.

### **Elected Representatives**

The literature specifically studying elected representatives in an emergency management environment remained limited yet provides knowledge from a quantitative, qualitative and government documentation perspective. For instance, recovery usually endured in a paperwork state vice an actualized process or policy focus area (Jensen et al., 2014). It is therefore reasonable to extrapolate that an elected official becomes the

enabler for recovery policy vice officials focused on executing recovery regulations such as a first responder, emergency manager, sheriff and city attorney.

Quantitative. The strength of the empirical research about elected official's role in emergency management recovery centered on traceable hypothesis to conclusions alignment and the weaknesses reside in clear declaration of validity and limitations in the research (Caruson & MacManus, 2011b; Caruson & MacManus, 2011b; Kwon et al., 2013). Caruson MacManus (2011a) hypothesis pertaining to Florida county elected officials' propensity for collaborative decision making after a disaster or punctuated incident is similarly explored by Kwon et al.'s (2013) hypothesis that political institutions influence policy following a punctuated critical incident. The key similarity involved the fact that policy decisions form after a measure of collaboration and coordination brought on by a disaster. The slight differences lie in the conclusions, whereby Kwon et al. determined that institutional collaboration and financial factors rule decisions, while Caruson and MacManus (2011b) concluded that more robust and capable local governments tend to have stronger collaborative public-private sector relationships in the formation of recovery policy actions. The governance or institutional theme continued with Caruson and MacManus (2011a) and MacManus and Caruson's (2011b) conclusions that a more capable government can address post disaster actions be it a county or metro area vice a city or rural area. Of use to the research was how Caruson and MacManus (2011a) and MacManus and Caruson, (2011b) pose research questions regarding the influence of organizational structures and government capability factors in the formation of critical incident policy.

Qualitative. The elective representative research referred to variations in leadership roles and responsibilities (Gerber, 2015; Johnson, 2014a; Storr & Haeffele-Balch, 2012). The strength of the qualitative research focused on alignment of CEM theory to the research question and the compare and contrast approach for how local leaders view post disaster recovery. The research questions concentrated to how local governments effectiveness in a post disaster recovery environment and whether a decentralized versus centralized decision making approach was best for local governments (Johnson, 2014a; Storr & Haeffele-Balch, 2012). The implications were that local level governments lacked a response and recovery system to manage and process the various factors that influenced policy. The common denominator is how Johnson (2014a) and Storr and Haeffele-Balch (2012) concluded that elected representatives tend to prioritize areas for recovery thorough a variety of decision factors such as financials, risk and vulnerabilities, robustness of community leaders, and willingness of citizens to return.

The weakness of the research was in the failure to declare study limitations and provide a balanced analysis of elected representative, emergency manager and county manager roles in post disaster recovery. The variety of disaster and regions required the researchers to explain the accuracy of the results within the context of coding protocols and development of themes (Trochim, 2006d). For instance, Storr and Haeffele-Balch (2012) concluded that social capital remains an important element of recovery yet neglected to provide examples from the semistructured interview protocol. Gerber's (2015) climate change research described the limitations associated with an ill-defined

term of resiliency as a subset of recovery (FEMA, 2012) but failed to mitigate the limitations with evidence-based research on the alignment between community recovery and resilience. The lack of clear delineation of research limitations inhibited a clear understanding of the experiences of local level recovery officials. An occasion to clarify Hampton Roads elected official recovery experiences through a well-constructed interview protocol and coding process mitigated the weaknesses in the qualitative research.

### **Government Documentation**

The common theme or strength about the federal, state and local documentation involved the important role elected representatives play in a disaster. The documentation underscored the value of political power in the form of Federalism whereby all levels of government utilize resources, networks and partnership toward a common goal of recovery (FEMA, 2015d; McCarthy & Brown, 2013). At the state and local level, government documentation indicated elected representatives utilize advocacy, distribution of authorities and the need to be at the center of policy change considerations (FEMA, 2015e; Virginia Department of Emergency Management [VDEM], 2015). The government documentation neglected to explain why there are no mandates for elected officials to participate in disaster training or certification. The value of key local level officials receiving recovery planning accreditation enhanced strategic and financial collaboration, coordination and communications in the restoration of a community (Johnson, 2014a). Unlike many other states, the VDEM lacked a recovery plan or mention of a need for elected officials to receive training or accreditation as stewards of

the state's recovery policy and distribution of recovery authorities (VDEM, 2015). A review of Hampton Roads city documents neglected to reveal the need for representatives to receive emergency management training; however, per the deputy emergency operations manager, the City of Chesapeake is the only city to send elected officials to emergency management training (R. Braidwood, personal communications, September 21, 2015). One can extrapolate that elected representative lack of emergency management training inhibited critical incident policy formulation and decisions.

#### **Decision Factors**

The quantitative and qualitative United States and International research provided a wide and deep perspective on emergency management recovery decision factors.

Quantitative. The strength of the recovery decision factor research resided in the use of models, to examine variables in the provision of recovery decision factors. The interoperability input-output model (IIM) and business recovery model provided officials the means to assess the environment via severity and vulnerability factors (Atkinson & Sapat, 2014; Haimes, 2012). The Haimes (2012) and Atkinson and Sapat (2014) derived severity and vulnerability factors aligned to Collins et al.'s (2015) conclusions for local level governments to use costing models to enable and measure decision formulations. The variable of time compression aligned to severity and vulnerability as key post disaster decision factor in the restoration of community services (Berke et al., 2014; Kasdan, 2015; Olshansky et al., 2012; Pump, 2011). One can ascertain from the quantitative research conclusions that time, severity and vulnerability are important

decision factors for elected officials to consider after a critical incident, and may relate to a community service, infrastructure need, economic situation or environmental concern.

The key weakness in most of the quantitative research centered on the assumption that the CEM theory applied and the researcher's lacked measurement error explanation and reliability of the instrument. The preponderance of the recovery empirical literature loosely aligned the research to the CEM theory without clearly stating the CEM tenets of mitigation, preparedness, response and recovery (NGA, 1979). One exception related to Berke et al.'s (2014) use of the anticipatory governance theory assumption that officials needed to create flexible policy which aligned to the PET assumption that officials cannot always develop policy gradually to remain relevant following a critical incident (Baumgartner & Jones, 1993; Boushey, 2012; Jones & Baumgartner, 2012; Wolfe, 2012). Another exception to the use of CEM theory pertained to Albright and Crow's (2015) application of the participatory theory assumption that policy formulation is a learning process precipitated by experiences and beliefs. For the quantitative factors related research, one can extrapolate that that officials need to learn from experiences, utilize public and private resources to make effective policy decisions.

The reliability of the national and state level survey instruments used by Caruson and MacManus (2011a), Donahue et al. (2014), and Johnson et al. (2015) neglected to explain the reliability of the instruments and the measurement errors (Frankfort-Nachmias & Nachmias, 2008). The reliability of the national and statewide instruments remained weak as there is no clear explanation of a test-re-test protocol to identify variable errors in the population's execution of the survey (Frankfort-Nachmias &

Nachmias, 2008). As such, Johnson et al.'s results that indicate motivation, capacity, and social capital collaboration decision factors require further study would be of more reliable if the survey was repeatable and expandable. In the end, the quantitative research of Caruson and MacManus, Donahue et al., and Johnson et al. informed the semistructured interview protocol regarding what factors advance or impede local elected official formulation of recovery policy, Appendix A.

Qualitative. Jensen et al. (2014), Smith and Sutter (2013), and Storr and Haeffele-Balch's (2012) semistructured interview approach aligned with the research in the examination of the role that officials assume in disaster recovery policy decisions. Jensen et al. and Smith and Sutter determined the need for officials to broaden views on community recovery parameters while Storr and Haeffele-Balch best qualified community recovery within the context of understanding then leveraging social capital. The lack of discussion on the research limitations associated with the sampling strategy inhibited Storr and Haeffele-Balch's and Smith and Sutter's research trustworthiness or quality of observations (Patton, 2002). Jensen et al.' limitation discussion on the purposive sampling of emergency management officials vice a random sampling of the county representative population mitigated the findings and conclusions related to officials need to understand and represent community recovery normalization. I emulated Jensen et al.'s semistructured interview approach with government documentation to strengthen the trustworthiness (Patton, 2002; Teddlie & Tashakkori, 2009) of the findings.

The actualization of a friction incident such as a disaster created the need to expose impediments in policy through "agenda setting" (Pump, 2011, p.2). Local level leadership understanding of what agenda factors drive recovery policy decision aligned to strengthen Chen et al. (2013) and Gerber's (2015) qualitative case study research. The research questions of Chen et al. (2013) and Gerber (2015) pertain to what is the value of partnerships and collaboration agendas in a post disaster environment. However, the studies differ in that Chen et al. (2013) concluded that social capital agenda factors contribute to community recovery policy, while Gerber (2015) determined that risk and vulnerability assessments contributed to the formation of recovery policy decisions. The common theme in the Chen et al. (2013) and Gerber (2015) research denoted the need for communities to mobilize recovery strategies anchored by aggregated decision factor agendas for the sustainment of recovery purpose, which Pump (2011) classified as the setting and sustainment of an agenda following a punctuated event. The sustainment of an agenda materialized in the decision factors of social capital, risk management and entrepreneurship (Chen et al., 2013; Gerber, 2015).

A common conclusion from the case studies referred to the need to examine an aggregation of decision factors influencing recovery policy (Atkinson & Sapat, 2014; Berke et al., 2014; Caruson & MacManus, 2011; Cho, 2014; Johnson, 2014a; Johnson et al., 2015. The case studies examine a variety of local level communities and determined that the execution of recovery planning, assessment, and policy required a closer review of decision factors such as social capital, risk management, time compression, motivation, capacity, financials, and empowerment. The mix of quantitative and

qualitative decision factors case studies provided a sufficient level of evidence-based knowledge to pursue the research question. The unknown derived from the PET whereby a triggering incident created policy decisions. The decision factors research provided the mechanism by which decision makers move from a critical incident to a policy decision; noted as trigger event which leads to decision factors and finally recovery policy decisions. One can then extrapolate that examining what decision factor agenda items influenced local officials lays the groundwork for effective recovery policy.

## Justification and Alignment of the Theory, Concepts, and Proposed Research

The PET grounded the research with the assumption that a disaster provided local representatives the opportunity to employ day-to-day and new decision factors to make recovery policy. A review of the research defined local level disaster PET as policy stability abruptly impacted by a critical incident that generated an agenda for focused policy decisions and actions (Albright & Crow, 2013; Henstra, 2011; Hu, 2012; Kwon et al., 2013; Tilcsik & Marquis, 2013). The review of the literature indicated PET within the context of emergency management recovery remained limited, however future research recommendations point to the expansion of local level PET associated research. The studies on local level PET concentrated on locality, private sector, and public sector institutional factors and environments, and concluded that critical incident policy was influenced by a variety of decision factors.

The longitudinal studies of Henstra (2011) and Hu (2012) provided an evolutionary emergency management perspective that the field of knowledge continued to change from the time of civil defense in the 1950s to a more complex disaster

environment. Henstra concluded that policy change is inevitable and dynamic while Hu promoted policy change as institutionally driven. Both researchers agreed that drivers or factors determined policy change depending upon conditions within the environment. The common drivers or factors that Henstra and Hu identified applied to the PET based research regarding information sharing capabilities and institutionally induced strengths and constraints. The factors of information sharing capabilities and institutions related to SQ2 (as previously described) regarding procedures and institutions influencing recovery policy.

Kwon et al.'s (2013) quantitative examination of PET within a local level institutional environment advanced Henstra (2011) and Hu's (2012) institutional focused analysis by hypothesizing that local disaster policy confirmed a "punctuated equilibrium pattern" (p. 196). The punctuated equilibrium pattern materialized in local level budget expenditures and reform measures (Kwon et al., 2013). The patterns can be categorized as institutional principles and financials practices factors that contributed to changes in local level policy equilibrium after a critical incident (Kwon et al., 2013). The research conclusions that institutional collaboration and resourcing structures are key ways and means to stabilize the disaster environment through policy change (Albright & Crow, 2013; Kwon et al., 2013) aligned to the SQ2 (as previously described).

The geography of a disaster influenced local government policy to stabilize a region through policy, partnerships and procedures (Cockfield & Botterill, 2013; Tilcsik & Marquis, 2013). The generalized PET research of Cockfield and Botterill (2013) about rural and regional policy provided context for the local level emergency management

research about elected officials' decision factors and policy decisions. Cockfield and Botterill concluded that PET does not exist at the rural level but thrived at the regional level provided an opportunity to apply the analysis to the Hampton Roads area as some cities are rural while others are metropolitan. The conclusions aligned to the research question (as previously described).

### PSM, PV, Community Factors, and Emergency Management

The PSM and PV concepts application to emergency management presented an opportunity to supplement PET knowledge with the address of public service related motivation and public value factors within a punctuated environment. A review of the literature indicated there is no research aligning the concepts of PSM or PV with emergency management or PET. However, the generalized PSM and PV research of Andersen et al. (2012a, 2012b), Coursey, Yang, and Pandey (2012), Kim et al. (2013), Matei and Cornea (2013); Moore (2014); Williams and Shearer (2011) and Word and Carpenter (2013) provided an opportunity to align to the research regarding elected officials' decision factors and recovery policy decisions. Rhodes and Wanna (as cited in Williams & Shearer, 2011) highlighted the lack of PV research related to elected representatives within the public administration population (p. 1379). Moore (2014) expanded upon Williams and Shearer's (2011) findings associated with PV and governance with a model to measure "arbiters of value" to the community such as the use of political power to improve social and economic conditions (p. 468). Applying aspects of Perry's (1996) PSM test and Williams and Shearer's (2011) appraisal of PV to Hampton Roads elected representative within the context of PSM factors breaks new

ground for the application of PSM and PV to the elected official population vice the already examined public servant or public administrator population (Anderson, 2012a; Anderson, 2012b).

PSM factors. A key element in the examination of public service factors concentrates on Perry's (1996) 24 questions regarding PSM. Coursey et al.'s (2012) and Word and Carpenter's (2013) research about public service individuals illustrated the reliability and validity of Perry's (1996) PSM test. The limitation of Perry's (1996) PSM test involved that fact that researchers focused on public service managers and employees vice elected representatives. For example, Ritz (2011) qualitative research fixated on measurement of public sector employee policy PSM factors and Matei and Cornea's (2013) qualitative research referred to public sector organization PSM factors. In both cases, Ritz (2011) and Matei and Cornea's (2013) concluded that alignment of the PSM concept to a broader understanding of public policy decision motivation warranted further study of factors, stakeholders and organizations. This gap in research provided the opportunity to apply elements of Perry's (1996) test to Hampton Roads elected officials within the elected representative semistructured interview protocol (Appendix A).

The PSM test aligned to the research question pertaining to understanding what factors inhibited or advanced recovery policy and provided useful sourcing for the semistructured interview questions. The reliability and validity of Perry's (1996) test is strengthened through Coursey et al. (2012) and Word and Carpenter's (2013) PSM research about organizations and individuals. For example, Coursey et al.'s acceptable measurement errors supported the conclusions that stature of stakeholders can be

examined regarding PSM factors such as commitment and collaboration. A defendable illustration of how to use Perry's PSM test for a population tasked with community service commitment and collaboration is provided by Word and Carpenter's examination of nonprofit leaders and employees. In the end the use of PSM factors that apply to critical incidents followed Yin's (2014) guidance to form questions from literature to strengthen a case study.

PV and community factors. PV and community factors influenced policy decisions through the application of trust, service and check and balances. Kim et al.'s (2013) quantitative PV research examined the checks and balances inherent in policy and program decisions aligned with Berke et al. (2014). Olshansky and Johnson (2014), Reeves (2011) and Smith's (2011) studies which identified the need for officials to balance political and community interests within the uncertain emergency management environment. The community emergency management factors research centered on singular studies such as time, businesses, housing and infrastructure (Berke et al., 2014; Corey & Deitch, 2011; Coursey et al., 2012; Egan &Tischler, 2010; Frimpong, 2011; Olshansky & Johnson, 2014; Orabi, Senouci, El-Rayes, & Al-Derham, 2010) offered an opportunity to extend the research to an aggregated application of factors for the Hampton Roads elected population.

The PV research of Anderson et al. (2012a), Anderson et al. (2012b), Moore (2014), and Williams and Shearer (2011) aligned to Berke et al.'s (2014), Olshansky and Johnson (2014), Reeves (2011) and Smith (2011) recovery study conclusions that identified the need for officials to balance political and community interests in emergency

management. The PSM and PV studies commonly recognized the checks and balances factors officials consider in policy decision-making (Andersen et al., 2012a, 2012b; Coursey et al., 2012; Kim et al., 2013, Matei & Cornea, 2013; Moore, 2014; Ritz, 2011; Williams & Shearer, 2011). For example, Ritz (2011) and Williams and Shearer (2011) qualitatively concluded that the status quo of policy making changes based on a polarized framework or event. One can extrapolate the polarizing event to a post disaster event whereby the framework of recovery activates a policy agenda issue (Pump, 2011). The extrapolation of what is known in PSM, PV and community factors research supported the formation of a more holistic or aggregated recovery policy perspective regarding the case study research question (as previously described).

# **Alignment to the Research Question**

The research question of how decision factors influence Hampton Roads elected representative recovery policy aligned to the case study approach through the review of peer-reviewed research. I presented why the case study approach and research question provided meaningful knowledge to PET at the local level and advanced emergency management knowledge regarding decisions factors influencing Hampton Roads elected representative recovery policy.

The decrease in emergency management budgets and state sponsored federal grants impacted local level governments' provision of post disaster recovery services (FEMA, 2012, 2015a; Johnson, 2014a). Elected representatives from a PSM or PV case study perspective sought to represent constituents in the distribution of assistance for formally and informally identified community recovery needs (FEMA, 2015a; Johnson et

al., 2015). The broad PSM related conclusion that official's policy decisions pertain to intrinsic or emotional factors and extrinsic or power based decision factors is partially supported by government analysis regarding the maintenance of political power throughout the recovery policy process (FEMA, 2015a; Matei & Cornea, 2013). A related extrinsic factor pertained to the degree of risk local level governments take regarding a communities' recovery capacity versus vulnerability (Caruson & MacManus, 2011; Gerber, 2015; McEntire, 2012). The policy decision to increase capacity after a disaster represented the principle of PET whereby the post disaster community factor needs result in policy changes such as the case study finding that officials removed local building regulations to accelerate housing or infrastructure recovery (Smith & Sutter, 2013).

A case study to holistically examine PSM, PV, community and institutional factors influencing local level elected representative recovery policy decisions offered the opportunity to expand PET knowledge regarding the assumption that a friction event resulted in an abrupt vice gradual policy change. Local level PET and emergency management research recommended future research to examine decision factors (Jensen et al., 2014; Kwon et al., 2014; Storr & Haeffele-Balch, 2012; Tilcsik & Marquis, 2013). As indicated in the decision factors research review section, the mechanism by which decision-makers move from a critical incident to a policy decision followed the pattern of trigger event, to decision factors, to recovery policy decisions (Atkinson & Sapat, 2014; Caruson & MacManus, 2011; Cho, 2014, Johnson, 2014a; Johnson et al. 2015. One can then extrapolate on the PET and emergency management research by examining the research question: How do PSM, PV, political institution and community services

decision factors influence elected representative recovery policy decisions? A case study about Hampton Roads elected officials provided an opportunity to advance local level PET and emergency management recovery policy knowledge through the previously represented research question.

### Summary

### **Themes and Findings**

The most significant themes and findings of the research pertained to elected official contributions' and decisions factors in the local level post disaster recovery environment. There are unknowns regarding elected official role in resource utilization and the creation and sustainment of community partnerships before, during and after a critical incident (FEMA, 2015d; McCarthy & Brown, 2013). At the state and local level, government documentation emphasized the need for elected officials to promote advocacy for community-wide recovery policy change considerations. The lack of elected official generated community advocacy created an environment of misalignment in the execution of recovery policy actions by local government administrators (FEMA, 2015e; VDEM, 2015).

The research offered the need for community leaders to recognize that social capital (as previously described) contributed to community recovery policy decisions.

Community leadership alignment required elected representatives, city managers, city department heads and civic and business leaders to advocate similar policy goals in a post recovery environment (Caruson & MacManus, 2011; Chen et al. 2013; Kasdan, 2012; Smith & Sutter, 2013). The evidence-based findings indicated recovery factors associated

with financials, private-public sector partnerships, regulations and time compression required future research within the context of elected officials (Caruson & MacManus, 2011; Chen et al. 2012; Kasdan, 2012; Smith & Sutter, 2013). The research findings provided an opportunity to examine how Hampton Roads decision factors influence elected representative policy efforts to normalize a punctuated disaster community situation. The common theme in the research findings related to the need for communities to mobilize and sustain a recovery policy strategy or agenda that is anchored by an aggregated list of decision factors. The sustainment of recovery purpose or decision factors remained a key enabler for relevant and timely recovery policy (Atkinson & Sapat, 2014; Caruson & MacManus, 2011; Chen et al., 2013; Cho, 2014, Gerber, 2015; Johnson, 2014a; Johnson et al. 2015; Chen et al., 2013; Gerber, 2015; Pump; 2011).

#### What is Known and Not Known

Recovery policy making. CEM theory derived from the NGA (1979) report detailing the four stages of CEM as "mitigation, preparedness, response and recovery" (p. 11). The creation of the NDRF recognizes the partnership between federal, state and local governments for recovery, but fell short in mandating organizational constructs such as state and local recovery planning. A review of the NDRF and Congressional records indicated there is no congressionally mandated recovery policy to align federal, state and local level government actions. The policy misalignment has the potential to create distribution of authority seams between the three levels of government (FEMA, 2015b, 2015e McCarthy & Brown, 2013; Olshansky & Johnson, 2014; VDEM, 2015).

Much of the emergency management recovery policy-making studies recognized the value of flexible, relevant and timely policy decisions by local level officials. Policy-making issues such as inter-government and intra-government and rural versus metropolitan revitalization factors permeated the recovery environment (Berke et al., 2015; Caruson & MacManus, 2011; Storr & Haeffle-Balch; 2012). What is not known centered on national and state derived surveys reliably representing the experiences of local level representatives in the formation of recovery policy (Berke et al., 2014; Donahue et al., 2014).

Decision factors. The decision factors of financials, risks, and stakeholders advanced or inhibited local level recovery policy making (Berke et al., 2014; Kasdan, 2015; Olshansky et al., 2012). What is not fully known is how the PET assumption that elected representative make decisions following a friction incident applied to an aggregated list of recovery decision factors (Albright & Crow, 2013; Henstra, 2011; Hu, 2012; Kwon et al., 2013; Tilcsik & Marquis, 2013). The PET recovery research surfaced in institutional and financials environments but does not address others factors such as risk, time compression and social capital (Hu, 2012; Henstra, 2011; Kwon et al., 2013). The research provided an opportunity to understand how Hampton Roads representative shape recovery policy utilizing a variety of complementary decision factors to normalize the community.

### Addressing the Gap

The large volume of research on elected official preparedness and response governance challenges pointed to the need to expand the research into the recovery

mission area (Comfort et al., 2012; McEntire, 2012; Reeves, 2011). The qualitative case study examination of the decision factors influencing Hampton Roads elected representative recovery policy addressed the local level recovery policy gap. The study examined the role and experiences elected officials play in advocating and protecting community wide recovery tasks within the context of appropriations and ordinances policy following a disaster (FEMA, 2015e; VDEM, 2015). A comprehensive review of decision factors with Hampton Roads officials addressed the gap of not fully understanding an aggregated examination of PSM, PV and community factors that influenced disaster policy (Andersen et al., 2012a, 2012b; Berke et al., 2014; Johnson, 2014a Kasdan, 2015; Kim et al., 2013; Matei & Cornea, 2013; Moore, 2014; Ritz, 2011; Olshansky et al., 2012; Coursey et al., 2012; Williams & Shearer, 2011). The case study examination of how PV checks and balances, PSM decision factors, and practical community decision factors affect recovery policy following a punctuated incident offered the means to expand the emergency management and PET field of knowledge.

#### **Transition**

The case study examination of local level elected representative emergency management experiences and perceptions addressed the literature gap regarding how aggregated decision factors affect the formulation of nonmandated recovery policy (Patton, 2002, Yin, 2014). I used a case study research design to purposively sample the Hampton Roads elected official population within their current setting of day-to-day governance. The use of a semi structured interview protocol provided the means to examine the Hampton Roads elected official population perceptions and experiences

about an aggregated list of decision factors that influenced recovery policy. The application of the research question to PET presented an opportunity to strengthen the PET assumption that local level elected officials make policy decisions following a friction event. A case study design with multiple source triangulation enhanced the literature conclusions that future research needed to examine the local level decision factors to formulate recovery policy. The alignment of peer-reviewed research and government recovery documentation to a case study methodology about influences to recovery policy decisions provided a more relevant and complete understanding of the emergency management recovery knowledge (Berke et al., 2014; Donahue et al., 2014; FEMA, 2105e, NGA, 1979; VDEM, 2015). Chapter 3 detailed the case study approach to fully examine the research question within the context of literature and theory.

#### Chapter 3: Research Method

#### Introduction

The purpose of this case study was to examine how PSM, PV, and community decision factors influenced Hampton Roads, Virginia, representative recovery policy decisions between 2003 and 2012. I used Yin's (2014) case study protocol comprising (a) an overview, (b) data collection procedures, (c) data collection questions, and (d) provision of a guide for the case study report to address the research question. The research population included elected officials who formulated recovery policy such as mayors and council members vice officials that act upon recovery policy such as sheriffs and city attorneys. A case study approach offered the best means to expand the PET assumption that a friction event causes abrupt changes in policy to the local governance level, more specifically the Hampton Roads region regarding critical incident recovery policy decisions. A case study provided the evidence-based means to gain a deeper understanding of the decision factors that contributed to local level recovery policy decisions (Patton, 2002; Yin, 2014). The strength of the case study centered on the multiple sources of evidence, a theoretical assumption to expand upon, and a contemporary issue (Yin, 2014).

The qualitative case study design of a semistructured interview protocol and Hampton Roads government document review informed what was not known regarding how decision factors influence local Hampton Roads elected official recovery policy decisions (Berke et al., 2015; Caruson & MacManus, 2011; Donahue et al., 2014; Kasdan, 2015; Olshansky et al., 2012; Storr & Haeffle-Balch; 2012). The PET

assumption that elected representatives make decisions following a friction incident grounded the research question to the local level vice the historically examined federal level (Albright & Crow, 2013; Givel, 2010; Henstra, 2011; Hu, 2012; Kwon et al., 2013; Tilcsik & Marquis, 2013). The research offered the means to understand what aggregated decision factors Hampton Roads representative used to shape the post disaster community environment through recovery policy. The local level official recovery policy actions comprised approval, denial, postponement, or a change in regulations via ordinances and appropriations based on a plethora of decision factors inside and outside local level governance.

I rejected exploratory, social justice, and phenomenological approaches as the exploratory approach required a random sampling strategy, there was no social justice issue, and experiences of the broader elected representative population would fail to fully examine the research question. For example, a social justice issue of a city funding recovery of debris in affluent vice lower income areas, exploration of a new emergency management stakeholder, or a phenomenological fieldwork of elected officials during an actual critical incident would necessitate a change in the selection of the sampling strategy. The problem did center on a specific local level program (Yin, 2014) regarding recovery policy decisions and therefore suited a case study approach. The pragmatic worldview provided the means to inform emergency management research about local level recovery policy formulation for a contemporary issue (Yin, 2014). The triangulation of multiple sources (Yin, 2014) presented the best means to expand the PET and determine categories and themes associated with local level representative recovery

policy actions. The case study protocol provided the means to fixate on a geographic area of the United States not previously examined at the local governance level regarding recovery.

Patton (2002) concluded that the role of a qualitative researcher centered on the provision of a credible, evidence-based plan to collect and interpret the data and accurately delineate the findings. The basis of the case study data collection focused on local level government document reviews, PSM, PV, and community decision factors research, participant characteristics, city document reviews, and semistructured interviews. In this chapter, I have presented the case study target population and sampling strategy justification, delineation of the trustworthiness of the data and data collection schema, and explanation of the data analysis plan (Yin, 2014). A real-time observation of the participants was not feasible or cost effective as attempting to observe officials during a disaster presented safety issues and detracted from the real-time policy actions of elected officials. I recognized the need to maintain balance and neutrality throughout the research process with reviews of the reliability and validity of the data collected, categorization and creation of themes, and interpretation of the findings.

The participants for the research comprised elected officials from the Hampton Roads, Virginia area, or the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. I represented the characteristics of the participants (Saldana, 2013) detailing length of service and service on emergency management—related committees. I used a purposive sampling strategy of 10 elected officials, which provided sufficient sampling of the Hampton Roads

population to answer the research question (Patton, 2002; Yin, 2014). As the sole researcher, I wanted to know what the typical case (Patton, 2002) was for local level recovery policy. As such, the population typically familiar with making policy pertained to elected officials such as a mayor and council member vice an elected official who executes policy such as sheriff and city attorney. The case study is a purposive study (Yin, 2014) as I focused on the Hampton Roads elected official population familiar with emergency management policy. The sampling validity promoted data trustworthiness and reliability that permeated every step of the research design and implementation (Teddlie & Tashakkori, 2009; Trochim, 2006c, Yin, 2014). The case study focus provided the opportunity to examine an array of evidence (Patton, 2002, Yin, 2014) comprising the day-to-day experiences of elected officials via semistructured interview protocol and city government document reviews related to Hampton Roads elected representative recovery decision factors that influencing policy

I leveraged Yin's (2014) five levels of questions regarding interviewees, patterns, entire study, and policy recommendations and conclusion questions (Yin, 2014) to drive the data collection. The Level 1 questioning pertained to the semistructured interview protocol. Level 2 questions referred to the subordinate research questions. The Level 3 questions related to the categories and themes that formed the findings. Level 4 questions pertained to information embedded in the literature review such as local decision factors research. The Level 5 questions emanated from the recovery policy conclusions. The review of local level government documents, semistructured interviews, and recovery research "attends to all of the evidence" (Yin, 2014, p. 168) for the case study.

The semistructured interview data and participant feedback provided the "most significant aspect of the case study" (Yin, 2014, p.160). The inquiry with each participant comprised a statement of the purpose of the study, an explanation of the role of the researcher, provision of topics and questions to the participant, and delineation of the value of research to the emergency management research field, elected officials, and their organization. I utilized the art of listening practices, note taking, an audio recorder, and maintenance of a neutral perspective throughout the data collection process (Janesick, 2011; Patton, 2002). The reliability strength required neutrality in the asking of the questions (Patton, 2002). I achieved reliability through the practice of respecting Hampton Roads representatives' perspectives about disaster recovery policy formulation and the decision factors.

The "explanation building analysis technique" (Yin, 2014, p. 147) provided the best means to expand the local level PET by tracing critical incidents between 2003 and 2012 for how decision factors influenced Hampton Roads elected official recovery policy decisions. I conducted frequent rechecks of the research question as the narrative and iterative nature of the case study, which mitigated unwanted bias throughout the analysis process (Yin, 2014). The value of the explanation building technique concentrated in the iterative or gradual building of the local level recovery policy case, which strengthened the findings.

The small population mitigated the need to use software to create codes and themes as an Excel spreadsheet and word analysis suffices for the data analysis (Bazeley, 2007; QSR, 2013). I implemented a repeatable analysis process for transcribing the

interview notes, determining themes, and creating visual models (Patton, 2002; Yin, 2014). The research question and theoretical framework of PET grounded the coding and designation of decision factor and recovery policy decision themes within the framework of the explanation building analysis protocol. The PET assumption that policy formulation is gradual unless triggered by a significant event guided the coding, category, and theme development. For instance, decision factors associated with Hampton Roads elected representative recovery policy drove categorization selection and offered the means to "compare details" of the case (Patton, 2002, p. 449). A summation of the analysis offered an interim step for the eventual determination of research findings.

Trustworthiness included objectivity in the engagement with the participants, the credibility of the data collected, transferability of the evidence-based data, dependability of the research process, and confirmability of the analysis (Patton, 2002; Teddlie & Tashakkori, 2009). The understanding of self-awareness from a researcher and participant perspective required scrutiny to ensure a neutral voice represented the data collected and analyzed (Patton, 2002). To strengthen the credibility and dependability of the data, I used an IRB-approved pilot study to evaluate the data collection and analysis procedures (Teddlie & Tashakkori, 2009; Trochim, 2006d; Yin, 2014). The pilot study comprised elected commissioners from the neighboring county of Currituck, North Carolina. I reenforced the importance of the research during the commencement of the semistructured interview, before the exit comments, and during the feedback sessions with the participants to strengthen the credibility and transferability of the analysis and findings (Patton, 2002; Teddlie & Tashakkori, 2009; Yin, 2014).

The protection of the participant rights commenced with recruitment through a formal letter (Appendix B) requesting participation in a semistructured interview process to examine the elected representative recovery policy and decision factors. The letter detailed (a) the purpose of the research, (b) the time-period requested for the administration of the interviews with the Hampton Roads representatives, (c) a request for consent, (d) delineation of the procedures to protect Hampton Roads participants and the cities represented in the research, (e) a description of the structured interview process, (f) the means to gain participant feedback during the data collection and findings formulation period, and (g) the intended use of the results for practitioners and research. I ensured no harm impacted the Hampton Roads representatives during the semistructured interview process.

# **Research Design and Rationale**

The research question provided the means to challenge or confirm the unknowns about Hampton Roads elected official recovery policy decisions. The research question was as follows: How do PSM, PV, political institutions, and community services decision factors influence Hampton Roads elected official recovery policy decisions?

The semistructured interview question protocol found in Appendix A formed the basis for review of local government emergency management documentation. The focus of the semistructured query was to capture the day-to-day environment, and then probe with questions pertaining to (a) what actors and stakeholders affected recovery policy, (b) the inherent checks and balances in policymaking, (c) the alignment to the PET principle of steady state policy versus a critical incident environment, and (d) decision factors as

previously described (Andersen et al., 2012a, 2012b, Baumgartner & Jones, 1993; Kwon et al., 2013; Perry, 1996).

The central phenomenon of the research referred to local level official disaster recovery policy decisions within the theoretical foundation of PET (Baumgartner & Jones, 1993; NGA, 1979). The phenomenon of disaster recovery aligned to the PET assumption that policy derives from a friction event for the local level recovery policy decision environment. A review of the recovery policy decision-making research mainly pertained to federal and state level official disaster recovery policy experiences (Berke et al., 2014; Donahue et al., 2014). The decision factors research associated with recovery policy tended toward singular vice aggregated examination (Andersen et al., 2012a, 2012b; Berke et al., 2014; Johnson, 2014a; Kasdan, 2015; Kim et al., 2013; Matei & Cornea, 2013; Moore, 2014; Ritz, 2011; Olshansky et al., 2012; Coursey et al., 2012; Williams & Shearer, 2011). The case study examination of the recovery phenomenon at the local level offered an opportunity to enhance knowledge within the context of how an aggregated view of decision factors contributed to recovery policy decisions following a disaster.

The case study research offered the means to interpret the local level recovery policy phenomenon through the capture of Hampton Roads elected official population experiences. The normal environment of the population provided the means to immerse in Yin's (2014) five levels of questions through the examination of city documents, press prior research, and semi structured interviews with elected officials associated with disaster recovery policy. The use of multiple sources offered the means to use inductive

and deductive analysis for themes creation to understand the Hampton Roads recovery policy decision factors (Patton, 2002; Yin, 2014). The case study research tradition provided the means to contribute to positive social change about local level recovery policy formulation via a decision factors prism. The data saturation and inductive and deductive case study approach best aligned to the research question and intent to examine Hampton Roads representative recovery policy decisions and provide an aggregated, over-arching decision factors synopsis (Patton, 2002; Teddlie & Tashakkori, 2009; Yin, 2014).

Many of the qualitative approaches provided the means to gain insight about the research question. The qualitative approaches comprised ethnography, defined as prolonged study on a cultural group; grounded theory, defined as determination of a theory; case study, defined as the understanding of specific program or incident; phenomenological designed to better understand experiences; and narrative research, defined as the understanding of a community (Patton, 2002; Yin, 2014). The narrative approach presented the means to understand the Hampton Roads elected official attitude and motivation for recovery policy decisions associated with PSM and PV, but would not address decision factors about housing, infrastructure, and the environment. The ethnography of the Hampton Roads representative recovery policy process provided an opportunity to immerse fully into the research problem; however, time and cost prohibited applying the approach. A phenomenological approach offered the means to understand how the Hampton Roads elected official population viewed recovery policy decisions, but excluded the review of city documentation. Grounded theory approach was

rejected as there is no theory generating from observations or fieldwork. A case study research application of iterative discovery offered the best means to address the research question with a variety of sources (Babbie, 2007; Patton, 2002, Yin, 2014).

The case study approach presented the preferred means to examine day-to-day Hampton Roads official recovery experiences and documentation vice a quantitative or mixed-methods approach. The quantitative approach seeks to test generalizations of theory through classical experimentation with a random sampling; however, the research question was not formulated to test a theory or capture data from a controlled environment strategy (Babbie, 2007; Frankfort-Nachmias & Nachmias, 2008). A mixed-methods approach offered the means to holistically examine the research question; however, the capability to effectively sequence and weigh the qualitative and qualitative data provided many occasions to inhibit visualization, understanding, and interpretation of the data (Fielding, 2012; Teddlie & Tashakkori, 2009). The time, cost, and required practiced expertise of a mixed-methods approach prohibited the selection. The best approach to address the research question was the case study approach for the alignment of the research question to a design that provided the means to understand better decision factors contributing to Hampton Roads elected official recovery policy decisions.

## Role of the Researcher

Effective qualitative research depended on the researcher being the fulcrum for credible evidence-based data collection, interpretation, and findings (Patton, 2002). I utilized local level government documents and semistructured interviews as the basis for data collection. The use of numerous data sources precluded drawing unsubstantiated

coding decisions and conclusions regarding categories and themes, and offered the means to ask question regarding each source element (Patton, 2002; Yin, 2014). I maintained balance and neutrality throughout the research process as the primary researcher for the data collection, coding, and analysis.

The avoidance of inserting personal bias regarding elected officials and post disaster response and recovery experiences required constant reviews and re-checks throughout the research process. A periodic review of the PET assumption and data collection protocol presented the means to mitigate bias (Yin, 2014). The insertion of personal bias potentially leads to improper coding and unsubstantiated findings and creates research questions misalignment (Patton, 2002; Yin, 2014). As chair for the City of Chesapeake LEPC, there was a tendency to mirror-image or replicate opinions that all Hampton Roads cities operated the same regarding mitigation, preparedness, response and recovery. The application of pilot study on the implementation of document reviews and creation of the semi structured interview protocol with elected officials in neighboring North Carolina provided the means to mitigate pre-conceived ideas on local level recovery decision factors and policy.

# Methodology

The participants for the research comprised elected officials from the Hampton Roads area (as previously described). I described a valid and repeatable sampling strategy that associated to the research question. The sampling validity promoted data trustworthiness and reliability (Teddlie & Tashakkori, 2009; Trochim, 2006c). The instrument for the proposed research comprised the semistructured interview protocol

supported by the review of city CAFRs, and city council meeting minutes. The procedures for participant recruitment and data collection applied to the pilot study and case study. I addressed issues about research trustworthiness and bias through credibility, transferability, dependability, confirmability and IRB research approval (05-10-16-0381303).

# **Participant Selection Logic**

A single case study approach examined the unusual or out of the norm day-to-day experiences of Hampton Roads officials following a critical incident through a purposive sampling strategy (Yin, 2014). A purposive sampling of the Hampton Roads representative population (as previously described) aligned to the research question and baselined the data collection and analysis plan (Patton, 2002; Teddlie & Tashakkori, 2009). The Hampton Roads representative population characteristics included officials associated with disaster policy formulation and decision-making vice post decision policy actions. The gathering of the data comprises a semi structured interview protocol supported by city document reviews and disaster press release reviews. A pilot study provided the means to assess the single case study sampling strategy.

Sampling strategy selection. There were a variety of sampling strategies available for consideration to address the research question. The random sampling approach prevented assurances that the appropriate Hampton Roads officials would participate in the research and better suited a quantitative design whereby confidence levels requirements must be met (Frankfort-Nachmias & Nachmias, 2008; Patton, 2002). A quota sampling strategy provided the means for sampling the Hampton Roads elected

official population with required elected official characteristic but fell short in the specific unit of analysis of officials associated with recovery policy decisions (Frankfort-Nachmias & Nachmias, 2008; Patton, 2002). A convenience sampling strategy does not align to the examination of elected officials associated recovery policy as the population originated from availability vice specific pre-determined characteristics.

The purposive sampling design enhanced the representation of the population with the selection of participants possessing the characteristics of previous formulation of disaster recovery policy decisions (Patton, 2002; Trochim, 2006c; Yin, 2014). The purposive sampling strategy ensured the elected official had the characteristic of recovery policy decision maker such as mayors and city council officials. The execution of the sampling strategy supported by a pilot study ensured the population best aligned to examining elected official recovery policy experiences. As discussed in the limitations section, I recognized that the case study does not represent a large population and that a follow-on multi-case study of the entire Commonwealth of Virginia may be required to strengthen generalization (Yin, 2014).

Purposive sampling rationale. I purposively sampled 10 elected officials to capture the rich, in-depth, day-to-day experiences of elected representative regarding emergency management policy decisions. The case study approach and sampling strategy aligned to support the collection of experiences of 10 Hampton Roads representatives' familiar with emergency management recovery vice a quantitative random sampling approach with the need to detail a 95% confidence level (Patton, 2002). The 10 officials selected were purposively sampled from officials associated with the mandated

emergency management programs and with elected representative tenure of 10 years or more. All cities are required to assign elected official to emergency management committees such as LEPCs (EPA, 2014). Accessing city web sites and conversations with city clerks provided the means to identify the appropriate officials for the research. The proposed purposive sampling strategy supported the assumption that the 10 officials best represented the Hampton Roads population associated with disaster policy formulation and decision-making (Frankfort-Nachmias & Nachmias, 2008).

The purposive sampling strategy aligned to the PET, the case study approach and research question about decision factors contributing to Hampton Roads official recovery policy decisions. A purposive sampling strategy ensured the appropriate participation by Hampton Roads elected officials. Any other sampling strategy led to research misalignment and undue cost and time in the pursuit of the case study. The purposive sampling strategy offered the means to use the semi structured interview protocol to address the research question within the case study explanation building context of Hampton Roads representative recovery policy decisions in a post disaster environment (Yin, 2014).

#### Instrumentation

I utilized a semi structured interview instrument, Appendix A, to explore and derive themes regarding policy decision factors (Altheide & Johnson, 2011; Patton, 2002). The semi structured interview instrument allowed for flexibility in the exploration (O'Sullivan, Rassel, & Berner, 2008; Yin, 2104) of an elected official recovery policy narrative. The validity of the individual interview questions centered on sources

triangulation (Patton, 2002; Yin, 2014), specifically local government emergency management documentation, city recovery related press releases, and decision factors research (as previously described). I utilized elected officials from Currituck North Carolina for the pilot study interview protocol. The Currituck and Hampton Roads officials and respective city emergency management organizations experience and plan for the same type of critical incidents such as hurricanes, hazardous material spills, tornadoes, fires, flooding and active shooter. The alignment of the pilot study to the research ensured the capture of elected official recovery narratives remained valid for subsequent categorization, coding and themes formation.

The value of the semistructured interview process resulted in rich, in-depth alignment to the intended inquiry (Patton, 2002). The Hampton Roads city government documentation data and decision factors research supplemented the participant emergency management recovery factors and policy perspectives. The semi structured interview questions provided the level 1 and 2 (Yin, 2014) inquiry regarding Hampton Roads elected official recovery policy experiences from 2003 to 2012.

# **Pilot Study**

The pilot study used neighboring North Carolina elected officials from Currituck County to ensure the purposive identification of elected official participation and relevant recovery policy sources (Yin, 2014). The pilot study participant recruitment comprised a formal letter detailing (a) the purpose of the research, (b) the conduct of the semi structured interview process, (c) provision of questions prior to the interviews, and (d) opportunities to provide feedback at the of the interviews. An on-line search of the

participants ensured the officials had served for 10 years or more in making emergency management policy for the community. The recruitment letter provided detailed data collection, analysis, and storage procedures to protect the privacy of the officials and the represented city. As previously identified, the alignment of the research question and sampling strategy required the population comprise the characteristic of policy formulation and decision-making and was a key element of the formal recruitment pilot study letter. I emphasized that participation in the proposed pilot study provided value to the local level emergency management field of knowledge and potentially enhanced elected official knowledge pertaining to future recovery policy factors and decisions.

As part of the pilot study, I conducted an on-line search of county and city web sites to ensure officials' characteristics represented the disaster policy governance knowledge characteristic. The web site search and conversations with the county clerk comprised (a) elected representative disaster knowledge such as years associated with preparedness and response oversight, mitigation decisions, and recovery policy formulation, (b) 10 to 15 years of elected service, and (c) full name. I avoided posing leading questions during the semi structured interviews to mitigate participant bias (Frankfort-Nachmias & Nachmias, 2008). The pilot study formed the basis for the data collection associated with Hampton Roads representative population characteristics and use of sources.

# Procedures for Recruitment, Participation, and Data Collection

A formal recruitment letter explaining the intent and format of the research provided the necessary information for the elected representative population active

participation in the research. The purposive selection of the Hampton Roads participants required recruitment through a formal participant and consent letter detailing (a) the purpose of the research, (b) the conduct of the semi structured interview process, (c) provision of questions prior to the interviews, and (d) opportunities to provide feedback during and after the interviews, Appendix A and B. The recruitment letter provided detailed data collection, analysis, and storage procedures to protect the privacy of the officials and the represented city. As previously identified, the alignment of the research question and sampling strategy required the population comprise the characteristic of emergency management policy making. I emphasized that participation in the research provided value to the local level emergency management field of knowledge and potentially enhanced Hampton Roads elected official knowledge pertaining to future recovery decision factors and policy.

As part of the formal recruitment, I conducted an on-line search of city web sites and conversations with city clerks to ensure official characteristics represented the disaster policy governance knowledge characteristic. The web site search comprised (a) elected representative disaster knowledge such as years associated with preparedness and response oversight, mitigation decisions, and recovery policy formulation, (b) 10 to 15 years of elected service, and (c) full name. The characteristics offered the means to avoid asking leading questions during the semistructured interviews to mitigate participant bias to the proposed research (Frankfort-Nachmias & Nachmias, 2008).

**Semistructured interview instrument protocol.** The use of Hampton Roads CAFRs, city council meeting minutes and decision factors peer-reviewed literature

supported the conduct of the semistructured interview protocol. The data sources presented sufficient data triangulation (Teddlie & Tashakkori, 2009) to examine qualitatively the research question and subordinate questions (as previously described). The implementation of an IRB approved semistructured interview protocol (05-10-16-0381303) ensured (a) participants understood the nature of the research and the role of the researcher, (b) no harm would come to the participant and the cities, and (c) participants had an opportunity to provide feedback during the interview process and analysis phase (Patton, 2002; Perakyla & Ruusuvuori, 2011; Yin, 2014). The feedback or member checks offered the participant multiple times to correct or refine input to the research thus strengthening the trustworthiness of the study (Patton, 2002). The adherence to an IRB vetted interview protocol ensured consistency in representation of the research question, protection of the participants, and minimized researcher bias. A rigorous pilot study mitigated issues of bias by removing pre-conceived conclusions regarding decision factors and recovery policy, and assisted in the refinement of the data collection plan (Yin, 2014).

**Data collection.** The key elements of the data collection plan comprised the overview, data collection procedures, data collection questions and findings (Yin, 2014). The unit of data collection pertained to the entire set of data comprising the government documents, press releases, semistructured interviews, and decision factors research. As such the unit of data collection related to Hampton Roads representatives regarding decision factors and policy vice the individual representatives. The overview included the problem statement, research question, PET assumptions and overall research plan. The

review of city CAFRs, city council meeting minutes, and the semistructured interview protocol formed the basis for the data collection and procedures (Figure 1). The review of city CAFRs and city council meeting minutes were actualized by Freedom of Information Act (FOIA) requests (DOJ, 2016) associated with disaster recovery between 2003 and 2012.

I collected the Hampton Roads elected representative recovery decision factors and policy actions experiences using the semistructured interview protocol, Appendix A. The semistructured interview questions served as a key data collection question instrument and shaped level 3 and 4 inquiries (Yin, 2014). I practiced the art of listening, took notes, used an audio recorder, and remained neutral but interested throughout the process (Yin, 2014). The neutrality approach strengthened the case reliability (Patton, 2002) which I achieved through the practice of respecting participant perspectives.

Figure 1: Data Collection Plan

Research Question: How do Public Service Motivation (PSM), Public Value (PV) What is and community decision factors influence Hampton Roads Virginia representative recovery policy decisions between 2003 and 2012?

The five levels of questions include: the interviews, data collection, pattern findings, literature and recommendations/conclusions

The data collection protocol includes: the overview, data collection plan, procedures and findings

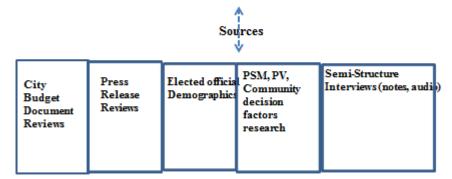


Figure 1 Case study protocol adapted from R.K. Yin, 2014, Case study research: Design and methods (5th ed.) Thousand Oaks: SAGE Publications, Inc.

Figure 1. Data collection plan.

The semistructured interviews or level 1 questions (Yin, 2014) provided the means to align to the research question. I administered the main and probing questions during a 20 to 25-minute session with each Hampton Roads official, Appendix A. The first 5 minutes pertained to a re-statement of the purpose of the research, role of the researcher, the mechanics and recording device value, the feedback process, and the significance of the research to the emergency management field and local level official recovery policy formulation and decisions (Janesick, 2011; Patton, 2002). The next 15 minutes pertained to the semistructured and probing questions related to the research question. The final 5 minutes provided the opportunity for the participant to discuss all questions previously addressed as well as offer an exit comment.

### **Data Analysis Plan**

I used an inductive data analysis strategy (Yin, 2014) to analyze how representative's recovery policy factors influenced policy decisions. The inductive data analysis strategy used numerous sources as previously described to array or categorize the data through a "ground up" approach (Yin, 2014, p. 138). For example, the semistructured interview data and participant feedback formed the basis for derivation of themes (Patton, 2002). The small population obviated the need to use software to create codes and themes as an Excel spreadsheet and word analysis sufficed for the data analysis (Bazeley, 2007; QSR, 2013; Yin, 2014). I implemented a repeatable analysis process for each form of data. For the semistructured interview process I (a) transcribed the notes from the audio recorder and interview notes, (b) reviewed and cleaned the data, (c) created codes based on repeated or emphasized phrases and words, (d) reviewed the data a second time, (e) reviewed the codes, (f) aligned phrases and ideas to determine themes, (g) created themes, (h) created visual models to represent the analysis, (i) reviewed Steps E through H, (j) drafted a summation to support the visual models, (k) sought member checks with the participants, and (1) repeated steps as required (Patton, 2002). The research question and theoretical framework of PET informed the coding and designation of themes related to decision factors and recovery policy actions.

I leveraged content analysis and explanation building techniques (Patton, 2002; Yin, 2014) to support the research. The explanation building technique is an iterative process that allowed the research question, decision factors sources of evidence and the PET assumption of rapid recovery policy change (Kwon et al., 2013) to iteratively

expand the knowledge throughout the case study (Yin, 2014). Content analysis was used to summarize the city documents and semistructured interview data, and was a good companion to the explanation building technique. The content analysis method enabled a more objective evaluation of the categories and themes. The value of content analysis centers on the depiction of visual models numbers which would useful for a variety of audiences. The ease in forming visual models removed subjectivity and simplified the depiction of codes, categories and themes (Frankfort-Nachmias & Nachmias, 2008; Patton, 2002; Yin, 2014).

Coding and discrepant cases. I used pattern matching to provide gross categorization of themes to strengthen the analysis (Yin, 2014). The coding of the disaster recovery through the categorization of semistructured interview comments and city documents provided the means to present visual models of the Hampton Roads elective official population experiences. I made sense of the data through the development of a first and second cycle codebook (Patton, 2002). The codebook provided a repeatable means to present (a) the research purpose, questions and role of the researcher, (b) the classification of the data, (c) the determination of the codes, and (d) representation of the meaning through an aggregation of key words, phrases, and experiences (Patton, 2002; 2014). The coding process comprised (a) transcription of the notes from the audio recorder and interview notes, (b) review and cleaning of the data, (c) creation of first and second cycle codes based on repeated or emphasized phrases and words, (d) reviewing the data a second time, (e) review of the codes, (f) alignment of phrases and ideas to determine themes, (g) creation of themes, (h) creation of visual

models to represent the analysis, (i) review of Steps E through H, and (j) draft of a synopsis (Patton, 2002; Yin, 2014).

The identification of experiences required additional consideration so as not to discount any aspect of the population's recovery policy attitudes, behaviors and experiences. The discrepant or outlier phrases or experiences created an opportunity to examine the population from a different or unintended perspective regarding disaster recovery. The coding of the discrepant data required further analysis to determine the impact to the case study. The discrepant data did not require follow-up questions with the Hampton Roads representative population to examine fully the outlier experience theme, but was addressed during member checks. I established pre-determined categories after the pilot study related to PSM, PV and community decision factors (as previously described) to ensure alignment to the research question. In the end, the coding process provided the means to analyze and interpret the local level elected official recovery factors and decision making in a repeatable fashion.

#### **Issues of Trustworthiness**

To strengthen the trustworthiness of the data, I used an IRB-approved pilot study to evaluate and adjust the data collection and analysis procedures (Patton, 2002; Teddlie & Tashakkori, 2009). The adherence to the IRB ensured representation of transferability to the practitioners, participants and the public policy and administration (PPA) field of knowledge (Patton, 2002). Practitioner and PPA research field trust in the analysis strengthened with the application of triangulation and evidence of saturation. I used triangulation or convergence of the recorded semistructured interview and notes, city

CAFRs, and city council meeting minute documentation reviews to achieve data saturation (Teddlie & Tashakkori, 2009; Trochim, 2006d; Yin, 2014). Of note, the review of city budget documentation and conversations with city clerks led to the evaluation of city council meetings between 2003 and 2012. The addition of the city council meeting minutes illustrated the value of Yin's (2014) five level of questions and strengthened the research trustworthiness.

# Credibility

The internal validity of the proposed research methodology involved data triangulation and process reviews. I used the PSM, PV, and community decision factors research, city budget documentation (as previously described) and semistructured interview data for the sources triangulation supported the previously described five levels of questions (Yin, 2014). The execution of a well-documented semistructured interview protocol data denoted research trustworthiness (Yin, 2014). The overlapping data provided a rich and in-depth means to ensure content credibility (Elo et al., 2014; Patton, 2002). The preparation, organization and coding cycles developed by Elo et al. (2014) and Patton, (2002) and Yin's (2014) data collection and analysis planning overviews provided a repeatable means to sustain research alignment. I focused on sources triangulation and data collection and analysis process alignment for the research credibility.

# **Transferability**

The strength of transferability centered on the creation and maintenance of the data collection plan, codebook, and coding practice. The data collection plan presented

future researchers the means to replicate each component of the plan (as previously described). The first and second cycle coding process and codebook provided a traceable guide to understanding the steps related to the semistructured interview protocol, data review and cleaning, and coding process. The setting of key words and phrases to support identification and interpretation of themes established the unit of meaning (Campbell, Quincy, Osserman & Pedersen, 2013) for examination of how decision factors contribute to Hampton Roads official recovery policy decisions. Campbell et al.'s (2013) unit of meaning coding practice provided an acceptable research process to capture broad and subtle meanings to Hampton Roads representative recovery policy decisions. I focused on checking for transferability through continual periods of data collection and analysis procedural reviews and coding reviews.

# **Dependability**

The dependability of the research concentrated on data collection procedural maintenance for the multiple sources of evidence, tracking of the data, and participant feedback (Yin, 2014). A clean and concise audit trail regarding the semistructured interview protocol and city documents, data retrieval, data storage procedures, and adherence to the first and second cycle coding process supported a traceable process for future research. To mitigate reliability of the data (Trochim, 2006a; Trochim, 2006b), I utilized member checks for the semistructured interview data and findings (Frankfort-Nachmias & Nachmias, 2008; Patton, 2002). As the sole researcher, the likelihood of intercoder shortfalls remained minimal. As the sole coder of a small purposive sampled population, the triangulation of sources tended to be less complicated yet richer in content

(Campbell et al., 2013; Patton, 2002). I maintained a broad review perspective to ensure I was open to contrasting evidence (Yin, 2014). I continually sought knowledge that advanced PET through the examination of local level recovery policy decisions vice biased, unsubstantiated evidence.

# Confirmability

The reflexivity of the research centered on maintenance of a neutral perspective (Patton, 2002). As the sole researcher, I remained transparent during the engagement with the population. I requested that the Hampton Roads elected officials be self-aware of their perspectives and attitudes toward disaster recovery and not attempt to "game" their responses during the semistructured interview process and member check sessions. I reenforced the importance of the research during the commencement of the semistructured interview, before the exit comments, and during the feedback sessions with the participants (Patton, 2002; Yin, 2014). As the sole researcher, I did not lead the participants during the interview process and respected the opinions and perspectives of the participant.

# **Ethical Considerations**

The importance of ethical considerations permeated every aspect of the proposed research regarding beneficence, justice and respect for the participants (Walden University, 2017a). The receipt of IRB approval re-enforced my attention to research ethics. I paid attention to the formal agreement documentation that garnered Hampton Roads and pilot study elected official participation through formal letters, phone calls and e-mails which detailed the purpose of the research, the semistructured interview protocol,

the methods used for the provision of feedback, and protections associated with the participant, data dissemination and data storage.

The treatment of the participants and data followed the Human Research Protections guidelines detailed in the National Institute of Health (NIH, 2015) training and certification course. I verified that I was certified under NIH guidelines until 2019. The integrity of the data integrity and confidentiality was a priority for the research so that no harm would befall the participants or their organizations. The data was stored in a removable hard drive for the duration of the research. The data checks comprised formulation of categories and themes and revisions. The audio recordings were transposed onto the computer then removable hard drive. The semistructured interview notes and freedom of information data requested from the cities were scanned and then moved to the removable hard drive. The removable hard drive data was numbered and checked each time the data was accessed.

The handling of the participants required strict adherence to a standard protocol. The formal correspondence and e-mails were standardized so that each engagement and response received the same attention. The semistructured protocol required each participant to receive the same approach regarding introductions, the address of questions and exit comments. The member check procedures for participants to review the results of the interview data required the same deliberate approach for re-introduction to the purpose of the study and significance of the research to the participant and city stakeholders. Although not needed, on the occasion that a participant wished to

discontinue participation in the research, I planned to cease engagement, thank them for their contributions and maintain the participant input as anonymous.

In order the maximize benefits to the participants, their respective city and the emergency management field of knowledge, the participants were represented by a number correlated to a respective city. There was no value to identify the participants by name, and therefore all participants were cataloged as anonymous. The protection of the participants and their city organizations remained a key criterion for the research. The benefit of proper adherence to IRB standards promoted future research application to the examination of elected officials in the disaster environment. The mitigation of risk to the Hampton Roads elected official population was an integral part of the research and was executed through a well-defined and defended research ethics protocol.

# **Summary**

The case study hinged on the examination of Hampton Roads elected official decision factor experiences and attitudes toward recovery policy. The timeframe of the study encompassed 2003 to 2012. The problem pertained to Hampton Roads elected official recovery governance following a disaster. It was worth knowing how the aggregated decision factors influenced recovery policy decisions to advance local level PET. The checks and balances between sustainment of city budgets and provision of services aligned with decision makers grappling with short- term and long-term recovery. The research offered the opportunity to examine the Hampton Roads area representative experiences, attitudes and perspectives in the examination of PSM, PV, and community decisions factors for recovery policy.

The purposive sampling strategy of using Hampton Roads officials familiar with emergency management policy formulation provided the means to inform PET using the research question and data collection and data analysis plans. The semistructured interview protocol (as described in Appendix A) and review of documents supported the research question.

The pilot study enhanced the trustworthiness of the semistructured interview questions and other levels of questions (Yin, 2014). The pilot case study offered an opportunity to improve upon the semistructured interview protocol and data collection procedures (Yin, 2014). The participant characteristics representation provided a better understanding of participant emergency management knowledge and years of elected service. The alignment of the semistructured interview questions with the city budget documentation, and city council meeting minutes provided sufficient data saturation for the examination of the research inquiry.

The data analysis strategy offered inductive and deductive means to examine and analyze the data (Patton, 2002; Yin, 2014). The value of the inductive and deductive analysis approach centered on first and second cycle coding, category determination, theme development and member check procedures. The inductive part of the analysis pertained to the continual interaction with the data, while the deductive part of the analysis related to the alignment to PET (Patton, 2002). A give and take between the inductive and deductive approaches mitigated issues of bias as I allowed for discovery based on participant explanation of decisions factors and city document reviews associated with recovery policy decisions.

The alignment of research methodology, results and conclusions enhanced the value of the case study to the emergency management field, application of PET to the local level, and Hampton Roads elected official recovery policy decision-making. The research methodology provided sufficient explanation and rationale regarding the environment, participants and data collection and analysis protocols to address the research question. As the first examination of Hampton Roads elected official recovery policy decisions, the methodology used inductive and deductive analysis of the problem associated with participant experiences and perspectives regarding over-arching decision factors that influenced policy. The methodology plan offered a clear and concise blueprint for the formation of results through the conduct of the semistructured interview process. The recovery decision factors and policy themes from the interviews offered the opportunity to present the data through tables, figures and mapping of participant comments to the research question.

### **Transition**

The researcher used a case study methodology to assemble findings in Chapter 4. The data collection of city documents and semistructured interviews, data analysis, and findings aligned to the research question (as previously described). A pilot study preceded the actual research to ensure data trustworthiness and content credibility. As a result of the pilot study, city press releases were replaced by city council meeting minutes as a data source which strengthened the findings. Protection of the participants remained a constant concern throughout the research. First and second cycle coding presented the

means to ascertain categories and themes associated with the research questions which expanded local level government PET and post disaster recovery policy knowledge.

#### Chapter 4: Results

#### Introduction

Chapter 4 provides the results of the data collection and analysis derived from the research question. The research question examined the following: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions? The purpose of the case study was to examine the decision factors affecting Hampton Roads elected representative post disaster recovery policy decisions between 2003 and 2012. The data collected contained extensive review of city council meetings, CAFRs between 2003 and 2012, as well as 10 face-to-face elected official semistructured participant interviews.

The case study was supported by a pilot study focused on Currituck, North Carolina, elected commissioners. The pilot study validated the participant sampling strategy to engage with elected officials possessing emergency management policy making characteristics. As such, the pilot study verified the alignment of the semistructured interview protocol and city document reviews to the research question. A pilot study review of the data collection plan and source triangulation strengthened the trustworthiness and reliability of the case study (Patton, 2002; Teddlie & Tashakkori, 2009). The ultimate value of the pilot study resided in confirmation of the data collection procedures, assurances of bias mitigation, and multisource data triangulation (Elo et al., 2014; Patton, 2002).

The setting and demographics determination of the case study for Hampton Roads, Virginia, precedes the data collection, data analysis, evidence of trustworthiness,

results, and summary. Participant characteristic evaluation assured relevant data would address decision factors that affected Hampton Roads post disaster recovery policy. The data collection execution followed the plan presented in Chapter 3. The key to the data analysis resides in the step-by-step process described in Chapter 3 that resulted in the emergence of decision factors themes associate with post disaster recovery policy decision. Results of the data analysis enhanced the current emergency management knowledge concentrated on local level recovery policy decisions. A summary provided the results and research question alignment.

### **Pilot Study**

The pilot study offered the means to assess the case study sampling strategy and the semistructured interview protocol within the context of credibility and dependability. I used an IRB-approved pilot study to evaluate the data collection and analysis procedures (Teddlie & Tashakkori, 2009; Trochim, 2006d; Yin, 2014). The pilot study initially comprised review of Currituck County CAFRs, examination of county commissioner press releases pertaining to post recovery policy, and semistructured interviews of Currituck, North Carolina, commissioners. However, discussions with the county clerk resulted in review of Currituck County, North Carolina, commissioner meeting minutes' vice press releases. The change to examining county meeting minutes yielded a richer, in-depth analysis of elected official post disaster recovery policy formulation and decisions. The focus of Currituck County documents related to post disaster recovery policy, while the semistructured interviews offered the means to capture county commissioner experiences in the factors that influenced post disaster policy.

#### **Data Collection Protocol and Semistructured Interview Instrument**

The method for reviewing county documents commenced with pulling of documents from the county online website or requesting documentation via FOIA (DOJ, 2016) queries to the county clerk. A FOIA response normally took 2 to 3 weeks to complete. Each document was reviewed for case study relevancy with passages transposed to an Excel spreadsheet for data centralization. Once the document data collection was completed, I moved on to recruiting county commissioners via e-mail using the IRB-approved participant letter, consent form, and interview questions. In each circumstance, I followed up with a phone call to the invited commissioner to clarify any lingering questions regarding the intent of the pilot study and value to elected officials and field of emergency management.

The Currituck County commissioner interviews were executed in a county boardroom, a place of business office, and at a commissioner's residency. I re-enforced the importance of the research during the commencement of the semistructured interview with the Currituck County commissioners, before the exit comments, and during the feedback sessions with the participants to ensure credibility and transferability of the analysis and findings (Patton, 2002; Teddlie & Tashakkori, 2009; Yin, 2014). Each of the three interviews was captured via DictoPro recording, which I later transcribed and strengthened by taking notes. The note taking provided the means to ensure the capture of the participant attitudes and behavior regarding post disaster recovery and guided the asking of follow-up or probing questions.

### **Protection of the Participants**

The protection of the pilot study participant rights commenced with county commissioner recruitment through formal participant and consent letters requesting participation in a semistructured interview process to examine the elected representative recovery policy and decision factors (Appendices A and B). The participant invitation letters detailed (a) the purpose of the research, (b) the time-period requested for the administration of the interviews with the elected representatives, (c) a request for consent, (d) delineation of the procedures to protect Hampton Roads participants and the cities represented in the research, (e) a description of the structured interview process and questions, (f) the means to gain participant feedback during the data collection and findings formulation period, and (g) the intended use of the results for practitioners and research. I determined that no harm impacted the pilot study participants.

### **Data Analysis**

I used an inductive data analysis strategy (Yin, 2014) to analyze representatives' recovery policy factors that influence policy actions. The inductive data analysis strategy provided the means to use numerous sources as previously described to array or categorize the data through a "ground up" approach (Yin, 2014, p. 138). For example, the semistructured interview data and participant feedback formed the basis for derivation of categories and themes (Patton, 2002). I did not use software to create codes and themes as an Excel spreadsheet and word analysis sufficiently offered the means to conduct data analysis (Bazeley, 2007; QSR, 2013; Yin, 2014). A repeatable analysis process offered the necessary credibility for each data source. For the semistructured interviews, I

conducted the same repeatable protocol: (a) transcribed the notes from the audio recorder and interview notes, (b) reviewed and cleaned the data, (c) created codes based on repeated or emphasized phrases and words, (d) reviewed the data a second time, (e) reviewed the second cycle codes, (f) aligned phrases and ideas to determine themes, (g) created themes, (h) created interim visual models to represent the analysis, (i) reviewed Steps E through H, (j) drafted a synopsis to support the visual models, (k) executed member checks, as requested by the participants, and (l) repeated steps as required (Patton, 2002). The research question and theoretical framework of PET informed the coding and designation of themes related to decision factors and recovery policy actions.

#### **Summation**

The pilot study provided insights on how to best approach and interview elected officials, confirmed the credibility of the semistructured interview protocol, adjusted city document source selection, and assured the transferability of the data analysis plan. I determined that elected official agendas were varied but participants were willing to address a specific issue such as disaster recovery. The collection of city data documents to support the case study comprised accessing city websites and requesting data via the FOIA process. Ninety percent of the city documents were accessible via city websites. The FOIA process, although timely, was straightforward and normally resulted in a city clerk providing the requested information within 14 workings days via hard copy or compact disk. As the sole researcher, I determined that the pilot study provided a credible, transferable, and reliable data collection and analysis method to move confidentially ahead to the case study.

### **Setting**

The environment for the semistructured interviews with the participants was normal for the case study period. Two hurricanes in 2016, Julia and Matthew, did delay the scheduling of interviews. However, the storms, with delivery of destructive winds, flooding, and infrastructure damage, provided the participants the opportunity to quickly recall previous disasters within the timeframe of the case study, 2003 to 2012. The triggering event of Hurricanes Julia and Matthew prompted the participants to discuss many factors impacting recovery policy, response, and preparedness.

The semistructured interviews were conducted in city council offices, homes, and places of business. I recorded and took notes for each session. The interview sessions lasted between 25 and 45 minutes. Only one session was interrupted by a business call, but that did not alter the participant commitment to the interview. The semistructured setting did not create any undue stress on the participant as each setting was chosen by the participant as a safe and quiet environment.

# **Demographics**

The value of the demographics, referred to as characteristics of the 10 participants, supported the purposive sampling strategy. Essential participant data were collected via attribute coding or characteristic tabulation (DeWalt & DeWalt, 2011; Saldana, 2013). The coding consisted of participant familiarity with disasters, length of public service, and contributions to post disaster related policy. The representatives who participated were familiar with emergency management factors as evidenced in responses to the request for an interview with comments such as "yes, I will support the case study

as disaster considerations are considered annually in our council meetings" (Participant 4, September 6, 2016) and "yes, I look forward to discussing how the city council addresses emergency management policy challenges." (Participant 1, September 5, 2016).

Participant attributes (Saldana, 2013) are provided in Table 1.

Table 1

Participant Attributes

Participant	Public Service (Years)	Emergency Management
		Experience
1	16	Yes
2	16	Yes
3	15	Yes
4	16	Yes
5	15	Yes
6	12	Yes
7	09	Yes
8	09	Yes
9	08	Yes
10	14	Yes

The participants acknowledged contributions to emergency management preparedness, response, recovery, and mitigation policy through city council meetings and approval of CAFRs. A review of city websites determined that city council members participated in HAZMAT, disaster mitigation and recovery exercises, and planning committees, which strengthened data collection validity.

### **Data Collection**

The mix of city documents and semistructured interviews sufficiently supported the research question: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions? The review of city council meeting notes and CAFRs offered the means to study the policy dialogue and

decisions associated with disasters between 2003 and 2012. The city documents offered an opportunity to view the documents as though they were "speaking to the researcher" for factors that influenced or determined disaster policy in the form of identification of concerns and determination of ordinances and appropriations. City council meetings and CAFR reviews represented 72 elected officials in Hampton Roads. The review of city documents preceded each participant interview, which strengthened the validity of the semistructured interview questions. Ten elected officials participated in the semistructured interview process.

#### **Data Collection Instruments**

I was the data collection instrument for the case study. The data sources for the case study comprised the review of city CAFRs, city council meetings, and semistructured interviews of 10 Hampton Roads elected officials covering the time between 2003 and 2012. The semistructured elected official interviews provided the means to capture post disaster recovery experiences. These experiences added depth and focused viewpoints to the city council meetings and CAFR policy decisions.

# **City Document Instruments**

The review of city documents provided an opportunity to understand the depth and attention elected representatives paid to disaster recovery between 2003 and 2012. For city council meeting minutes and CAFRs, the entire elected official population of 72 contributed to decision regarding formal post disaster recovery appropriations and ordinances. The city council meeting minutes also provided an opportunity to examine elected representative opinions and concerns requiring additional study by city

department heads. City council post disaster policy decisions and concerns were recorded on Excel spreadsheets for closer examination for semi structured interview probing questions and subsequent coding cycles. The similarities in city council meeting protocol and representation of CAFRs presented a useful reference in preparation for the semi structured interview protocol.

#### **Semi structured Interview Instrument**

The second instrument selected to support the case study approach were semi structured interviews. As was the case with the city document reviews, I was the sole researcher for the semi structured interviews of 10 Hampton Roads elected officials comprised mayors, deputy or vice mayors and city council members. The location of the interviews varied by participant, but were conducted at locations selected by the officials such as city board rooms, city council place of business or residencies. My only request to the elected representatives was to choose a place that was quiet and comfortable. The 10 interviews took nearly 5 months to complete due to summer vacations, business obligations and two storms, hurricanes Julia and Matthew, that delayed numerous interviews so the representatives could address real time disaster response and recovery policy issues. The interviews were recorded and I took notes throughout the sessions. Follow-up phone calls on participant answers that required clarification were not recorded. A transcription of the interviews provided the means to conduct first and second cycle coding of the data which was later transposed to an Excel spreadsheet.

### **Data Collection Challenges**

The greatest data collection challenges comprised gaining access to city council meeting minutes and comprehensive financial reports between 2003 and 2005 and scheduling elected official interviews. Historically, cities archive city documents after 7 years. The FOIA request for city council meeting minutes and CAFRs process delayed, but did not hamper the overall data collection plan. As for elected official interview requests, the obtainment of representative phones numbers and personal phone numbers via city clerk offices expedited communications with the participants. The circumstance that two storms raced through the region created interview delays, but did not impede the overall data collection plan. A rigorous data collection protocol (Yin, 2014) provided the ways and means to sustain and maintain the research.

# **Data Analysis**

I used an inductive data analysis strategy (Yin, 2014) to analyze how representative's recovery policy factors influence elected representative policy actions. The inductive data analysis strategy to use numerous sources as previously described offered the means to categorize the data through a "ground up" approach (Yin, 2014). For example, the analysis of city council meeting minutes and CAFRs provided the basis to conduct semi structured participant interviews and feedback to form the derivation of codes, categories and themes (Patton, 2002). The small population obviated the need to use software to create codes, categories and themes as an Excel spreadsheet and word analysis sufficed for the data analysis (QSR, 2013; Yin, 2014). The research question and

theoretical framework of PET informed the analysis process of coding and designation of themes related to decision factors and recovery policy actions.

A repeatable analysis process was implemented for each form of data. The city document reviews required (a) review of the documents, (b) transfer of phrases in the form of ordinances, appropriations, council member issues for future review, (c) review and cleans the data, (d) creation of codes in first cycle coding, (e) review of documents for a second time through second cycle coding, and (f) alignment of phrases into the creation of categories and themes. For the semi structured interview I followed the analysis process of (a) notes transcription from the audio recorder and interview notes review, (b) review and cleaning of the data, (c) creation of codes based on repeated or emphasized phrases and words, (d) review of the codes in second cycle coding, (e) alignment of phrases and ideas to determine categories, (f) creation of themes, (g) development of visual models to represent the analysis, (h) review of Steps E through G if necessary, (i) draft of a synopsis' to support the visual models, (j) member checks with the participants, and (k) repeat of any steps as required (Patton, 2002, Saldana, 2013). Upon completion of the sources review and creation of themes, an integrated representation or congruence of the analysis emerged in visual models.

I leveraged content analysis and explanation building techniques (Patton, 2002; Yin, 2014) to support the research. The explanation building technique is an iterative process that aligned the research question, decision factors sources of evidence and the PET assumption of rapid recovery policy change (Kwon et al., 2013) to iteratively expand the knowledge throughout the case study (Yin, 2014). The iterative analysis

provided what factors interrelate in elected official policy decision making. Content analysis method offered the means to summarize the city documents and semistructured interview data. The content analysis enabled a more objective evaluation of the themes following the second cycle coding process. The value of content analysis centered on the depiction of visual models which will be useful for a variety of audiences. The ease in forming visual models removed subjectivity and simplified the detection of trends (Frankfort-Nachmias & Nachmias, 2008; Yin, 2014).

# **Coding Process**

An eclectic coding process provided the best means to understand the city documents and semistructured interview data through descriptive, in vivo, pattern, beliefs and values techniques for first and second cycle coding (Saldana, 2013).

# **First Cycle Coding Process**

Descriptive coding offered a tabular display in the first cycle codebook, Appendix C, which represented 1,210 city council meetings, 100 CAFRs, and 10 semistructured participant interviews regarding post disaster policy factors for the case study timeframe of 2003 to 2012. The descriptive coding utilization was limited to the first cycle of coding as the strength of the technique lies in the organization of the data vice in-depth insights (Saldana, 2013). The in-vivo coding first cycle coding for the semi structured interviews confirmed alignment to the research question and city document descriptive coding with actual participant words or phrases (Saldana, 2013) regarding post disaster recovery. The first cycle coding represented in Appendix C resulted in delineation of (a) a word that describes the code, (b) key subset phrase by the participants, (c) a description of the

phrase or action (Saldana, 2013). First cycle coding in Appendix C was represented in three sections:

- CAFR with codes associated with ordinance and appropriation policy decisions,
- City council meeting minute codes for ordinance, appropriations and other concerns, and
- 3. the six semistructured interview questions.

The transition to second cycle coding was executed after a thorough review of the codes and research question to ensure alignment.

An important element of first cycle coding related to the data derived from the semistructured interview questions, Appendix A. Ten Hampton Roads elected officials (as previously described) participated in the interviews over a 4-month period. Each semistructured interview revealed data pertinent to the research question (as previously described). The participant comments provided rich insights into elected official beliefs and values associated with the post disaster recovery policy environment.

**Interview Question 1.** What factors advance or impede disaster recovery policy formulation and decisions?

"Financial capability and capacity planning enables our recovery" (Participant 1, September 5, 2016).

"Pre-planning is another key factor in making policy decisions. Storms drain clearance, flood preps, shelters adequately manned and supplied and pre-positioning of

our law enforcement, fire and public works people is important" (Participant 5, October 6, 2016).

"The city has already established the means to restore the community through preapproved insurance" (Participant 2, September 9, 2016).

"There is a sense of urgency in returning the community to normal" (Participant, 10, October 25, 2016).

**Interview Question 2**. Can you discuss the community related disaster recovery factors you considered such as infrastructure revitalization, business continuity, environment practices and housing restoration and regulations that you used to formulate disaster recovery policy actions between 2003 and 2012?

"We waived building permit fees" (Participant 3, September 19, 2016).

"We appropriated funds for shelters" (Participant 7, September 6, 2016).

"The community related disaster recovery factor is economic development knowledge led by the city's economic development authority. The ECA ensures that business can leverage incentive programs via city council appropriations" (Participant 2, September 9, 2016).

"The two roadways in an out of the city are key to normal community life and recovery" (Participant 4, September 26, 2016).

"Expectations are public safety for short term recovery needs such as debris removal, restoration of power, banking and communication" (Participant 10, October 25, 2016).

**Interview Question 3**. How did current policy procedures and organizational structures influence recovery actions for the critical incidents between 2003 and 2012?

"Social services and behavioral support offices need continual funding to assist with recovery such as the homeless and shelters" (Participant 5, October 6, 2016).

"City council, city manager and city departments work well together as an institutional mechanism" (Participant 4, September 26, 2016).

"We can count on our institutions to implement policy such as waiving building fees and adjusting inspections for the individual" (Participant 1, September 5, 2016).

"Our institutions are a strength" (Participant 8, November 6, 2016).

"FEMA and State damage assessments are too slow and much is laid on local level to assess needs. We cannot rely on grants, we must be self-sufficient" (Participant 10, October 25, 2016).

**Interview Question 4**. For public service post recovery decision factors between 2003 and 2012, what did you do consider important and why; helping people in distress, public service, or community wide policy making?

"We need to be better stewards of the environment to preserve the community and region" (Participant 3, September 19, 2016).

"City council focuses on the factors of safety, security and damage to the community. The city council mindset is factors relating to quality of life, physical security and health of the individual" (Participant 2, September 9, 2016).

"The citizen is our number one concern" (Participant 9, December 14, 2016).

"As elected official I do not see a difference between individual and community needs. Our ordinances and appropriations policy decisions address both" (Participant 4, September 26, 2016).

"My service to the community requires I understand the situation. I can then relay my understanding of the recovery to the media" (Participant 5, October 6, 2016).

"Historically, we think of safety before cost for short term recovery. We take of people first, then community-wide issues. We do provide community-wide ordinances for debris removal, waiving of building fees" (Participant 10, October 25, 2016).

**Interview Question 5**. What did you consider important and why for recovery policy decisions between 2003 and 2012; Accountability to the community, adherence to policy and regulations, balancing interests, or assurance of tangible results?

"We need to support without being intrusive. We need to understand the positions of others" (Participant 1, September 5, 2016).

"We need to balance being too intrusive and ensuring self-reliance for the community" (Participant 2, September 9, 2016).

"I am accountable to the entire community, not any special interests. It is counterproductive" (Participant 4, September 26, 2016).

"I want to be equitable to all neighborhoods, but sometimes the downtown area with its poor infrastructure takes priority, which then ensures other areas are properly supported" (Participant 5, October 6, 2016).

"We are taking a risk in not funding a better EOC as it can inhibit recovery planning, execution and assessment" (Participant 10, October 25, 2016).

**Interview Question 6.** In closing, were there any aspect of decision factors associated with recovery policy formulation between 2003 and 2012 that you would like to comment on, as well as any other comments associated with your role in community disaster recovery?

"I would say that self-reliance, dealing with short and long-term recovery problems one at a time is important to make community whole again. I believe our long-term recovery issues will always be in restoration of housing and roadway improvement" (Participant 4, September 26, 2016).

"Assure the public that we will address safety and security issues" (Participant 9, December 14, 2016).

"We work on sustainability of the community" (Participant 1, September 5, 2016).

"We ensure that reserve funds are on hand to address natural disasters, so we are viewed by state and federal officials as resilient, prepared and organized to support the community" (Participant 2, September 9, 2016).

"Safety and security are paramount for short-term recovery and prevention and mitigation are important for long-term recovery. Being pro-active is key and being able to appropriate funds ahead for changes in infrastructure, housing, etc. are how we are pro-active vice re-active" (Participant 6, December 15, 2016).

"Listening is key to ensure broad access to information. If I can't get information my policy making ability is restricted. Pre-planning requires more work, but departments are getting better." Participant 5, October 6, 2016).

"We don't spend enough time on long term recovery issues and associated mitigation in our capital fund projects. We know the consequences and benefits of recovery but can't afford it" (Participant 10, October, 25, 2016).

A complete interpretation of the semistructured interviews and city documents will be presented in the second cycle coding section. However, initial analysis indicated that elected officials focused more on short-term vice long-term-recovery policy decisions (Table 2).

Table 2

Hampton Roads Elected Official Recovery Policy Decision Sources Breakdown

	CAFR	City Council Meeting Minutes	Semistructured Interviews
Short-Term	Yes	Yes	Yes
Long-Term	Yes	Limited	Limited

I determined that triangulation of the city council meeting minutes, CAFRs and semistructured interview second cycle coding protocol would provide a more complete content validity representation.

# **Second Cycle Coding Process**

The importance of the second cycle coding process, Appendix C, resided in use of in-vivo, pattern, process, and values techniques for an eclectic coding and in-depth triangulation analysis of the source data (Patton, 2002, Saldana, 2013). As in the first cycle coding, the in-vivo coding provided a means to explore participant attitudes, beliefs and values. I sought to understand any patterns the data offered to transition codes to categories (Saldana, 2013). Examples further discussed in the following codes, categories

and themes section comprised the linkage between post disaster recovery planning and assessment and public service values the participants assigned to post disaster recovery such as safety and security. The result of the second cycle coding process was the formation of categories and the emergence of over-arching or abstract themes (Patton, 2002; Saldana, 2013) about elected official post disaster factors that influence policy decisions.

# **Codes, Categories, and Themes**

The coding, categorization and themes formed the basis for contradicting, confirming and extending (Patton, 2002; Saldana, 2013) Kwon et al.'s (2013) public policy and administration PET research assumption that political institution factors influence post emergency management policy decisions and examining the following research question: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions?

# **Short-Term and Long-Term Categories and Emergent Themes**

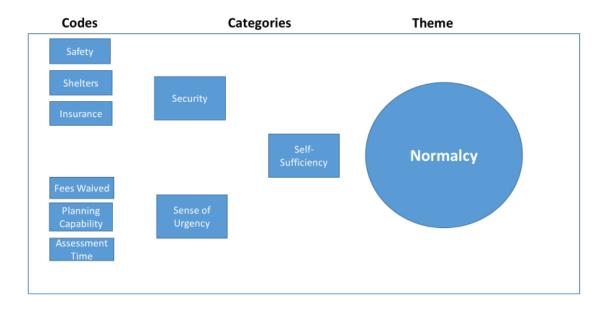
The first and second cycle coding process of the data resulted in categories and themes that the elected officials identified within the context of short-term and long-term recovery policy.

For short-term recovery, the participant semistructured interviews and city documents revealed factors regarding security and urgency categories. For security, the codes identified included safety, shelter and cost. Safety was noted in participant public service and values comments related to flooded areas, procurement of water and ice for the community and city-wide transportation restoration or sustainment. Participant 1

commented that "the city departments need to assess and move assets quickly and efficiently to support those stuck in flooded areas, move basic needs such as ice and water to key distribution areas, and for the police to help direct traffic in high volume parts of the city." The CAFRs denoted city council concurrence to man and sustain shelters throughout the city (City of Portsmouth, 2009). The cost of short-term recovery regarding city department overtime is an accepted "cost of the business of recovery" (Participant 5, personal communications, October 6, 2016). The roll-up of the codes equated to a community-wide category of security. For the urgency category, the codes identified included waiving of fees, planning limitations and time to assess damage. The waving of fees related to city council policy decisions during city council meetings to dismiss the need for building permit fees, tolls and debris clearing fees (City of Suffolk, 2006; City of Hampton, 2010). An illustration of planning limitations was revealed in participant comments, such as "we have a capacity challenge when it comes to hurricanes for category 3 and above" (Participant 10, personal communications, September 26, 2016). Time to assess post disaster damage to support FEMA recovery submissions is determined to be too short by the participants with comments such as "at times I can't get around the entire city to see the damage so I can promote and prioritize recovery projects" (Participant 5, personal communications, October 6, 2016). These codes equated to a sense of urgency category.

The semistructured interview questions related to short-term recovery and the associated theme of normalcy are delineated in participant comments, Appendix D.

Short-term recovery and normalcy synopsis. The two categories of security and sense of urgency meld into a short-term recovery policy factor theme of elected officials need to restore the previously described social capital (Johnson et al., 2015; Storr & Haeffele-Balch, 2012) of the community to a state of normalcy (Figure 2). Within the context of the Hampton Roads elected official case study, Johnson et al. (2015) and Storr and Haeffele-Balch's, (2012) restoration of social capital is further defined as the return of community services and quality of life within weeks and months following a disaster. The normalcy decision factor will be discussed further in the results section.



*Figure 2.* Codes, categories, and theme model for normalcy.

For long-term recovery, the participants and city documents revealed codes regarding (a) environmental, infrastructure and city insurance factors that equated to a financials or capital improvement category and (b) linkages to mitigation actions,

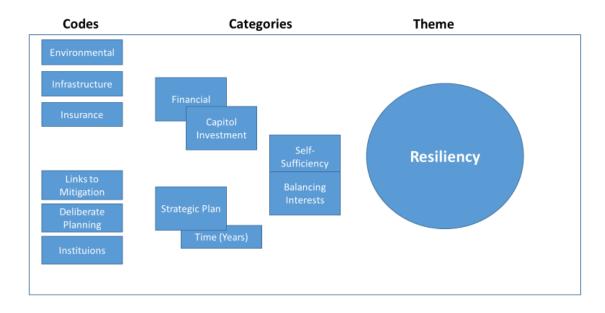
deliberate planning and the strength of city institutions or departments that equated to a strategic planning category. Environmental coding centered on beach replenishment, watershed and marsh protection. City of Virginia Beach CAFRs commencing in 2004 represented appropriations for a beach recovery program (City of Virginia Beach, 2004), while another elected representative "stressed the need to protect marsh areas for future generations' (Participant 3, personal communications, October 6, 2016). The infrastructure code represented Hampton Road elected official decision related to emergency operations capability and capacity for Emergency Operations Centers, Fire Stations and roadways in and out of the region (Participant 4, personal communications, September 26, 2016; City of Poquoson, 2004). A key code that permeates across all longterm recovery codes and categories are Hampton Roads city council decisions regarding deliberate appropriations for what elected representatives called rainy day funds based on lessons we learned from Hurricane Katrina (Participant 8, personal communications, November 6, 2016; Participant 10, personal communications, October 25, 2016). The summation of the codes resulted in a category centered on city financial stability.

The codes associated with linkages to mitigation actions, deliberate planning and the strength of city institutions or departments equated to a strategic planning category. A mitigation to recovery alignment code equated to participants recognizing the need to prevent potential recovery actions with building elevation code ordinances for new homes and business (City of Norfolk, 2008; City of Portsmouth, 2010). There was commonality across the region that participants believe there is a strength in long-term recovery with "the close partnership amongst the city council, departments and city

managers" (Participant 1, personal communications, September 5, 2016; Participant 9, personal communications, December 15, 2016) in addressing long-term recovery ordinances and apportionment of funds. The distillation of the codes resulted in a strategic planning category with a recognized need to meld recovery planning into the grander capital improvement strategic planning dialogue when it comes to "balancing interests across the city for day-to day needs such as school board needs versus the need to fund road renovations to ensure individuals can get in and out of a city after a disaster" (Participant 10, personal communications, October 25, 2016).

The semistructured interview questions related to long-term recovery and the associated theme of resiliency are delineated in participant comments, Appendix D.

Long-term recovery and resiliency synopsis. In the end, the strategic planning and financial categories equated to a long-term recovery policy theme best represented by a need for a resiliency mindset (Figure 3). Within the context of the Hampton Roads elected official case study, the resiliency policy factor is defined as the ability of city departments and community to find ways to plan, resource and adapt to future disasters in the region. FEMA (2016) defines resilience as communities absorbing disasters with an integrated approach. The resiliency decision factor will be discussed further in the results section.



*Figure 3.* Codes, categories, and theme model for resiliency.

A common theme for both short-term and long-term recovery policy centered on the factor of self-sufficiency. A repeated comment by elected officials regarded confidence in its city manager and departments with a comment that self-reliance is key to post disaster recovery and is enabled by the cities financial capability and city department capacity to learn from previous incidents and then develop best practices (Participant 1, August 15, 2016; Participant 8, personal communications, November 6, 2016). The self-sufficiency theme materialized in what impedes long-term recovery with comments referring to state and federal recovery inefficiency with comments such as "the federal bureaucracy can be slow in areas of housing recovery or environmental issues pertaining to the watershed" (Participant 3, September 19, 2016).

The semistructured interview questions related to short and long-term disaster recovery and the associated theme of self-sufficiency are delineated in participant comments, Appendix D.

Recovery and self-sufficiency synopsis. Disaster self-sufficiency is a mindset adopted by the participants and associated Hampton Roads cities. FEMA (2016) guidance involved individuals being self-sufficient or ready for a post disaster environment. For the purpose of the case study, the self-sufficiency policy factor adds to FEMA's (2013) individuals being ready for a disaster to a community planning and assessing how best Hampton Roads elected officials fund departments (City of Chesapeake, 2008), plan for unique city-wide risk and vulnerabilities (City of Hampton, 2011; City of Newport News, 2004b)), and assess sustainability (Participant 1, personal communications, September 5, 2016) long after the disaster passes through the region. The self-sufficiency decision factor will be discussed further in the results section.

# **Discrepant Cases**

The research process did not reveal negative or discrepant data cases (Patton, 2002). The coding process revealed codes, categories and themes common to elected official post disaster recovery perspectives. One negative case appeared to surface in the semistructured interview process for participants 8 and 10 regarding comments that they were occupying part-time positions. I determined that the perspective of the two participants did not impact examination of the research question: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions? Furthermore, the participant part time position comments did

not influence the selection of categories and themes. The part time nature of elected officials will be addressed in the future research section of Chapter 5.

### **Evidence of Trustworthiness**

# Credibility

The research focused on sources triangulation and data collection and analysis process alignment for the research credibility. I used the elected official ordinance and appropriations policy decisions and policy related comments actions to ask questions during the coding about the overlapping in-depth semistructured interview and city documents data (Yin, 2014) to ensure research trustworthiness and content credibility (Elo et al., 2014; Yin, 2014). The preparation, organization and reporting phases checklist developed by Elo et al. (2014) and Yin's (2014) data collection and analysis planning overviews provided a repeatable blue print to sustain research alignment.

# **Transferability**

The strength of transferability centered on the creation and maintenance of the data collection plan and coding practice. The data collection plan offered future researchers the means to replicate each component of the plan (as previously described). The first and second cycle coding process and codebook provide a traceable guide to understanding the steps for the semistructured interviews and city document reviews. The setting of key words and phrases to support identification and interpretation of categories and themes established the unit of meaning or description (Campbell, Quincy, Osserman & Pedersen, 2013) for examination of how decision factors contributed to Hampton Roads official recovery policy decisions. Campbell's et al. (2013) and Saldana's (2013)

code meaning practice provided an acceptable process to represent abstract meanings to Hampton Roads representative recovery policy decisions. Transferability was realized through continual periods of data collection and analysis procedural reviews.

# **Dependability**

The dependability of the research centered on data collection procedural maintenance for the multiple sources of evidence, tracking of the data, and participant feedback (Yin, 2014). The data collection required periodic audit trail reviews of participant related transcripts, notes and memos. To mitigate reliability of the data (Trochim, 2006a; Trochim, 2006b), I utilized member checks for the semistructured interview data by sending the interview notes or transcripts to the participant for comment (Frankfort-Nachmias & Nachmias, 2008; Patton, 2002). Some of the participants only cared to review the interview notes while two participants asked to review the interview transcripts. No substantive feedback was provided as the participants were satisfied with the data provided. As the sole coder of a small purposive sampled population, the triangulation of sources was not complicated and offered a rich and in-depth perspective on data content (Campbell et al., 2013; Patton, 2002). An unbiased review of the data ensured unsubstantiated data (Yin, 2014) was not considered as research evidence and aligned to the research question and Kwon et al.'s (2013) PET assumptions.

# Confirmability

The reflexivity of the research centered on maintenance of a neutral perspective (Patton, 2002). As the sole researcher, I remained transparent during the engagement with

the population. I encouraged the Hampton Roads elected officials to be self-aware of their public service perspectives and values toward disaster recovery and not attempt to "game" their responses during the interview sessions. As previously described in the discrepant case discussion, I had to address concerns from two participants regarding contributions to post disaster recovery policy. Some of the participants initially deferred to the role of the city managers. I explained that research had been conducted on the role of city managers, but that little research had been conducted regarding elected officials. As such, I re-enforced the importance of the elected official related research during the commencement of the semistructured interview, before the exit comments, and during the feedback sessions with the participants (Patton, 2002; Yin, 2014). As the sole researcher, I did not lead the participants during the interview process and respected the opinions and perspectives of the participant.

### Results

The purpose of this case study was to expand upon Kwon et al.'s (2013) PET conclusion that local level political institution factors inform and trigger emergency management decisions. As the sole researcher, I used Hampton Roads, Virginia, city council meeting minutes, CAFRs and semistructured interview questions to 10 elected representatives regarding post disaster recovery to examine the research question of how PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions. Three themes emerged showing the key factors that influenced Hampton Roads elected official post disaster recovery policy decision: Theme 1 referred to the factor to return to normalcy in the short-term; Theme 2 related to the

factor to achieve a constant state of resiliency for long-term recovery; and Theme 3 centered on a common factor for short and long-term recovery of self-sufficiency. The themes were inductively derived using first and second cycle coding techniques and categorization of the codes.

Theme 1: Normalcy synopsis. The normalcy decisions factor theme was best represented within a relationship model whereby the normalcy decision factor was supported by self-sufficiency mindset and institutional frameworks and framed by crisis planning, time, costs associated with community safety, security capability and capacity to assess short-term community wide recovery needs (Figure 4). In summation, the restorations of social capital (as previously described) is further defined by the Hampton Roads elected representatives as normalcy via ordinances and appropriations for the return of community services and quality of life within weeks and months of a disaster.

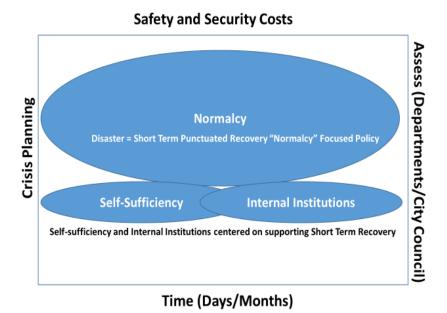


Figure 4. Short-term recovery relationship model for normalcy theme.

Participant 3 stated the following. "The community expectation is public safety for short-term recovery such as debris removal, restoration of banking services and public utilities, and communications" (Participant 3, personal communications, September 19, 2016).

Participant 7 stated the following: "Pre-planning makes us relevant" (Participant 7, September 2016).

Participant 10 stated the following: "Proper planning ensures we can provide safety services after a storm" (Participant 10, October 25, 2016).

City Council meeting minutes from Norfolk, 2008 established an ordinance to address special needs shelters (City of Norfolk, 2008a).

Theme 2: Resilience synopsis. The resiliency decision factor theme was best represented within a relationship model whereby self-sufficiency policy and institutional

frameworks are framed by deliberate planning, time, costs and processes associated with capability and capacity to strategically assess community wide long-term recovery (Figure 5). Therefore, the resiliency decision factor pertained to Hampton Roads elected official perspective for city departments and the community to find ways to plan, resource and adapt to future disasters. Parameters for resiliency involved stewardship, planning and financial oversight.

# Resiliency/Self-Sufficiency Disaster = Long Term Resiliency Recovery Policy Infrastructure Planning Internal/External Financials Transportation Time (Years)

Figure 5. Long-term recovery relationships model for resiliency theme.

Participant 3 stated: "We must be stewards of the environment" (Participant 3, personal communications, September 19, 2016).

Participant 10 stated: "We can't rely on grants, we must be self-reliant" (Participant 10, personal communications, September 19, 2016).

The City of Newport News (2004) city council meeting resulted in a decision to appropriate funds for emergency management and hazardous material planning to better inform post disaster recovery actions.

A city of Suffolk CAFR included a city council approved line item that "the city is self-insured for exposures to various risks of loss related to torts, thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; terrorist acts and natural disasters" (City of Suffolk, 2003). All cities in Hampton Roads adopted similar language commencing in 2003 which Participant 1 credits to the lessons learned from the hurricane Katrina aftermath (Participant 1, personal communications, September 5, 2016).

Theme 3: Self-sufficiency synopsis. The self-sufficiency decision factor emerged from the second cycle coding and categorization analysis whereby Hampton Roads elected officials and the city manager teamed to create ordinances and appropriations policy for self-sufficiency regarding short and long-term recovery. Parameters for self-sufficiency comprised procurement and long-term financial proficiency and risk reduction capability and capacity regarding normalcy and infrastructure and economic resiliency.

Participant 2 stated: "committing funds for roadways is an economic development authority concern so that we can leverage incentive programs for sustained growth" (Participant 2, personal communications, September 6, 2016).

Participant 1 stated: "Self-reliance is key, we have a staff that learns and is prepared to procurement procedures, post disaster assessors and financial capacity" (Participant 1, personal communications, September 5, 2016).

City Council meeting minutes for the City of Hampton (2011) approved an ordinance to improve flood plan management.

Elected representatives from the cities of Norfolk, Newport News and Chesapeake decided upon appropriations represented in the CAFRs to fund risk insurance and mitigation planning (City of Chesapeake, 2008; City of Norfolk, 2003; City of Newport News, 2004).

The triangulation of the city council meeting minutes, CAFRs, and semistructured interviews provided a rich, in-depth view of elected official post recovery policy formulation and decisions between 2003 and 2012. The numerous sources informed the coding process, categorization of the codes and development of the themes. Throughout the data analysis, I questioned the trustworthiness of the data, collection process and data analysis. According to the inductively derived findings, three significant themes emerged that influenced elected official post recovery policy decisions. The results revealed a close relationship between short and long-term recovery and the corresponding themes.

# **Summary**

Chapter 4 provided results of the data collection and analysis associated with Hampton Roads, Virginia elected representative factors that influenced post disaster recovery policy between 2003 and 2012. The triangulation analysis of city council meeting minutes, CAFRs and semistructured interviews offered three themes that reliably

answered the research question: How do PSM, PV, political institutions, and community service decision factors affect post disaster recovery policy decisions? The inductive coding through a first and second cycle coding protocol and data analysis offered three decision factor themes that affected Hampton Roads elected representative post disaster recovery policy between 2003 and 2012.

Normalcy Decision Factor Theme 1: Hampton Roads elected officials used the decision factor of normalcy to address short-term recovery framed with sub factors related to crisis planning, time measured in days and months, costs associated with safety and security capability and capacity, and the ability to quickly assess short-term community wide recovery needs.

**Resiliency Decision Factor Theme 2**: Hampton Roads elected officials used the decision factor of resiliency to address long-term recovery via deliberate planning, time measured in months and years, and costs to strategically assess and decide upon community-wide post disaster long-term recovery projects.

Self-Sufficiency Decisions Factor Theme 3: Hampton Roads elected officials and the city manager teamed to create ordinances and appropriations policy to establish a timeless capability and capacity for short and long-term recovery. The capacity and capability parameters for self-sufficiency comprised procurement and long-term financial proficiency and risk reduction for community-wide normalcy and infrastructure and economic resiliency.

Chapter 5 provides a summary of the interpretation of the findings aligned to the research and question and PET of Kwon et al. (2013). As the sole researcher, I described

the case study limitations, positive social change impact for practitioners and emergency management field and future research recommendations concentrated on local level recovery policy decision factors of normalcy, resiliency and self-sufficiency.

## Chapter 5: Discussion, Conclusions, and Recommendations

### Introduction

The purpose of this case study was to expand upon Kwon et al.'s (2013) PET conclusion that local level political institution factors inform and trigger emergency management decisions. To address the gap, a case study approach was used to extrapolate on Kwon et al.'s PET research conclusion that local level political institution factors informed emergency management policy to the case study examination of an aggregation of post disaster recovery decision factors comprising public service, values, and community. The aggregated examination of decision factors following a local level triggering event (Baumgartner & Jones, 1993) provided a deeper understanding of the decision factors that contributed to local level recovery policy actions (Andersen et al., 2012a; Berke et al., 2014; Comfort et al., 2012; Desmarais & Edey Gamassou, 2014; FEMA, 2012; Kim et al., 2013; Kwon et al., 2013; Patton, 2002; Perry, 1996; Yin, 2014). The PET derived assumption for the case study was an aggregated list of decision factors that influenced Hampton Roads elected representative recovery decisions between 2003 and 2012. The research question provided the means to expand on the PET assumption that political institution factors influenced local level emergency management policy decisions (Kwon et al., 2013). The research question for the case study was this: How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions?

I expanded the PET assumption that political institution factors influenced emergency management recovery policy decisions through the examination of short- and

long-term factors that influenced Hampton Roads elected official recovery policy decisions between 2003 and 2012. Three themes emerged from the findings. Hampton Roads elected officials (a) used the decision factor of normalcy to address short-term recovery policy, (b) utilized the decision factor of resiliency to address long-term recovery policy, and (c) addressed capability and capacity within a self-sufficiency decision factor for short- and long-term recovery.

# **Interpretation of the Findings**

The literature referred to the need to research an aggregation of decision factors influencing recovery policy (Atkinson & Sapat, 2014; Berke et al., 2014; Caruson & MacManus, 2011; Cho, 2014; Johnson, 2014a; Johnson et al., 2015). Local governments use decisions factors of institutions, social capital assessment, risk and time management, and financials to plan, assess, and execute post disaster recovery policy and actions (Atkinson & Sapat, 2014; Berke et al., 2014; Caruson & MacManus, 2011; Cho, 2014; Johnson, 2014a; Johnson et al., 2015; Kwon et al., 2013). The decision factors research literature provided the mechanism by which local government decision makers move from a critical incident or trigger event to a policy decision. The case study findings that Hampton Roads elected representatives used a variety of post disaster decisions factors extended local government emergency management short- and long-term recovery policy decisions knowledge through the broad themes of normalcy, resiliency, and self-sufficiency.

# **Findings and Literature Alignment**

Normalcy directly applied to the literature in the form of risk assessment, time management, and financials factors for post disaster recovery (Atkinson & Sapat, 2014; Berke et al., 2014; Frimpong, 2011; Kasdan, 2015). The Hampton Roads normalcy findings referred to semistructured interview responses that city departments needed to quickly assess damage across the community so that funds can be appropriated and ordinances put in place to expedite short-term recovery. City council meeting minutes illustrated the need to return the community to a stable state of safety, security, and quality of life or normalcy within days and weeks following a disaster. The participants' community-first viewpoint aligned to Ritz (2011) and Matei and Cornea's (2013) assessment that public or community interest is an element of PSM and therefore applied to Hampton Roads elected representative belief that serving the public interest is an element of achieving normalcy. The participant interview comments highlighted what Jensen et al. (2014) and Johnson (2014a) concluded regarding a sense of urgency for short-term recovery policy and actions.

Resiliency in the literature focused on the factors of coordination and collaborative planning (Caruson & McManus, 2011b; Johnson, 2014b; Kwon et. al., 2013; Olshansky & Johnson, 2014) and a holistic understanding of vulnerabilities and risk modeling (Atkinson & Sapat, 2014; Haimes, 2012). The Hampton Roads resiliency findings refer to a deliberate application of financial, capital investment program and years of planning to formulate post disaster long-term policy. Hampton Roads city CAFRs illustrated the need for elected representatives to balance interests in the

appropriation of funds for long-term projects such as roadway improvements. City council meeting minutes for long-term recovery centered on ordinances to improve building codes regarding the elevation of houses and buildings in flood-prone areas. The alignment of mitigation and long-term post disaster recovery planning becomes evident in the cases for the execution of local level government resiliency, or what Gerber (2015) concluded as a need for hazards assessment. It is the case study factor of resiliency that aggregates prior post disaster local level government research into an improved understanding of how Hampton Roads representative use the decision factor of resiliency for long-term post disaster recovery policy decisions. The element of PV surfaced as elected officials must find the ways and means to promote checks and balances (Kim et. al., 2013; Reeves, 2011) in determining long-term recovery projects. Participants and city documents referred to the need to appropriate funds and approve ordinances that allowed cities to address disaster environments efficiently and effectively in partnership with the Commonwealth of Virginia government leaders and departments.

Self-sufficiency in the literature covered what Berke et al. (2014) noted as the need for local governments to develop policy that is anticipatory in nature to remain relevant in a post disaster situation. The Hampton Roads participant interviews revealed the need for cities to be proactive through the promotion of ordinances and appropriations that create sustained capacity and capability without state or federal assistance. The factor of self-sufficiency is the common denominator that allowed Hampton Roads elected representatives to formulate resiliency and normalcy policy after a disaster. Hampton Roads elected official recognition that self-sufficiency is an important foundation for pre-

and post-disaster recovery policy will remain if state and federal governments select to provide guidance vice mandate local level government post disaster recovery frameworks (FEMA, 2015b; Virginia.gov, 2014).

Normalcy, resiliency and self-sufficiency provides elected officials to aggregate post disaster short and long-term recovery policy. An extrapolation of Smith's (2011) conclusion that the federal government lacks a coherent recovery policy to the local level aligns to the three decision factors of normalcy, resiliency and self-sufficiency.

Olshansky and Johnson (2014) discussed the need for a comprehensive recovery policy in terms of improving community social capital. The resiliency and self-sufficiency decision factors align with Olshansky and Johnson's (2014) social capital conclusions in that Hampton Roads elected officials utilized CAFRs to appropriate funds for roadway and infrastructure improvements to enhance future resiliency and self-sufficiency.

# **Findings and PET Alignment**

The findings confirmed and expanded on Kwon et al.'s (2013) PET research conclusion that the factor of political institutions influenced emergency management policy. A key element of the findings confirmed that short-term post disaster recovery remained a focus of elected officials. As such, elected representative in concert with the city manager and city departments triggered appropriations and ordinance recovery policy to expedite post disaster community normalcy. Without Hampton Roads elected representatives and city manager collaboration, short-term recovery planning and management would suffer, which confirmed Kwon et al.'s conclusions that institutional

collaboration and financial frameworks stabilize the disaster environment to a state of stability or normalcy.

The Hampton Roads elected representative long-term post disaster recovery policy decisions findings contradicted Jones and Baumgartner's (2012) PET assumption that a disaster disrupted the normal policy making cycle for the delivery of community services. The case study findings indicated that disasters in the region do not trigger immediate Hampton Roads elected representative long-term recovery ordinances and appropriations, but rather the officials defaulted to the normal, deliberate policy formulation and decision apparatus resident in the CAFR approval process. An environment of PV as in checks and balances arose in long-term recovery, which Reeve's (2011) asserted is when stakeholders leverage politics to affect change after a disaster. Resiliency vice normalcy was the focus of elected representatives in a post disaster longterm recovery policy environment, which Henstra (2011) and Hu (2012) promoted as conditions of a post disaster situation. Many of the participants highlighted that the post disaster conditions of a Category 4 or 5 hurricane demand improved mitigation policy decisions and improved planning capacity and capability not resident in the Hampton Roads region in 2016.

# **Limitations of the Study**

The limitations to the case study trustworthiness referred to transferability of the findings and results to other regions in the United States and international community.

For local level governments, the triangulation of the city council meetings, CAFRs, and semistructured interview sources can be applied to all regions in the United States.

International local government constructs may not offer city council or financial reporting consistency for examination. As such, an IRB review will need to be applied to ensure follow-on research does not create unacceptable levels of discrepant cases and content credibility (Elo et. al., 2014; Yin, 2014).

### **Recommendations**

The case study offered three factors that influenced Hampton Roads elected official post disaster recovery policy decisions between 2003 and 2012: normalcy, resiliency, and self-sufficiency (as previously described). Hampton Roads elected representatives (a) used the factor of normalcy to address short-term recovery policy, (b) applied the factor of resiliency for long-term recovery policy decisions, and (c) made capability and capacity policy decisions within the context of self-sufficiency for both short and long-term recovery.

The first recommendation for Hampton Roads elected officials research would be to examine the two categories of security and sense of urgency that form the basis for normalcy. The parameters for restoration of quality of life or social capital (Johnson et al., 2015; Storr & Haeffele-Balch, 2012) could be quantitatively explored to provide elected representatives a checklist from which to derive short-term post disaster policy decisions. Analysis of the sources, as shown in Figure 2, points to participant responses and ordinance and appropriations primarily focused on short-term recovery and normalcy. Participants 3 and 10 alluded to the challenges of capacity and capability for the myriad short-term recovery issues, and a checklist would possibly offer a means to assess impact to a community (Appendix D). As such, research that provided additional

fidelity for current and future elected officials is worthy of examination to expedite policy that returns a community to a state of normalcy as quickly as possible following a disaster.

The second recommendation for Hampton Roads elected official research would be to examine resiliency within the context of long-term recovery policy decisions. Local government policy decisions on how best to absorb and adapt to a disaster (FEMA, 2016) require examination as most of the ordinance and appropriations policy focus between 2003 and 2012 was on traditional safety and security normalcy issues. A focused examination of how Hampton Roads elected representatives and city managers address resiliency would possibly result in an improved strategic and financial planning approach to flood and wind damage-related disasters that historically plague the Hampton Roads regions.

The third recommendation for Hampton Roads elected official research entailed examination of the self-sufficiency decision factor adopted by the participants and associated Hampton Roads cities. The analysis indicated that the factor of self-sufficiency was a common denominator for elected representative post disaster short-term normalcy and long-term resiliency policy decisions. Data analysis indicated that the Hampton Roads elected representatives sought to conduct community-wide planning and assessment capability for how best to fund departments (City of Chesapeake, 2008), assess risk (City of Hampton, 2011; City of Newport News, 2004b), and determine sustainability options (Participant 1, personal communications, September 5, 2016) for short and long-term recovery. Self-sufficiency appeared in every city CAFR in the form

of a standard insurance statement (City of Newport News, 2004b; City of Norfolk, 2003), which represented self-reliance vice depending on state and federal government assistance for the re-establishment of normalcy. The reliance on grants did not appear to be major element for policy formulation, as Participant 10 indicated "we cannot rely on grants, we must be self-sufficient" (Participant 10, October 25, 2016). Therefore, a focused examination of Hampton Roads elected official and city manager attitudes and beliefs toward self-sufficiency for short- and long-term disaster recovery has the potential to encompass the mission areas of mitigation, prevention, and response (as previously described) for a city-wide vice individual being ready, as FEMA (2013) promoted in the literature.

# **Implications**

The case study has significant implications for (a) Hampton Roads representative formulation of post disaster recovery policy and the positive change for consistency in how local governments address short and long-term recovery policy formulation and decisions, (b) further definition of local elected actors within the emergency management public policy field, and (c) and generalizability of PET at the local level for post disaster short- and long-term emergency management recovery policy.

The findings identified Hampton Roads elected representative use of normalcy, resiliency and self-sufficiency factors to formulate and approve ordinances and appropriations for post disaster recovery between 2003 and 2012. The three factors promoted a way for elected officials to categorize, prioritize and dictate future post disaster recovery policy for their respective city. As such, the case study, with a rich and

in-depth triangulation of sources, offered an opportunity to apply the findings factors to other cities in the United States on how to consistently address a post disaster recovery environment. Consistency is important as the nonmandated mission area of recovery required local community elected leaders and departments to be better informed on the decision factors that influenced recovery related ordinances and appropriations policy.

Implications for PET will be enriched by the case study focus on the local vice state and federal level. Although PET research has been applied to the local level of government, this case study examined the elected official actors regarding the specific stage of emergency management recovery policy. The confirmation and expansion of Kwon et al.'s (2013) research with a further definition of the factors that influenced local level elected representatives offers new knowledge to PET within the context of emergency management recovery. An aggregate of broad factors that influenced Hampton Roads elected official post disaster recovery ordinances and appropriations between 2003 and 2012 qualified Kwon et al.'s political institution conclusions with a specific set of decisions factors that Hampton Roads elected officials used to influence recovery policy decisions and actions for city department leaders.

### **Conclusions**

The case study resulted in the determination of three factors normalcy, resiliency and self-sufficiency that influenced Hampton Roads elected representative post disaster recovery policy between 2003 and 2012. Determination of the three factors answered the research question (How do PSM, PV, political institution, and community services decision factors affect elected official recovery policy decisions?) with the findings that

Hampton Roads elected officials applied the normalcy decision factor to short-term recovery, the resiliency decision factor to long-term recovery policy and the self-sufficiency decision to both short and long-term recovery policy. The decision three factors confirmed Kwon et al.'s (2013) PET conclusions that political institutions influenced emergency management policy decisions with illustrations that the city council meetings, elected official approved city manager CAFRs and semistructured interviews validated the influence elected representatives have in the formulation and promulgation of emergency management policy decisions.

The case study enhanced emergency management knowledge pertaining to factors that affect elected official post disaster policy decisions. The research provided additional fidelity for how current elected officials formulated and applied policy to expedite a state of normalcy following a disaster, and the associated research recommendation to quantitatively examine checklists future elected representatives can use to derive short-term normalcy policy. The case study provided a substantiation of how Hampton Roads elected representatives address long-term recovery through the lens of resiliency and associated element of strategic and financial planning, and a related research recommendation to explore how elected officials and city managers address long-term disaster planning and recovery resiliency. Finally, the research exposed a unique relationship between normalcy and resiliency decision factors with the self-sufficiency policy decisions factor elected officials used to address short and long-term recovery, and the applied research recommendation to explore how self-sufficiency relates to mitigation, prevention, response and recovery policy.

In summation, disasters, natural and man-made, require elected official to be well-informed to assess and then issue coherent short and long-term recovery policy decisions. The factors identified in this research should help elected representatives in these serious processes. To ignore them could be detrimental to public safety, security and stability.

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## Appendix A: Semi-structured Interview Question Protocol

#### Introduction:

Thank you for participating in this research case study regarding post disaster recovery policy factors. The purpose of the case study is to baseline decision factors that influence elected representative recovery policy. As you know, I am the sole researcher for this doctoral study under the supervision of Walden University. The intent of the case study is to provide positive social impact for how representatives address recovery policy for infrastructure revitalization, housing regulations, business practices and environmental issues.

#### Procedures:

- 1. The procedures for the recorded interview will be to discuss the questions provided to you and finish with an opportunity to offer closing comments. Is it still ok to record this session?
- 2. As indicated in the email and phone calls, you will be provided numerous opportunities to provide feedback throughout the study such as review of the transcripts and findings.
- 3. Do you have any question before we commence the interview?

## Questions:

Question 1: What factors advance or impede disaster recovery policy formulation and decisions?

Question 2: Can you discuss the community related disaster recovery factors you considered such as infrastructure revitalization, business continuity, environment

practices and housing restoration and regulations that you used to formulate disaster recovery policy actions between 2003 and 2012?

Potential Probing question: How would you seek the means to adjust regulations or policy for short term or long term recovery such as housing, economic or infrastructure regulations and why?

Question 3: How did current policy procedures and organizational structures influence recovery actions for the critical incidents between 2003 and 2012?

Potential probing questions: What challenges do you face in the formulation of policy and why? Probing question: How do stakeholders influence your formulation of recovery policy and why?

Question 4: For public service post recovery decision factors between 2003 and 2012, what did you do consider important and why; helping people in distress, public service, or community wide policy making?

Potential probing questions: How do you consider community services factors such as housing, infrastructure, time, business continuity restoration in making recovery policy decisions? Are there other community service factors that you consider for recovery policy? Why are these factors important?

Question 5: What did you consider important and why for recovery policy decisions between 2003 and 2012; Accountability to the community, adherence to policy and regulations, balancing interests, or assurance of tangible results?

Question 6: In closing, were there any aspect of decision factors associated with recovery policy formulation between 2003 and 2012 that you would like to comment on, as well as any other comments associated with your role in community disaster recovery?

Thank you for your time. I will be sending the transcripts or notes to you for review in the next two weeks.

# Appendix B: Recruitment Letter

#### **Invitation Letter**

William Reiske XXXX XXXX XXX-XXX-XXXX

Dear [Potential Participant Name],

I am writing to request your input for a Walden University doctoral case study on Hampton Roads elected official decision factors influencing emergency management recovery policy decisions. Examples of decision factors pertain to infrastructure revitalization, economic continuity, and public service perceptions. Recovery pertains to transitioning from response in saving lives and shelter-in-place to when reconstruction and restoration begins for eventual community normalization.

I am examining how factors affect recovery policy in the region through interviews, document reviews and press releases between 2003 and 2012. As an elected official responsible for the formulation of policy, I am eager to hear about your post disaster recovery experiences in your community. The research should benefit elected officials with a re-usable baseline of decision factors for recovery policy formulation for manmade or natural disasters.

You will be provided opportunities to comment on the transcripts and findings, a copy of the research and a 1-3 pager paper on the case study scope, implications for positive social change and a decision factors list to assist in future recovery policy decisions. If you would be willing to participate in this doctoral research, please contact me to schedule a convenient time for a short 20-30-minute face-to-face interview. Please take a look at the attached documents with information about the research, confidentiality, the interview questions and how to participate in the case study. Should you have any questions, feel free to contact me by phone at XXX-XXX-XXXX or email at XXXXX. You may also contact Dr. Donald McLellan, who my Chair for the doctoral research at XXX-XXX-XXXX or XXXXXX or the university's Research Participant Advocate, Dr. Leilani Endicott at XXXXXX.

I thank you in advance for your participation in this doctoral research and look forward to speaking with you about your post disaster recovery experiences. Sincerely,

William Reiske

# Appendix C: First and Second Cycle Coding

# First Cycle Coding

# **Comprehensive Annual Financial Reports, 2003-2012**

## Financials (F)

001 Insurance Statement

002 Year Implemented

003 Recovery Grant

# Appropriations (A)

001 Infrastructure

001A Shelters

001B Emergency facilities

001C Street repair

001D HAZMAT clean-up

001E Emergency communications

001F Debris clean-up

001G School building restoration

001H Community buildings

#### 002 Environment

002A Beach replenishment

002B Watershed reconstruction

#### 003 Other

003A Flood modeling study

003B Surge modeling study

003C Overtime costs

# Ordinance (O)

001 Home elevation

- 002 Recovery loans coverage for citizens
- 003 Toll fee waived

# City Council Meetings, 2003-2012

# Ordinance (O)

- 001 Flood elevation
- 002 Agriculture disaster declaration
- 003 Building fees waived
- 004 Truckloads waived
- 005 Real estate tax waived
- 006 Shelter designation
- 007 Disaster declaration

# Appropriations (A)

- 001 Storm water funding
- 002 Grant matching
- 003 HAZMAT recovery
- 004 Shelters
- 005 Security

005A Port

005B Community

# Others concerns (OC)

- 001 Power restoration
- 002 Disadvantaged

002A Elderly

002B Non-English speaking community

002C Low income community

003 Partnership (P)

003A Regional

```
003B Volunteers
```

003C Non-profits

# **Semi-structured Interviews: Hampton Roads Elected Officials**

# Factors that advance/impeded disaster recovery (AIF)

001 Planning

001A Time

001B Capacity

00B1 Communications

00B2 EOC

001C Technology

002 Financial

002A Overtime

002B Insurance

002C Shelters

002D Debris

002E Procurement capability

003 Partnership

003A Regional

003A1 Hampton Roads

003A2 N. Carolina

003B State

003C Federal

003D Non-profit

003E Utilities

003F Academia

003G Business

# 003H City council, city manager/departments, economic development

# Community related disaster recovery factors (CF)

001 Safety

authority

- 002 Security
- 003 Quality of Life
- 004 Environment
- 005 Economic
- 006 Partnerships
- 007 Transportation
- 008 Housing
- 009 Public Utilities

## **Institutional Factors (IF)**

001 Assessment

001A short-term

002A long-term

- 002 Departments
- 003 Federal
- 004 Cooperative agreement

# **Public Service Factors (PSF)**

- 001 Community
- 002 Stewardship
- 003 Safety and Security
- 004 Assess the damage
- 005 Support for disadvantaged

# Others (O)

001 Access to elected official

- 002 Self-reliance
- 003 Sustainability
- 004 Long-term recovery
- 005 Prevention

Second Cycle Coding: Triangulation of Comprehensive Annual Financial Reports, City Council Meetings and Semistructured Interviews

# **Short-Term Recovery**

# Infrastructure (I)

- 001 Shelters
- 002 Emergency facilities
- 003 Street repair
- 004 HAZMAT clean-up
- 005 Emergency communications
- 006 Debris clean-up

# Safety (Se)

- 001 Water
- 002 Traffic/transportation
- 003 Food
- 004 Public Utilities
- 005 Housing

# Security (S)

- 001 Law enforcement
- 002 Consumer protection

## Financials (F)

- 003 Community support (Recovery loans coverage for citizens. Toll fees waived)
- 004 Overtime costs

005 Building fees waived006 Real estate tax amended

# Planning (P)

001 Disadvantaged recovery

002A Elderly

002B Non-English speaking community

002C Low income community

002 Partnerships

003A Regional (cities)

003B Volunteers

003C Non-profits

003 Time (Speed of decision/Speed of action)

004 Capacity

005A Communications

006B Assessment

007C Procurement

# **Long-Term Recovery**

## **Environment (E)**

001 Beach replenishment

002 Watershed restoration/protection

# Infrastructure (I)

001 School building restoration

002 Community buildings

003 Home elevation change

004 Flood elevation

## **Public Service Factors (PSF)**

001 Community

```
002 Stewardship
003 Assess and act
Planning (P)
001 Economic
      001A Agriculture
      001B Tourist
002 Disadvantaged recovery
      002A Elderly
      002B Non-English speaking community
      002C Low income community
003 Partnerships
      003A Regional (cities)
      003B Volunteers
      003C Non-profits
004 Capacity
      005A Communications
      006B Assessment
      007C Procurement
005 Assessment capability (AC)
Financials (F)
001 Insurance Statements
002 Recovery Grants
Institutions (I)
001 State/Federal
002 City council, city manager/departments, economic development authority
003 Bureaucracy
      003A Speed
```

003B Relevancy

004 Assessment capability

# Appendix D: Themes and Semistructured Interview Question Alignment

Q1: What factors advance or impede disaster recovery policy formulation and decisions?

Normalcy: P10:"There is a sense of urgency in returning the community to normal"

P5: The cost of short-term recovery for overtime is an accepted "cost of the business of recovery"

P10: "We have a capacity challenge when it comes to hurricanes for cat 3 and above"

P5: "at times I can't get around the entire city to see the damage so I can promote and prioritize recovery projects"

P3: "The community expectation is public safety for short-term recovery such as debris removal, restoration of banking services and public utilities, and communications"

Resiliency: P4: "The grant process is slow and cumbersome" Self-

Sufficiency:P7: established our own notification system for communicating with the public

P10: "prior planning is key to recovery"

P1: "procurement advances our recovery"

P2: "the city has already established the means to restore the community through pre-approved insurance"

Question 2: Can you discuss the community related disaster recovery factors you considered such as infrastructure revitalization, business continuity, environment practices and housing restoration and regulations that you used to formulate disaster recovery policy actions between 2003 and 2012?

Normalcy: P3: "We waived building permit fees"

P1: "partnerships with non-profits is key to short-term recovery

P7: "We appropriated funds for shelters"

Resiliency: P6: "beach restoration and erosion repair are important to the environment"

P2: "the economic development authority ensures the businesses can leverage incentive programs

P10: Recovery planning requires a closer look

P3: committed to dredging waterways

Self-

Sufficiency:P4: "we have widened corridors"

Question 3: How did current policy procedures and organizational structures influence recovery actions for the critical incidents between 2003 and 2012?

Normalcy: P1: "We can count on our institutions to implement policy such as waiving building fees and adjusting inspections for the individual"

Resiliency: P10: "We can't rely on grants

P1: "Our cooperative agreements with other cities is good"

P5: "I believe mitigation is linked long-term recovery"

Self-

Sufficiency:P4: we need to plan within the region

P2: "I do not see a weakness in our city institutions"

P6: "we need to have procedures that can address shelters, elevation issues And terrorist attacks"

Question 4: Q4: For public service post recovery decision factors between 2003 and 2012, what did you do consider important and why; helping people in distress, public service, or community wide policy making?

Normalcy: P9: "The citizen is out number one concern"

P5: "public safety is a key factor for me"

P5: "my service to the community requires I understand the situation"

Resiliency P3: "We must be stewards of the environment"

P1: "we must find work-arounds"

Self-

Sufficiency:P1: "we need to support without being intrusive"

Question 5: What did you consider important and why for recovery policy decisions between 2003 and 2012; Accountability to the community, adherence to policy and regulations, balancing interests, or assurance of tangible results?

Normalcy: P4: "I focus on getting out and finding out what the immediate problems are"

Resiliency: P5: "FEMA grant money must be applied to assist the individual in need, Which may mean an entire neighborhood"

P6:"capital improvement programs is how we deal with habitual areas"

P3: "I view the long-term through environmental impact assessments"

Self-

Sufficiency:P1: "we need to work with our North Carolina partners"

P2: "the city maintains a seven to ten percent unfunded balance to address unplanned incidents"

P10: "if our EOC is not functional then we miss giving FEMA our best damage assessment"

P4: "I am accountable for the entire community"

Question 6: Q6: Were there any aspect of decision factors associated with recovery policy formulation between 2003 and 2012 that you would like to comment on, as well as any other comments associated with your role in community disaster recovery?

Normalcy: P9: "Assure the public that we will address safety and security issues"

P2: "Safety and security are paramount for short-term recovery"

P5: "fire fighters, police and civic groups working together ensures a more cohesive recovery"

Resiliency: P10: "we need more time to develop long-term goals"

P6: "prevention and mitigation are paramount for short-term recovery"

P8/10: we will be reacting vice being pro-active for a major storm

Self-

Sufficiency:P4: "self-reliance is key to short and long-term recovery"

P2: "we ensure we are a fiscally sound city"
P7: "we are confident we handle most disasters"
P1/9: we work on sustainability of the community

Note: Participant comments reflected as P with an associated number