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# Disaster Preparedness: Rescue Planning for People with **Disabilities**

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Alimata Coulibaly

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Walden University 2019

### Abstract

Disaster Preparedness: Rescue Planning for People with Disabilities

by

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MS, Oklahoma University, 1983

BS, University of Abidjan, 1980

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Public Policy and Administration, Specialization in Terrorism, Mediation, and Peace

Public Policy and Administration, Specialization in Laws and Public Policies

Walden University

May 2019

#### **Abstract**

Disaster preparedness policy implementation in the United States inadequately integrates people with disabilities (PWDs), most tangibly at the local level, where PWDs do not face an equal chance for survival during disasters compared to those without disabilities. The purpose of this qualitative case study was to examine current disaster preparedness policies and procedures to identify whether local agencies are following existing laws and policies related to integration of PWDs in Orange and Riverside Counties of California. The study furthered understanding of emergency managers' and planners' approaches in coordinating local disaster actors and the impact of their attitudes on local preparedness practices integrating PWDs. The conceptual framework for this study drew on normative political theories, including the Jeffersonian, Hamiltonian, and Jacksonian approaches to disaster policy and management, the principal-agent theory, models of intergovernmental relations, and the concept of vulnerability. Data collection encompassed documentation analysis, questionnaires, and open-ended interviews with purposely-selected eighteen participants, including PWDs. Using within-case and cross-cases techniques to analyze data, findings revealed a disconnect between county emergency professionals providing preparedness services and PWD beneficiaries. Emergency managers and the PWD community who contributed in this study offered differing perceptions of disaster preparedness plans and activities. The study affects social change by linking existing disaster preparedness plans and PWDs, improving emergency managers' mindfulness of the diversity and susceptibilities of PWDs, and promoting that the goal of properly integrating PWDs in preparedness plan and activity is attainable.

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#### Dedication

I dedicate this achievement to Allah Tabaraka Watta Allah, Soub'anaWatta Allah; this could not have been achieved without His enlightenment of Noor, Rahman, Rahim.

I dedicate this to my son, Jean-Oumar K. Ehoussou, my rock and best friend. I will be forever grateful for your inspiration of strength and resilience. I have taught you to work hard and take time to enjoy yourself, and you have taught me to laugh at myself and persevere. I dedicate this to my daughter-in-law, Ramatoulaye H. O. Ehoussou. You inspire me with your unwavering integrity, kindness and love. I dedicate this to my grandson, Yameen D-G. Ehoussou, who teach me something new each and every day. Without you Yameen, I would wonder what my life's purpose would be. I hope this achievement can inspire you someday to strive for your own academic success.

I dedicate this to my parents N. J. Oumar (deceased 1970), Djeneba and Ella P. Swan. You have always been a great example to me. I also dedicate this to my seven brothers and two sisters: Dr. Donatou, Dr. Founzegue, Pele, Adama, Dogatiene, Nounieri, Allagnan, Massagnou and Binta, as well as my 25 nephews and nieces. I hope it can inspire you to realize that it is never too late for continuing your education.

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## Chapter 1: Introduction to the Study

#### Introduction

People with disabilities (PWD) are disproportionately affected when disaster strikes (Blaikie, Cannon, Davis, & Wisner, 2014; Christensen, Collins, Holt, & Phillips, 2014; Flanagan, Gregory, Hallisey, Heitgerd, & Lewis, 2011; Hemingway & Priestley, 2014), and accordingly face higher risks than the general public in times of calamity (Galea, Norris, & Sharrieb, ,2014; Kettaneh & Slevin,2014); for example, during disasters such as the terrorist attacks on September 11, 2001, individuals with disabilities were left behind in the evacuation process because they responded to wait-for-help practices as recommended by emergency evacuation protocol (Gerber, Norwood, & Zakour, 2010). This protocol meant the PWD were the last to be evacuated, and many died as a result of having to wait (Frieden, 2005).

Another example of poor emergency planning for PWDs is hurricane evacuations that do not adequately include all individuals living with disabilities, such as sight and hearing-impaired people (National Council on Disability, 2005, p. 12). During recent violent storms such as Hurricane Sandy, the nation's Emergency Alert System (EAS), which requires PWD accessibility to emergency information, was never activated by local authorities (Kerschbaumer, 2006; National Council on Disability (NCD), 2006), which demonstrates how inadequacies in predisaster preparedness plans are the critical reason why PWDs suffer disproportionately during disasters.

## **Background**

Since the September 11, 2001 attacks, much has been done to address emergency preparedness and mitigate the impact of disasters. The U.S. Congress passed the Homeland Security Act of 2002, which created the Department of Homeland Security (DHS) aiming to prioritize disaster preparedness and recovery through the coordination of different federal agencies, including Federal Emergency Management Agency (FEMA), engaging individuals, businesses, and communities to conform to emergency preparedness rules as risks evolve. Further, the DHS included disaster planning and readiness for PWDs in its Nationwide Plan, adding the Disability Coordinator position to the 10 FEMA regions with the Emergency Management Reform Act of 2006.

However, these existing strategies are insufficient. Deficiencies in disaster preparedness planning for PWDs were further substantiated with lawsuits against the City and the County of Los Angeles following wildfires in the region, and more recently against the City of New York in the aftermath of Hurricane Sandy. Outcomes have revealed disaster planning shortcomings for PWDs such as the inability of hearing-impaired individuals to understand disaster drill announcements and lack of familiarity with evacuation plans for mobility- impaired persons (Disability Rights Advocates, 2011). Disaster plans are still underdeveloped or inadequate for the evacuation of PWDs before or during an emergency (California Emergency Management Agency, 2011; Furman, 2013).

Disaster response systems have failed to adequately assist PWDs during

Hurricanes Katrina and Rita because personal responsibility and preparation to adapt to

environmental barriers for PWDs were promoted over and above social responsibility to remove those environmental barriers, highlighting the discriminatory practices and policies surrounding the existing environment (Christensen, Collins, & Holt, 2006; Litman, 2006). Whereas local emergency management planners are promoting individual and family responsibility to protect themselves and assist family members with incapacities at the time of calamities, the Department of Justice (DOJ) issued a guide of the Americans with Disabilities Act (ADA). The DOJ guide was highlighting the role of local government's primary responsibility for protecting their citizenry from harm, and proclaiming disaster preparedness planning and response programs accessible to PWDs, in line with public perception of disaster-related assistance as a fundamental governmental role and as a societal responsibility. Thus, by implying that PWDs needed to undertake further individual responsibilities to elude the hardships of disasters, emergency preparedness management and first responders are circumventing their social responsibility regarding disaster planning in an effort to promote a safer environment for everyone and covering up local government's answerability for functioning disaster preparedness.

Also, further information provided by FEMA (2013) has called attention to the monetary impact of calamities that could be aggravated by the lack of predisaster preparedness. While FEMA (2013) reported declarations of 47 major natural disasters, 16 emergencies, and 49 fire management assistances in the United States during 2012, many individuals with disabilities remained unprepared for a disaster. Despite mandates to do so, needs and contributions from individuals with disabilities are not integrated in

municipalities' disaster preparedness plans (Kailes, 2008; Larson, 2008; National Council on Disability, 2009).

As a result, critics such as Perry & Lindell (2003) have condemned discrepancies between written preparedness plans and evidence of jurisdictional preparedness provisions. Further, Tady (2011) denounced the lack of standardized federal preparedness planning for PWD and provisions relating to disability laws and regulations in local emergency preparedness practices. The United Nations (2013) said that the needs of PWDs are not addressed in disasters. According to the United Nations Office for Disaster (2013), 90% of 5,000 respondents with disabilities said that their local municipality did not have any form of emergency or disaster management strategy in place related to their functional needs, and 58% of respondents living with disabilities recognized that they would have difficulty evacuating from home.

Similarly the California Emergency Management Agency (2011) said that application of registries in planning for PWDs were underdeveloped, mainly because it was deemed to be time consuming for staff. Because of weak preparedness planning, a 2011 class action complaint against the City of Los Angeles (CALIF. et al. v. City of Los Angeles) brought on behalf of all PWDs, claimed that the city was in violation of the ADA by not considering the needs of their inhabitants living with disabilities in their disaster preparedness processes. Similar complaints were evident when a November 2013 court decision (Brooklyn Center for Independence of the Disabled, et al. v. Mayor Bloomberg, et al.) on disaster response systems during Hurricane Sandy accused the New

York City's disaster planning process of being inadequate for the evacuation of PWDs before or during an emergency.

Certain disasters such as terrorist acts have proven to be complex, providing no preparation times for PWDs. At the time of disaster, when familiar caregiver support systems fail and no other alternatives address their functional needs, PWDs endure life-threatening experiences beyond those experienced by nondisabled persons, limiting their ability to evacuate to identified shelters. Accordingly, while some PWDs would respond to alert systems, leave the crisis area, and take protective action, more people with cognitive disorders and other disabilities, such as quadriplegics and Alzheimer's patients, may be physically unable to overcome barriers in order to accomplish their task without assistance, and may go through serious challenges due to not being assisted during disasters.

### **Problem Statement**

The problem I addressed in this study was that disaster preparedness policy implementation inadequately integrates PWDs. There is a problem with planning for PWDs at the local level, which reveals a societal failure in terms of giving the same chance for survival to people with and without disabilities when disaster strikes. PWDs constitute the world's largest minority, representing 15% of the world's inhabitants (United Nations, 2010).

A possible cause of this problem is that although the DHS (2013) recognized preparedness gaps in relation to the integration, inclusion, and accessibility of PWDs, it provided little guidance regarding the process by which emergency preparedness

planning in accordance with the NPG's recommendation of accessibility for all people is to be strengthened, sustained, or enforced. Therefore, a study that focuses on the marginalization of PWDs in terms of disaster preparedness planning and practices could help address the systemic failure to protect all citizens, particularly PWDs.

#### Rationale

Existing preparedness strategies are insufficient in spite of nationwide determination and initiatives toward efforts to improve emergency planning for all citizens. For example, current disaster preparedness strategies stipulate that all individuals with or without disabilities have to be responsible for their own safety and survival during disasters by following provided checklists, kits, and guides (FEMA, 2009; National Council on Disability, 2009; Red Cross, n.d.). Without taking into account that counties and municipalities seldom maintain thorough demographics of PWDs that would support customizing community awareness and evacuation messages, emergency planners are continuing to develop technologies, ideas, and plans for the disaster management community as well as PWDs.

The ADA (1990) established that emergency planners should include the needs of PWDs in disaster preparedness planning. Similarly, the DHS (2013) recommended that PWDs be integrated in the emergency planning process as well as drills and evacuation plans. Still, individuals living with disabilities have difficulty evacuating to shelters, and/or are left behind in the evacuation process (National Organization on Disability, 2004; United Nation Office for Disaster, 2013). For instance, Barbara McWilliams was a PWD who died in the 2015 Valley Fire that was burning across three Bay Area counties

in California. McWilliams suffered from multiple sclerosis and was not able to evacuate her house on her own, and Cal Fire rescuers were unable to save her from the fire.

Another recent calamity was when the State of California called for emergency assistance for Napa, Solano, and Sonoma counties after a 6-point magnitude earthquake followed by about 50 aftershocks within a week. According to Weise and Bello (2014), more than one million people felt the quake, which killed 63 and left hundreds wounded and 64,000 without power. Weiss and Bello further said that the quake damaged many homes, buildings, historic edifices, and infrastructures including 50 gas main breaks and 30 water main breaks. PWDs are the largest minority, representing 15% of the population (United Nation, 2010). Yet, they have suffered from the aftermath of this earthquake disaster, especially power shortage.

Similar deficiencies in disaster preparedness planning for PWDs have resulted in lawsuits against the City and the County of Los Angeles and more recently against the City of New York in the aftermath of Hurricane Sandy. Outcomes of these lawsuits have revealed disaster planning shortcomings for PWDs such as the inability of hearing-impaired individuals to understand disaster drill announcements or lack of familiarity with evacuation plans for mobility-impaired persons in need of essential assistance to efficiently and safely evacuate. Disaster plans are still underdeveloped, outdated at times, or inadequate in terms of the evacuation of PWDs before or during a calamity. As a result, local emergency preparedness practice is not in compliance with disability laws and regulations.

## **Brief Overview of Existing Literature**

According to the NOD, YEAR), 56% of PWDs do not have knowledge of emergency plans regarding whom to contact in the case of an emergency, and 61% do not have any planned strategy to safely and speedily evacuate their home. Conversely, general public evacuation rates are 90% in major storms (Sorensen & Vogt, 2006), where most of the time spontaneous evacuation occurs before official orders to evacuate. Further, Baker and Cormier (2014) said that budget shortfalls happen during emergency evacuation when localities have little responsibility in emergency planning and when state departments providing leadership in making those plans fail to provide such leadership in terms of implementation.

The NOD (2014) said that few emergency planners possess the proficiency required to attest that disaster preparedness include sufficient provisions for PWDs.

Gerber et al. (2010) said that no findings on emergency preparedness show generalizable planning efforts or evidence-based drills of "what works for PWDs in disaster" (p. 4).

More research is needed to establish best practices regarding emergency planning and investigate breaches in local disaster preparedness that prevent PWDs from quickly and safely exiting their homes in the event of a calamity. Thus, in this research I seek to comprehend the involvement of PWDs in the local disaster planning process, and determine whether the implementation of current requirements for integrating PWDs into local disaster preparedness plans is adequate in addressing the unique needs PWDs face in disaster situations, including effective and safe evacuation strategies from workplaces, homes, and communities.

## Gaps in the Literature

Gerber, Norwood, and Zakour (2010), described their experiences in assessing the attitudes, behaviors, and needs of PWDs. They mentioned the NCD's declarations, sustaining that there is a clear lack of research validating best practices and a lack of evidenced-based knowledge about how best to organize preparedness and response efforts for PWDs (p.11). According to Gerber, Norwood, and Zakour "this critique endures despite repeated disasters and on-going pleas" (P 11) to address disaster readiness in rescuing PWD (NCD 2009:14; Gerber et al., 2010, p.11). In the same view, a 2013 survey of United Nation Office for Disaster indicated that PWDs largely recognized they will have real trouble evacuating from calamity scenes toward shelters if disasters strike, but little research exists regarding just how to address this issue.

## **Purpose of the Study**

The purpose of this study was to examine current disaster preparedness policies and procedures put into practice in county level for integrating PWDs, and consider emergency managers' and planners' approaches in coordinating local disaster actors. In addition, the study aimed to broaden the understanding of the effectiveness of predisaster rescue planning and practices through a parallel between PWDs anticipation and the application of current requirements for integrating PWDs into local preparedness plans. The study aimed to address preparedness reform issues related to warning, evacuating, and rescuing practices for PWDs by exploring whether the implementation of current disaster preparedness policies requirements for integrating PWDs into local preparedness plans are adequate in addressing the unique needs of PWDs during disasters.

## **Significance**

This study was based on the assumption that emergency planners, support groups, and community members ought to enhance emergency preparedness rescue procedures for PWDs so that no one is left behind during a disaster. The study's ambition was to minimize happenings such as wildfires in California where PWDs unable to self-evacuate are left behind. The study aimed to discuss the need for a policy to enhance local predisaster preparedness planning and practices for individuals with disabilities. As a result, study could potentially lead to improved local emergency preparedness strategies related to warning, evacuating, and rescuing PWDs.

The study also aimed to encourage emergency managers and planners in coordinating local disaster actors, integrating the community as a whole, and using their expertise to induce local communities' engagement with and awareness of the imperative that PWDs be granted as much of a chance as the common public to survive disasters. The study referred to a number of emergency professionals involved in local preparedness planning and practices for individuals with disabilities, proposing insights to institutions such as the Department of Homeland Security and FEMA, inspiring disability advocates, and stimulating further study on disaster preparedness for scholars in public administration and human rights.

## **Conceptual Framework**

The conceptual framework for this research drew on Sylves' normative political theories, including the Jeffersonian, Hamiltonian, and Jacksonian approaches to disaster policy and management, the principal-agent theory, and Wright's models of

intergovernmental relations. The concept of vulnerability added to the framework. Sylves reasoned about emergency management as the application side of disaster policy, providing an overview of how and where theory knowledge fits in the evolution of emergency management as a profession and disaster policy as a domain of public policy. Sylves further related disaster policy implementation to notions of emergency managers' know-how approaches as locally appointed federal officials conducting local emergency management processes. In the context, where disaster policy application calls for collaboration between disaster policy implementation actors at various levels of government and coordinated group efforts of local agency professionals, emergency managers' approaches are fundamental in integrating PWD to the disaster preparedness process in preparing for and reacting to calamities (Kendra & Wachtendorf, 2003; McGuire & Silvia, 2010; Moynihan, 2005).

Sylves (2014) argued for the development and application of theories and concepts related to disaster preparedness policy. Hurricane Katrina showed that preparing for and responding to emergencies by local frontrunners within federal disaster preparedness goals through the DHS initiatives is a matter of emergency managers' know-how approaches in dealing with eventual gray areas. Hurricane Katrina further revealed deficiencies in the approach of coordinating political intent and PWD expectations to survive to upcoming disasters in the process of putting disaster policy into practice throughout the "phases of preparedness, response, recovery, and mitigation" (NCD, 2009, p. 14). Sylves said that emergency managers need to have the professional skills and abilities to establish disaster management as profession and understand their

role in the policy process and grasp the significance of political and managerial theories relevant to their work. The three normative theories based on America's forefathers are the Jeffersonian, Hamiltonian, and Jacksonian theories. As Sylves said, these three theories of disaster policy and management postulate that there is a continual tension between the need to promote political openness for representative democracy and the need to work professionally with minimal bias in putting policy into practice.

The Jeffersonian approach supports decision-making ensuing from consultations with interest groups, suggests a strong community participation of emergency preparedness, and recommends emergency managers maintain community support from local officials and the public (Sylves, 2014). The Hamiltonian model is concerned with performance and evaluation under public law, and expects emergency managers to have decision-making expertise and professional knowledge in order to maximize performance efficiency (Sylves, 2014). The Jacksonian emergency manager is expected to be a good intermediary between states and local government in reaching federal political goals (Sylves, 2014).

The principal agent theory frames the debate about government emergency managers' interactions with federal, state, local, and private/nonprofit agencies (Sylves, 2014). According to Sylves (2014), emergency managers work in environments where they cannot observe whether or not the instructions they issued as principals are properly carried by agents, disaster policies are properly implemented, or disaster-related needs are properly addressed in realizing goals they are mandated to meet. Thus, emergency managers deal with gray areas that require them to be able to use their practical

knowledge and reasoning to adapt to unusual or unpredicted disaster events or establish new rules taking into account "administrative-legislative interaction, intergovernmental relation, agencies, and interest groups" (Sylves, 2014, p. 41).

Another conceptual frame for the study was Wright's three intergovernmental relations models in the context of disaster management: (a) the coordinate-authority model describing disaster management in conformity to federalism and dual federalism with a distinctive separation between relationships of level of government, (b) the inclusive-authority model emphasizing the leading role of the national government with little collaboration between level of government and where major disasters are handle by local jurisdictions who experienced them, and (c) the overlapping-authority mode highlighting the overlaps between level of government units simultaneously through state declaration of emergency to request federal assistance in personnel, funding, goods, and services.

The September 11, 2001 terrorist attacks led to the inclusive-authority model with the enactment of the Homeland Security Act of 2002 and the creation of the National Response Framework and Incident Management System. With this contemporary model, the federal government has the key coordinating role, yet there is an excess of top-down commands with less local freedom of action, making states and localities "mere minions of national government" (Sylves, 2014, p. 43). Further, the new disaster awareness reforms and grants that were introduced have placed terrorism preparedness above preparedness for all other disasters and increased the influence of

emergency managers appointed through federal DHS directives intended to prepare local government and agencies to integrate PWDs in disaster preparedness planning programs.

I also used the concept of vulnerability in the study to incorporate the principle of giving equal chance at survival to each person, while stressing the level of needs of PWDs compared to the general public. This study aimed to consider disaster vulnerability and give voice to underrepresented groups in the planning process, such as PWDs, their related caregivers, and advocacy groups, to address common problems regarding disaster preparedness policy implementation that call for emergency manager know-how while taking into account intergovernmental relations.

### **Research Ouestion**

There is a clear disconnect between disaster preparedness policy and its implementation, and policy makers know little about how and why the integration of PWDs in preparedness planning as required or mandated remains controversial. In addition, a gap in knowledge exists regarding how emergency management influences a county's application of disaster preparedness policy in preparing for and responding to local calamities or how appointed emergency managers' decisions regarding coordinating operational activities across the different level of government and agency settings waves local preparedness planning and practices integrating PWDs. Seeking even a partial response to these interrogations calls for an in-depth investigation that has all-inclusive and fully-implemented disaster plans with community members and PWDs practicing drills accordingly, and an appointed emergency manager is effectively coordinating key players' role implementing those plans in preparing for and responding to local disasters.

Investigators can be assured about what does and does not work by examining that PWDs community's plans encompassing provisions relating to disability laws and regulations by documenting community members' drill experiences and perceptions of readiness and exploring the intent behind emergency managers' decisions throughout the disaster preparedness policy application process. PWD caregivers and services providers can further benefit from this research to see how emergency managers' practical knowledge and reasoning bring together emergency players and build up community engagement to enhance disaster preparedness planning.

This study was guided by the following research questions:

*RQ1:* Do emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in the Riverside and Orange counties of California?

*RQ2:* How do emergency managers' attitudes influence local preparedness planning and practice integrating PWDs?

The research will address the following subquestions:

*SQ1:* How do advocacy organizations and caregivers for PWDs perceive individual responsibilities for safety during disasters according to prevailing promoted plans and kits?

*SQ2:* Are backup plans included in preparedness strategies for PWD necessitating essential assistance? If not, what are the alternatives? If yes, how do those plans influence changes in the community behavior and thus bring about social change?

## **Nature of the Study**

## **Qualitative Studies**

A qualitative approach was the most applicable, as this study's aim was to provide an in-depth understanding of county level's disaster preparedness practices through data analysis of multiple sources of information. Thus, the study used a collective case design, the case being the current implementation process of the disaster preparedness policy integrating PWD in the disaster implementation programs.

This case study emphasized the NPG's recommendation, scrutinizing the effectiveness of predisaster rescue planning and practices through the determination of a parallel between the application of current requirements for integrating PWDs into local preparedness plans and PWDs' outlooks. The study explored the ways emergency management preparedness plans take into account PWD needs to avoid increased risks during disasters in the Riverside and Orange counties of California and assesses the disconnect between the two groups of plan providers and beneficiaries as related to access to warnings and evacuating from disaster scenes. The study also considered whether emergency managers' attitudes influence local preparedness planning and practices integrating PWDs, the implication of individual responsibilities for safety in time of disasters for PWDs, and the availability of backup plans included in preparedness strategies for PWDs necessitating assistance.

While quantitative research tests objective concepts by investigating correlations among variables, and qualitative research involves understanding of human behavior, a mixed methods approach is desirable when either the qualitative or quantitative method

by itself is insufficient to best comprehend a research problem (Creswell, 2013, p. 18). For my research problem, a qualitative study was the most applicable approach as it purposed to provide an in-depth understanding of county level's disaster preparedness practices through data analysis of multiple sources of information.

This was an exploratory qualitative case study where interview participants from two sites, Orange and Riverside counties, were invited to share in-depth experiences that informed their thoughts and ideas about current requirements of disaster preparedness planning for PWDs. While this study does not provide an answer to all difficulties PWDs come across in a disaster, it does provide a basis to challenge local-level implementation of current requirements regarding disaster preparedness planning and could provide more information on the topic. I investigated two groups of people. The first group was composed of state emergency managers; the second group was composed of community-based organizers or disability advocacy personnel of activist organizations who work with PWDs. To answer the research questions, I used diverse data-collecting approaches encompassing questionnaires, interviews, documentation review, and analysis of existing plans, to yield evidence about available emergency plans and current disasters preparedness requirements.

The participants for the study all reside within Orange and Riverside County,

California, where people are living with the permanent threat of unpredictable wildfires

and earthquakes. Investigator and case transactions and interactions are essential with the

case study method. This case study emphasizes the role of emergency managers in

implementing current disaster preparedness requirements at the county level, examining

how disaster preparedness rescue planning for PWDs compares with disaster preparedness rescue planning for the general public. Thus, I relied on selected participants' thoughts, perceptions, experiences, and skills to determine a parallel between the application of current requirements for integrating PWDs into local preparedness plans and their expectancy regarding effective evacuation strategies before and during a disaster and assess the disconnect between the two groups of providers and beneficiaries. The study included strategies for PWDs to compare with the general public, using the within-case analysis technique to explore similarities and differences in preparing for upcoming disasters. I also cross-compared data from the two selected counties, isolating themes and patterns to highlight commonalities and state relationships to answer the research questions.

## Possible Types and Sources of Information or Data

This qualitative case study employed questionnaires, interviews, and documentation analysis as data collection tools. Orange and Riverside County, California served as the research site for this study where I investigated two groups of providers and beneficiaries and their perceptions regarding disaster preparedness issues for PWDs. Related to the first group of providers, I collected questionnaires from 24 southern county emergency managers to explore their coordinating roles and capabilities in terms of performing functions such as warning, searching, evacuating, and rescuing PWDs before and after disaster strikes. I also conducted open-ended interviews with the second group of beneficiaries composed of 18 emergency managers servicing Riverside and Orange County, two executive members of regional centers (RCs) for people with disabilities

serving those counties, five community-based organizers or disability advocacy personnel of activist organizations that work with people with disabilities, five caregiver personnel for PWD, and four actual PWDs. Documents such as administrative reports, procedures and policies, minutes, drill practices records, existing disaster preparedness plans, and handbooks were gathered for this study to emphasize the suitability of the disaster implementation programs in the selected counties and ascertain chances of survival for PWDs compared to the general public when disaster strikes.

## **Operational Definitions**

California Office of Emergency Services (CalOES): This office is responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities within the state of California by dispatching team members to join first responders, emergency leaders and those affected by disasters that threaten public safety

Disability rights advocates: Those who encourage PWD protections and rights. A number of community-based organizers or disability advocacy personnel of activist organizations work with people with disabilities. In 2012, 150 nations sanctioned the international Convention on the Rights of PWDs (CRPD), a treaty practically based on the ADA, but the US did not ratify it.

Federal emergency management officials: Government officials appointed by FEMA. FEMA has ten regional offices in California included within the ninth regional office of the nation. These officials serve the United States by working with state governments to provide help to people impacted by disasters.

Federal Emergency Management Agency (FEMA): This agency is to support the citizens and first responders to promote teamwork in building, sustaining, and improving their capability to prepare for, protect against, respond to, recover from, and mitigate all hazards throughout the nation.

*Hurricane*: Spiraling winds traveling at speeds of 75 to 200 miles per hour for up to 600 miles across an area.

Local emergency management: Those who govern within the boundary of a county organizing first responders on scene when a disaster starts. Their approaches to coordinating local community actors include warning, evacuating, and rescuing people with disabilities. For example, human services departments, disability rights advocates, and volunteer organizations are handle sheltering, while law enforcement agencies are responsible for evacuation.

People With Disabilities (PWDs): PWDs constitute the world's largest minority, representing 15% of the world's inhabitants (United Nations, 2010). In the United States, 54.4 million people are individuals with disabilities (U.S. Census Bureau, 2010). In California, 4.8 million individuals over 18 years old are disabled (National Center on Birth Defects and Developmental Disabilities, 2009). In the context of this study, a PWD refers to persons with physical deficiencies, sensory impairments, and cognitive disorders.

State emergency management officials: Government officials who are appointed by the states. These state emergency managers pledge to assure readiness to respond to

and recover from disasters by backing up local government efforts in monitoring preparedness and providing resources when needed.

Superstorm: A powerful and destructive storm that distresses an unusually large area.

### **Ethical Considerations**

The subject is highly sensitive, dealing with disasters and PWDs. I collected data from emergency management officials, community-based organizers, disability advocacy personnel working with activist organizations who work with PWDs or are committed to preparedness activities, and PWDs with their caregivers. Further, prior to data collection, I obtained the approval of the Institutional Review Board (IRB approval # 03-19-18-0277202) to confirm compliance with the university's ethical standards and U.S. federal regulations.

## Summary

In this exploratory qualitative case study, interview participants from two counties were recruited to share in-depth experiences regarding disaster preparedness. The study triangulated sources of data and used the within-case examination and cross-comparing data techniques to isolate themes and patterns, explore similarities and differences, and highlight commonalities across cases. Chapter 1 presented the problem statement, demonstrated the significance of the study, and identified the research questions guiding the investigation. Chapter 2 includes a literature review to establish the reasons behind selecting the research questions and synthesize theories that add to the study. Chapter 3 identifies the research approach and how I will ensure quality through validity and triangulation of data using

different data sources. Chapter 4 presents collected data results and analysis. In Chapter 5, the implications of the findings are discussed in relation to the research questions that guided the study.

# Chapter 2: Literature Review

#### Introduction

Disasters are generally unpredictable in terms of their occurrence and consequences (Hoyos, Morales, & Akhavan-Tabatabaei, 2014; Liberatore, Pizarro, de Blas, Ortuño, & Vitoriano, 2013); thus, community planning for disasters is essential in minimizing threats to human life and limiting resulting damages. Accordingly, PWDs, as part of their communities, need to be considered in the steps taken by preparedness planners who have been trusted with such responsibilities through specific and established plans that include their unique needs. This chapter begins with my literature review strategy related to the research questions and a framework for the methodology.

Following the introduction, this literature review first focuses on research that identified disaster types, highlighting the unique needs of PWDs and ways in which disaster planning is or should be implemented for PWDs compared to the general public. The literature review continues with studies highlighting recurring challenges faced by PWDs in relation to current disaster preparedness requirements in localities. Next, the review transitions to the literature on law of disability to synthesize related public policies, lessons learned regarding previous disasters, and the effect of ADA laws on disaster preparedness policies. The literature review then explores the influence of federalism on local responses to DHS initiatives, stressing the challenges in the implementation and enforcement of disaster preparedness rules. The literature review further reflects on preparedness planning strategies. Ultimately, the literature review considers community disaster vulnerability perspectives in light of disability vulnerability

as the basis for understanding disaster preparedness for PWDs and increasing PWD's community involvement for social changes in disaster preparedness in Orange and Riverside County, California.

The review strategy focused on the area of inquiry of this study and the qualitative case methodology. The literature included peer-reviewed professional journals, works that described the theories as identified in the background section, and the most recent books in the field. The literature searches involved Walden University and community's library resources from Academic Search, SocINDEX, and ProQuest. The terms were disaster(s), preparedness, preparedness planning, rescue search, people with disabilities, vulnerability, emergency law, disaster law, and case study.

#### **Disasters**

A disaster happens when a hazard impacts vulnerable people. Researchers such as Blaikie, Cannon, Davis & Wisner (2014), Smith (2013) have addressed complex life-threatening situations caused by disasters on unprepared populations, describing disaster as a serious disturbance in a community's functioning that surpasses its capability to manage recovery within its own resources. Blake et al. (2014) further stressed the social, economic, and physical vulnerabilities following lives lost due to natural disasters that are aggravated for PWDs who might revisit the effects of earlier traumatic experiences when exposed to secondary stressors due to disaster effects. Disasters do not always come from natural or human actions. In referring to atmospheric and water pollutions, hazard also arise through slow industrial processes within the built environment.

Redlener and Reilly (2012) said that ongoing changes in seas level and weather

subsequent to climate variations are deemed to result in recurring and severe storms in years ahead.

# **Types of Disasters**

September 11, 2001 is an example of a great disruption in the functioning of the surrounding community and the entire nation. Since then, organizations such as CERT and Citizen Corps have been recognized for preparing communities for upcoming disasters and enhancing safety during emergencies. Most of those organizations' recommendation measures focus on general public safety during emergencies and cannot be applied to PWDs (Wise, 2007). Ultimately, all people, including PWDs, have the same fundamental want to live and share challenges in terms of securing resources for upcoming emergency evacuations. The NCD (2009) said that emergency planning is as important for PWDs as it is for the general population regardless of where people are when disaster strikes.

As mentioned earlier, recent lawsuits have cited evacuation procedures, focusing exclusively on residential removal situations and prompting reconsideration of methods used. Rapid onset events such as escalating thunderstorms developing to tornados and traveling wildfires during high winds leave people unable to access home-ready emergency preparedness kits, intensifying displacement of human populations (Black, Arnell, Adger, Thomas, & Geddes, 2012). Similarly, large-scale events, such as Hurricane Rita show how prearranged traffic movement may hold back PWDs depending on buddy systems to evacuate as their caregivers might be unavailable and their plans disrupted (Boyce, 2014, p. 2; Camara, 2009; Davis & Phillips, 2009; Van Willigen et al.,

2002). Bagrow, Wang, and Barabási (2011) argued that behavioral changes with long-term impact may be noted in human activity under disaster conditions such as floods and hurricanes.

Similarly, isolating events, such as chemical accidents or attacks with material spilling conditions may delay or impede rescue teams and/or first responders from getting to survivors. Moore, Geller, and Clark (2015) sustained that there is a lack of correlation between the development of disaster plans and the chemical and radiological disaster preparedness. As a way to minimize the risk associated to chemical attacks as well as other radiological disaster risks, Mayhorn and McLaughlin (2012) identified warning systems as an integral part of timely communication of risk in isolating calamities.

# **PWD** in Disasters

Kettaneh and Slevin (2014) and Galea, Norris, and Sharrieb (2010) acknowledged the unique needs for PWDs in emergency situations and reasoned that disasters disproportionately affect PWD. Battle (2014) argued that 14% of evacuated individuals in refugee sites or disaster shelters are disabled, one third of them being youngsters. Examples are numerous where at time of emergency, disabled people who have difficulty evacuating and protecting themselves end up left out (Server, 2015). For example, during Hurricane Sandy in 2013, some PWD were trapped for 3 weeks in high-rise apartment buildings.

As Alexander (2008) said, PWDs are disproportionately affected by power failure as compared to the general public during disasters. While specific inclusion of PWD is highlighted in preparedness guidelines and manuals, literature is not extensive on the

subject of backing the disabled in emergencies (Parr, 1987; Tierney et al., 1988) and rather tend to demonstrate inadequacy of provisions (CID, 2004; Server, 2014; Tady, 2006; White et al., 2004). Indeed, many PWD use durable medical equipment with assistive breathing machines (respirators, ventilators), power wheelchairs and scooters, support oxygen, and suction or home dialysis equipment that needs electricity to power on (Norwood, Gerber, & Zakour, 2011). As such, blackouts during tornadoes, earthquakes, and hurricanes critically undercut PWDs' abilities to survive (NCD, 2009). Ochi, Hodgson, Landeg, Mayner, and Murray (2014) revealed that many PWD lose hearing aids, essential medical aids such as insulin pens, and prescriptions during the evacuation process. Consequently, at the time of disaster when the familiar caregiver support systems fail and no other alternatives addresses their functional needs, PWD endure life-threatening experiences beyond those experienced by the nondisabled (Liu, 2008), limiting their ability to evacuate to identified shelters. For Ochi et al. (2014), PWD with chronic conditions are most at risk of dying during or after evacuation.

Compounding the threat surrounding electrical dependency is the fact that disaster preparedness plans are generally unfavorable to PWD. Earthquake preparedness plans, for example, anticipate that everyone, including PWD such as deaf, wheelchairs-users, and visually impaired individuals (HIC, 2005; Kett et al., 2005), are able to identify danger, receive evacuation orders (Kailes 2002, 2009), and seek refuge under desks and tables (Rahimi 1993, 1994). Another example is wildfire preparedness plans; during the 2003 California wildfires, which have been called the worst wildfire disaster in the history of the United States (California State Independent Living Council, 2004), many

PWD suffered from inaccessible communications plans and alerts for hearing or visually impaired persons. Thus, requirements of disaster preparedness planning should be adapted to PWD needs, standardized, and further enforced at the local level.

While emergency planners are encouraging the ideal of PWD's all-inclusiveness in the entire phases of preparedness, they are not sufficiently ready to face the challenges to realizing this in practice (Twigg, 2014). Kailes (2009) emphasized specific issues that make the disabled more vulnerable and added that simply thinking of accommodating a disability is not enough if guidance on how to include PWD in preparedness planning phases are not offered and further enforced. In his study on risk reduction during disaster, Twigg (2014) used capacity consideration and vulnerability to incorporate PWDs' needs and capacities in developing appropriate programs and suggested that implementing organizations need changes in their primary perceptions and approaches of disability in order to take account of PWDs. In addition, understanding the relationship between preparedness practices and policy implementation outcomes is as crucial for people with intellectual disabilities as it is for those with physical disabilities (Schalock & Verdugo, 2013; Shogren & Turnbull, 2010; Turnbull & Stowe, 2014).

Reinhardt et al. (2011) revealed that compounding the lack of preparedness for PWD is the fact that when disaster strikes, PWD are ignored in various reports, images, and statistics. This was substantiated during the Haiti earthquake in 2010 where nothing was heard about what was happening to disabled individuals (Server, 2015). Thus, the complex nature of disaster conditions facing a different type of disabled during disasters leads to raising awareness during preparedness planning. Indeed, inadequate

implementation of social policies and programs vividly expose the gross violation of the human rights affecting PWD (Kailes, 2009) and the failure of preparedness planners to recognize the differing living contexts and unique needs of disabled people for warnings, evacuations, and shelters.

# **Examples of Plans**

Current preparedness strategies stipulate that all individuals with or without disabilities have to be responsible for their own safety and survival during calamities for at least three days subsequent to a catastrophe (FEMA, 2009; National Council on Disability; 2009; American Red Cross, n.d.) by maintaining supply of food, water, and medicine at all times and by following provided checklists, kits, and guide-plans.

Accordingly, promotional material and guides in print and electronic format are provided by local agencies and displayed in organizations' websites to help individuals develop personal preparedness plans.

# Households' Role and Responsibility

The Los Angeles County Office of Emergency Management steps preparedness guide (see Appendix C) stipulates that each disabled and nondisabled individual should create four dissimilar emergency kits: grab-and-go, bedside, carry-on, and home (NCD, 2009). This guide provides quality instructions in different languages with a user-friendly, self-assessment checklist. However, the identification of potential kit items is left to individual choice, and the short description of each kit may lead PWD to overlook a necessary item or completely fail to build up the kit (NCD, 2009).

Other plans such as the one promoted on the American Foundation for the Blind website (see Appendix D), suggested using a previous arrangements system using outdoor lockboxes with house keys so that emergency responders are able to access PWD's home in times of disaster. More suggestions (see Appendix E) include particular alarm systems that help PWDs unable to evacuate to connect to rescue services. However, such systems when available are often more than a PWD living on social security or other security income can reasonably have the funds for (NCD, 2009).

Preparedness plans tend to be uniform for every household, yet when disaster strikes, members of a community are not affected the same way (Hemingway & Priestley, 2014), and accesses to resources remain disparate within communities, affecting susceptibility and adaptive capacity of vulnerable individuals (Yamin et al., 2005). Accordingly, researchers such as Levac, Toal-Sullivan, and O'Sullivan (2012) have stressed challenges facing PWD in preparedness activities, while emergency policies, guidelines, and plans are invariably emphasized on household and individual responsibility and the importance for maintaining a 72-hour supply of food, water, and medicine at all times to respond to upcoming disaster.

Other studies have demonstrated that while PWD are generally ready with the required three-days medication supplies, they are less likely to have the supply of food, water, or other household preparedness items (Bethel, Foreman, & Burke, 2011), suggesting the need for an emergency response planning tool such as pre-positioned emergency supplies under uncertainty (Rawls & Turnquist, 2010). Ultimately, as mentioned above, the availability of resources to prepare for disasters remains the

bottleneck for most households. Accordingly, Palmer (2011) has drawn attention to the close relationship of disability and poverty as a conventionally accepted approach to national poverty reduction programs.

Hemingway and Priestley (2014) evidenced readiness and capability among PWD community and advocacy organizations to respond in disaster situations through informal networks of support and expertise that was not readily available within the conventional disaster response systems. However, studies have clearly emphasized the lack of adequate resources of those PWD related organizations to maintain their contribution and proficiency inside the disaster assistance effort (Hemingway & Priestley, 2014). For Eisenman, Zhou, Ong, Asch, Glik, and Long (2009), PWD, in particular mentally ill individuals, remain the less expected to have emergency communication plans and/or household disaster supplies prepared. In comparing the preparedness behaviors of families with and without PWDs, Uscher-Pines, Hausman, Powell, DeMara, Heake, and Hagen (2009) declared that families with PWD are less expected to get involve in disaster preparedness behaviors such as emergency kits purchasing and drills scheduling.

### **Challenge of Using Special Registry**

Although Kailes and Enders (2014) pointed out that no documented evidence has shown that registries have made a difference in protecting PWD lives, registries have become a default strategy. Accordingly, the City Assisted Evacuation Plan (CAEP) in the City of New Orleans (see Appendix F) encouraged PWD to provide required information for the special registry database that could be used during evacuation for upcoming disasters. For Kailes and Enders (2014), the bias under maintaining a registry is to see

PWD as easy to locate or in a fixed place because of their disabilities. In fact, knowing where PWD live does not tell where they would be if disaster strikes. The difficulty in relying on a registry system have been further exposed during the 2003 California wildfires, when emergency responders could not access registry records to identify PWDs necessitating help to evacuate.

In addition, maintaining a registry requires considerable staff time and funding, and no registry has been tested in large scale emergencies. Thus, researchers such as Norwood et al. (2011) stood in favor of neighbor-to-neighbor programs for PWD emergency preparedness as an alternative to the registry system. Sandler and Gates-Allen (2010) stressed that the concerns and well-being of neighbors through the neighbor-to-neighbor programs is a way to build social support networks within neighborhoods and communities, in agreement with the well-known *neighborhood watch* approach.

### Juxtaposing Preparedness Plans and Evidence of Jurisdictional Provisions

Preparedness is an ongoing process of readiness in responding to and recovering from calamities. Accordingly, Perry and Lindell (2003) pointed out that a written plan is not sufficient to guarantee community disaster preparedness. Indeed, written emergency plans are of no use without people and responders' awareness of their existence and usefulness. To illustrate that, subsequent to Hurricane Katrina's damages in 2005, interviews with local police officers highlighted that only few were aware the city had settled a cataclysmic flood plan in 2004 (Cashen, 2006, p. 8). This unfamiliarity about existing plans may explain the confusion experienced in the aftereffects of Hurricane Katrina. A great number of individuals are unexperienced with disaster and rely only on

written plans for the essentials of crisis response activities (McLoughlin 1985), educational programs that provide information and instructions on functioning disaster preparedness plan (Parr, 1987), and planned practices of live drills. Yet, unless emergency planners keep on developing technologies, ideas, and plans that inclusively integrate the "whole community" (Fugate, 2011, p. 2; National Council on Disability, 2011), PWD such as individuals with mobility impairments may face frustration seeking to evacuate or hide during speedy catastrophes, such as earthquakes (Blaikie et al., 2014; Fernandez et al., 2002; NCD, 2009; Zobel & Khansa, 2014).

Gershon et al. (2013) underlined deficiencies in preparedness strategies, including lack of back-up plans for PWD in need of essential assistance. Critics have condemned discrepancies between written preparedness plans and evidence of jurisdictional preparedness provisions (Perry & Lindell, 2003), denouncing the lack of standardized federal. Thus, Norwood et al. (2011) sustained that the efficient way to get people to evacuate when calamities occur is to have them practice or drill ahead of time. Although practicing an evacuation with PWD is recommended, most of the time employees with disabilities are not invited to participate in evacuation training because of liability involved (NCD, 2009). Ultimately, the relationship and involvement of PWD as key stakeholders throughout disaster planning development and evaluation process is essential to determine the appropriateness of policy implementation procedure in integrating PWD into local disaster preparedness plans and addressing their unique needs in disaster situations (Bricout & Baker, 2010).

The NOD (2014) sustained that not enough emergency plan organizers have the necessary proficiency required to ensure adequacy of emergency preparedness provisions for PWD. Accordingly, Foster (2012) pointed out that decision makers' responses to threat arise only after disaster has ensued. Indeed, the elected officials remain the ultimate responsible party to ensure that inclusive plans are implemented (Foster, 2012). Thus, the development of uniform guidance by states that is generalized to all crises events is desirable, such as a regulation related to medical institutes' ethics in disasters (Gostin & Hanfling 2009), as ethical norms do not change during disaster.

Already disproportionately affected by disparities in education and income (Baker, Hanson & Myhill, 2009), PWD are further marginalized in their access to critical information needs (Baker et al., 2009), facing greater barriers in their neighboring community. Although access to Web-based material is an inevitable integrated part of emergency preparedness and response communication strategy promoted by organizations like the American Red Cross and government agency like FEMA to prepare for upcoming disasters, such sites remain unfavorable to PWD. In fact, Lazar and Jaeger (2011) demonstrated that 90% of government sites have major access barriers unfriendly to various types of disabilities. Thus, closing related gaps in disaster policy and enforcing existing rules would definitely reduce difficulties to online access for PWD (Baker et al., 2009; Lazar & Jaeger, 2011). As a result, emergency preparedness practices linger without much generalizable findings for planning efforts or evidence-based practices of "what works for PWDs in disaster" (Gerber et al., 2010 p 4), for the reason of noticeable inconsistencies between provisions as practiced and strategies as planned.

# Laws of Disability Perspectives on Disaster Response

Public policy is often used by government officials in response to problems specific to contexts and institutional practices in place, which encourage specialization and detailed case studies. According to John (1998), public policy is a system where issues of public agenda are pinpointed and disputed to generate new policy or improve the one in effect. Conversely, Kilpatrick (2000) defined public policy and law as "system of courses of action, regulatory measures, laws, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives" (p. 1). Some such definitions cause public policy and laws to overlap.

While some writers have distinguished between types of disabilities encompassing handicap imposed by society and handicap imposed by nature (Liachowitz, 2011), other researchers like Baynton (2013) argued that disability is used to justify discrimination against PWD. Liachowitz, (2011) further defined socially imposed handicaps as constructed and stressed that the nature of disability must influence legislatures and implementation strategies. Thus, examining which disability laws have influenced disaster preparedness reveals that less is known about the influence types of disabilities has on the enactment and implementation of emergency preparedness policy.

# **Key DHS Laws**

A few days after the September 11, 2001 terrorist acts, the U.S. Congress enacted the Homeland Security Act of November 2002, creating the Department of Homeland Security (DHS) (USC 116 Stat. 2135, Title 1, Section 101 & Title XX, and Section 2002-2005). General DHS laws encompass the Homeland Security Act of 2002, establishing

the Department of Homeland Security, the Intelligence Reform and Terrorism Prevention Act of 2004 (USC 118 Stat. 3638 Title 1, Section 1021 & 7202) addressing national security issues, and the Implementing Recommendations of the 9-11 Commission Act of 2007 (Public Law 110-53121 Stat. 266), setting forth the Department's missions. Similarly, states have passed laws, conveying supporting programs, to reflect Federal legislatures. For example, the California Emergency Management Agency (2011) stipulated in its emergency preparedness policies for PWDs that:

The Governor shall coordinate the State Emergency Plan and those programs necessary...and he shall coordinate the preparation of plans and programs ... to be integrated into and coordinated with the State Emergency Plan and the plans and programs of the federal government and of other states to the fullest possible extent. (p. 5)

According to the Homeland Security Act of 2002, FEMA is an agency under the DHS. In Tittle V - Section 501 of this act, Senate and House of Representatives set broad policy mandates related to Emergency Preparedness and Response. Hence, as part of 22 DHS agencies, FEMA ensures that citizens are prepared for, would respond to, and could recover from all natural and manmade disasters. Thus, Emergency Management policies consist of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and Related Authorities describing declaring disasters and emergencies in receiving assistance, and the Post-Katrina Emergency Management Reform Act of 2006 (Public Law 109-295) reviewing the Homeland Security Act and the Stafford Act provisions.

As a result, based on the Congressional delegation of authority to the Department of Homeland security, the DHS has developed through the 2004 Executive Order 13347, the Office of Disability Integration and Coordination (ODIC) under FEMA as the way to enhance federal, state, and local cooperation (Boyce, 2014) in supporting evacuation efforts of PWD for emergency preparedness (Davis & Phillips, 2009). Accordingly, FEMA has promulgated regulations, issued guidelines related to planning of disaster preparedness, warning, and public evacuation towards designated shelter.

# **Effect of ADA Laws on Evolving Disaster Preparedness Policies**

At all levels, governments have progressively addressed issues affecting PWD since the signing of the ADA in July 1990 proscribing discrimination in the provision of public services. According to Scotch (200 P. 1. 93-1121, 2009) Section 504 of the Rehabilitation Act of 1073, seen as the first major civil rights reaching for PWD, has mended earlier federal disability policy in instituting disabled full social participation. Further, Executive Order 13347 signed into law on July 22, 2004, furthered the ADA's goals in strengthening emergency preparedness (Boyce, 2014; Davis & Phillips, 2009).

Yet, when the DHS issued the Nationwide Plan Review Phase 2 on June 16, 2006, including a section about the needs of PWD, the report established that only a few plans agreed with the ADA's lawful requirements (Jones, 2010). Indeed, ADA lasting ambiguity over the quality of services required and FEMA's unrealistic and unattainable standards for compliance (Nishamarie Sherry, 2011) keep confusing local emergency officers' planning for PWD integration in disaster preparedness. The ADA did not include provisions directly applicable to disasters, even though ADA's nondiscrimination

provisions are by some means related to disaster preparedness planning and responses (Jones, 2010). Further, ADA did not address the needs of all disabled such as children with disabilities (Lavin, Schemmel-Rettenmeier, & Frommelt-Kuhle, 2012).

Similarly, Christensen et al. (2007) pointed out acute concerns about the evacuation procedures recommended in the ADA accessibility guidelines. Christensen et al. mentioned the lack of accessible environments without any indication about promoting or building PWD environments. Emergency planners must further look for solutions that enable PWD to overcome environmental obstacles (Loy & Batiste 2004; Parr, 1987) and evacuation communication issues (Turner, Evans, Kumlachew, Wolshon, Dixit, Sisiopiku, Islam, & Anderson, 2010), reducing greater risks features for those vulnerable populations.

Disaster outcomes have revealed the insufficiencies in including PWD needs in preparedness strategy (Kettaneh & Slevin, 2014; Galea, Norris, & Sharrieb, 2010), and a number of studies have further underlined concerns related to PWD in disaster (Ahronheim, Arquilla & Greene, 2009; Banks, 2013; Gibson, 2014). Mainly focusing on people with mobility impairments, evacuation studies rarely refer to evacuation needs for individuals with severe learning or cognitive disabilities (Shields, Smyth, Boyce, & Silcock 1999), who have trouble processing or understanding evacuation messages. Putting the ADA's law in practice during the aftermath of the September 11 terrorist attacks has highlighted new urgency for the emergency needs of PWD.

While expanding the definition of disability, the ADA Amendments Act of 2008 (ADAAA) increased the number of disabled, taking away the differentiating cushion

between nondisabled and disabled (Emens, 2012). Accordingly, the DHS did not fully implement joint strategies to meet mutual needs and failed to develop compatible policies and procedures guidance across agency boundaries (Government Accountability Office [GAO], 2007). GAO (2007) further sustained that the lack of effective information sharing may influence DHS Security Information Network to duplicate state and local capabilities, and accordingly raises other duplication issues within the department.

All the same, in addition to challenges associated with the information system, the DHS has inspired emergency planners to enhance the evacuation processes of disabled population should disaster strikes (NOD, 2009), and further urged preparedness organizers to associate community members with disabilities in emergency planning (Rooney & White, 2007). Accordingly, the department has suggested making preparedness training available that include PWD. In view of that, FEMA has testified providing trainings that may not be uniformly available through states, but that are intended to have eligible local participants identify and address their capability gaps before disaster strikes (FEMA, 2014), to avoid the magnitude of fatalities noted in previews calamities.

The Post-Katrina Emergency Management Reform Act of 2006 added to FEMA, and the disability coordinator encouraged the state and local jurisdictions to consider the unique needs of PDWs in emergency preparedness planning (Executive Order 13347, para. 3). Indeed, the application of disability laws in disaster preparedness planning has shown that executive orders are merely documents of good intentions with little

authoritative value (Cooper, 2001), focusing narrowly on the disability rather than emphasizing difficulties dues to the unique needs of PWD.

# **Lessons Learned Regarding Previous Disasters**

Frieden (2006) said that needs of PWDs were disregarded by rescuers during Hurricanes Katrina and Rita. Other researchers underlined the invisibility of PWD to emergency officials (Twigg, Kett, Bottomley, Tan, & Nasreddin, 2011), their vulnerability and evacuation experiences (Boon, Pagliano, Brown, & Tsey, 2012; Davis, Hansen, & Mincin, 2011; Peek & Stough, 2010; Wolbring, 2009), extremely contrasting from the one of persons without disabilities. More recent studies on the evacuation reported issues due to mixed ability populations (Fahy, 2013; Shields, Boyce & McConnell, 2009), and constraints in route planning (Shekhar et al., 2012). Most of the transportation system was not wheelchair accessible, and emergency warnings were not in compliance with federal laws. In the same view, the GAO reported that deaths and damages caused by Hurricane Katrina were due to poor leadership, failures of emergency warnings methods, organizational deficiencies, and insufficient statutory authorities (Bea, 2007). As a result, the Congress reviewed strategies that reorganized FEMA and its parent, the DHS. Six statutes included the Post-Katrina Emergency Management Reform Act of 2006 (Title VI of P.L. 109-295 (H.R. 5441)) and enacted the SAFE Port Act of 2005 to enhance future FEMA duties.

Still, 6 years later Santora and Weiser (2013) described the nightmares of Hurricane Sandy, where cities remained in darkness with PWD in high-rise buildings stranded for days, unable to get out and waiting for help to arrive. Hurricane Sandy has

shown that the nation's planning for disaster is still falling short. The Heritage Foundation Emergency Preparedness Working Group (2012) recommended that more disaster response responsibility go back to the states to avoid overlooking the local community's role. In support of that, when Sandy hit the east coast, local community groups get actively implicated in the disaster response to Sandy, adding to the American Red Cross and Salvation Army's efforts.

As Congress has enacted the Emergency Management Reform Act of 2006 enhancing guidance for the Federal Emergency Management Agency (FEMA), the Americans with Disabilities Act (ADA) of 1990 and 2008 as amended (ADA, 1990, 2008), has established that emergency planners should include the needs of people with disabilities (PWD) in disaster preparedness planning. The Department of Justice (DoJ) further extended these protections to help eliminate discrimination against disabled people when disasters strike, in all state and local government disasters management programs, services, and activities. Actually, FEMA's (2014) is expected to support crisis sites 'residents and first responders' effort in pooling together as a nation to get ready for, react to, recuperate from, and alleviate all disaster threats, and be in accordance with the requirement of Section 508 of the Rehabilitation Act, for the all information accessibility to PWD.

Growing demographics, climate changes, (Blaikie et al., 2014; Heltberg, Siegel & Jorgensen, 2009; McEntire, 2009; Myers et al., 2013; Weber, 2010), and likelihood of a greater number of devastating terrorist acts prevailing in current environment have led to increase exposure to risk factors (Field, 2012; Haddow, Bullock, & Coppola, 2013) that

calls for a change in emergency management processes. A good example is Hurricane Sandy's response where agencies recognized the ineffectiveness of their way of providing assistance that was not suitable for population-dense cities like New Jersey and New York (Fugate, 2013), and that emergency management processes need to be redesigned with evolving strategy of action (Comfort, Oh, Ertan, & Scheinert, 2010), from the ground up to provide support to a large number of individuals. Moving forward, DHS and FEMA agencies recognize the need to lower the country's overall spending for and susceptibility to calamities through focusing on citizens' resiliency. Fugate (2013) declared that government agencies have been overestimating their ability to deal with disasters, as their processes of just preparing, responding, and rebuilding in disasters' aftermaths are not enough.

Emergency preparedness responses are based on actions undertaken before an emergency to prepare communities for when a disaster strikes. Preparedness planners advocate that everyone, including PWD, is individually responsible for their own protection (FEMA, 2009; Lindell & Perry, 2012; American Red Cross, n.d.) at the time of disasters. To illustrate, people must allocate discretionary income to retain emergency water and food on hand (Foreman & Burke, 2008; Rawls & Turnquist, 2010; Redlener & Reilly, 2012), pay for emergency kits, and prepare in due course with transportation costs, evacuation costs, and provisional shelter expenses (NCD, 2009). Whereas local emergency measures are rarely, if ever, activated (Henstra, 2010), and emergency management planners are promoting individual and family responsibility to protect themselves and assist family members with disabilities at the time of disasters, the

Department of Justice (DOJ) issued an ADA guide highlighting the role of local government's primary responsibility for protecting their citizenry from harm and proclaiming disaster preparedness and response programs easily reachable by PWDs (DOJ, 2010), in line with public perception of disaster-related assistance as a fundamental governmental role (Waugh, 2000) and as a societal responsibility (Prosser & Peters, 2010). By implying that people with disabilities needed to undertake more individual responsibility to elude disasters' consequences, emergency preparedness management and first responders are circumventing social responsibilities of disaster planning in an effort to promote a safer environment for everyone (National Council on Disability, 2009).

Both disability organizations and emergency planners recognized that their joint planning efforts are essential in supporting the safety of PWD in disasters (Norwood et al., 2011). Unfortunately, little interaction exists between emergency management and disability service providers (NCD, 2009). As a matter of fact, voluntary organizations are rarely connected to local and national disability organizations (NCD, 2009), and emergency planners and disability organizations do not know each other. As Norwood et al. (2011) pointed out, the emergency procedures of FEMA and the American Red Cross are rigid; while FEMA provides shelter with no support services, the American Red Cross delivers basic supplies. None of the supplies are specific to PWD.

In addition to this contradiction, little connection (Norwood et al., 2011) exists between PWD communities, voluntary organizations, and emergency management.

Furthermore, Fox et al. (2007) brought up the organizational challenges between

emergency preparedness agencies emphasizing that PWDs were underrepresented in disaster preparedness planning. Norwood et al. (2011) declared that local jurisdictions should create working groups of emergency operations plan to address the needs of PWD and organize cross trainings on disability and disaster impacts with first responders, disaster planners, and voluntary and disability agencies.

For Peerbolte and Collins (2013), emergency preparedness managers need to possess critical thinking skills in order to effectively and efficiently anticipate situations and manage risk. Likewise, the Government Accountability Office (2009) reported on FEMA's lack of basis to operationalize and implement its conceptual approach for assessing local, state, and federal preparedness capabilities against capability requirements (GAO, 2009). Literature on emergency preparedness for PWD suggested best practices for uniting disability and emergency management communities (Davis & Phillips, 2009; Matherly & Mobley, 2011) and made recommendations mostly about what should be done without providing how to apply those recommendations (NCD, 2009), leaving emergency planners and disability organizations with suggestions that have no implementing strategy.

### **Influence of Federalism on Disaster Response**

The Founding Fathers foresaw centralized power as a threat to peoples' rights and liberties (Hamilton, Madison & Jay, 2007; Williamson, 1990; Zimmerman, 2009). As a result, the constitution resolutely restricted the central government's power while providing it with sufficient authority to protect the national interest (Bodenhamer, 2007). Since its implementation, the Presidential branch has grown from three executive

departments in 1789 (Oleszek, 2010) to 15 developed throughout the years, including the newest: Homeland Security (DHS). While the Founding Fathers believed that special mention of oversight in the Constitution was not necessary (Schlesinger & Burns, 1975), Congress has had increasing influence on the executive branch's activities (Bowers, 1989). The impact congressional oversight has (Bowers, 1989) on making the DHS an administrative agency has increased its authority as well as its accountability. Analyzing oversight and management approaches of officials at different levels of government captures the dynamic nature of disaster definition (Sylves, 2015), and the impact of emergency planning and response on intergovernmental relations.

Congress has the latitude to revisit and amend existing laws (Ostrander & Sievert, 2014). Further, Congress holds the appropriations tools that shape public policy, influence decision makers, and impact the administration processes (Macdonald, 2013). Some researchers have recommended that a Congress should temper its desire of policy control for more policy expertise (Sharkey, 2009; Kraus, 2010) to enhance its institutional ability in evolving necessary enforcement measures and allowing agencies to stand by executive mandates and related reforms instead of depending on political scheming.

Congress has enacted comprehensive policy directives by passing laws to establish the DHS and place FEMA within the newly created DHS. The agencies have generated more thorough guidelines and procedures through rulemaking (Nelson & Yackee 2012; Yackee & Yackee, 2010), while being pulled and pushed between diverse directions by Congress and executive branch (Potter & Shipan, 2013). Through

administrative rule-making, the executive and various independent agencies such as FEMA formulate regulations for better execution of the policies (Harrington & Carter. 2009). Experts such as Krager (2012) argued that the rule-making process reduces the transparency and accountability of democratic government.

The Administrative Procedure Act (APA; 5 U.S.C. Subchapter II - 60 Stat. 237 (1946)) enacted by Congress has become a constitution for administrative agencies (Harrington & Carter, 2009, p.31). Cases have addressed APA's model that encompasses (a) adjudication between parties of interest in deciding about controversies, (b) rulemaking in creating or adjusting regulation according to "notice-and-comment" (Kolber, 2009; Abramowicz & Colby, 2009), (c) usage of discretionary option (Magill, 2009), and (d) judicial review in setting standards courts must follow. Further, while APA explicitly permits agencies such as DHS and FEMA, to take certain steps at their own discretion (Harrington & Carter, 2009, p.31), it does not authorize judicial review of anything the agency does (section 701a). Thus, researchers like Kolber (2009) have encouraged the uses of notice-and-comment informal rulemaking, indicating that direct final rulemaking is too open to misuse.

# **FEMA Disaster Response Coping**

Administrative agencies provide services directly to the public as opposed to roles of legislators and judges. Accordingly, FEMA, under the DHS rule, adds technical expertise to Congress statutes and investigates and adjudicates during disputes arbitrations between the agency and individuals to eventually punish law violators (Harrington & Carter, 2009). Once Congress has enacted necessary APA such as the

Emergency Management Reform Act of 2006, it belongs to FEMA to make its activities public and implement rules (Eguasa, & Nicolai, 2012; Harrington & Carter, 2009; Moteff, 2010). Although administrative agencies are held to be inefficient, Gajduschek (2003) pointed out that the system of bureaucracy has the advantage to reduce uncertainty when it comes to the application of formal law.

Federal and state governments share the power as defined in the United States Constitution, with the states creating local rules. Thus, disaster regulation connects with and crosses through parts of other ruling (Sylves, 2014, 2008) concerning housing, labor, education, environment, social services, transportation, defense, and more. As local and state governments remain in charge of emergency management (Birkland, 2009), they should also consider emergency management as coordinated activities of different level of government (Sylves, 2014), underlining the importance of intergovernmental relationship.

With the creation of FEMA, the federal government became an important source of support of local programs (Birkland, 2009). However, prior disasters such as Hurricane Katrina have exposed the conflictual interest in this "shared governance system" as related to disaster management (Birkland & Waterman, 2008; Birkland, 2009; Gomez & Wilson, 2008; Kearney, Scavo, & Kilroy, 2008; Kweit & Kweit, 2006; May & Williams, 1986; Schneider, 1990). To illustrate the resonance of the Hurricane Katrina's intergovernmental conflict, while the governor in performing his duty was trying to avoid the over-federalization of his state through disaster declarations, the DHS sustained that the responses to Hurricane Katrina's issues did rest on FEMA, not at the local level or

state (Curtius, as cited in Birkland, 2009). Indeed, palpable components for forming a powerful regime through the DHS initiatives have pointed out the challenges of governing across policy subsystems (May, Jochim & Sapotichne, 2009) through previous calamities such as the September 11 attacks in 2001, Hurricane Katrina in 2005, the British Petroleum Deepwater oil spills in 2010, the Missouri tornadoes in 2011, Hurricane Sandy in 2013, and the Boston Marathon Bombings in 2013.

The federal government further impacted the disaster response system with the introduction of FEMA's all-hazards concepts (DHS, Inspector General's Office, 2006), focusing on the prevention of emergency (Birkland, 2009). Indeed, the September 11 terrorist attacks have uncovered deficiencies in local responses to disasters, requiring federal top-down involvement and calling for better emergency preparedness planning. Accordingly, a number of researchers have articulated dissatisfaction with local disaster planning (e.g., Burby, 2006; Campanella & Berke, 2006; McConnell & Drennan, 2006; Olshansky, 2006; Tierney, 2005). Thus, the "all hazards" notion was introduced to recommend localities to accommodate for a variety of hazards (DHS, Inspector General's Office, 2006) instead of focusing on recognizing and assessing their locally-specified hazards (Birkland, 2009; Burby, 2006). This approach has made communities become more vulnerable, which was substantiated when Hurricane Katrina's victims moved from disaster areas to be replaced by higher population densities encompassing tourists, who have purchased their damaged properties. Ultimately, with the all-hazard approach, states and local governments will remain more and more dependent on federal incentives through FEMA, and the federal government will keep on using disaster aid as an

economic and political palliative (Birkland, 2009) to rebuild disaster areas, increasing existing community vulnerability.

Following the Homeland Security Act of 2002, the Executive branch issued Executive Order 13347 as the emergency preparedness guidelines for better execution of the policy and the protection and safekeeping of PWD in disasters. In creating the Office of Disability Integration and Coordination in 2009, FEMA worked in coordination with States Emergency Offices (Kapucu, 2009; Kapucu, Wart, Sylves, & Yuldashev, 2011), organizations like the American Red Cross, and other stakeholders to identify key emergency communications policies, strategies and plans while analyzing priorities and recommendations from researchers. For Caruson and MacManus (2011), vertical constraints of state and federal mandates coupled with horizontal constraints such as local cost-sharing and information-sharing inconsistencies are fundamentally deterring collaboration. Accordingly, local programs managed with FEMA's coordination within a top-down system (Birkland, 2009) are indeed federal decisions made in Washington, DC, that are expected to be implemented and enforced locally. The expected compliance is realized through coercion in reducing money or gaining it in inducements (Birkland, 2009). For example, in federalizing routine disasters based on the Stafford Act, local governments look up to federal resources that nay not meet community needs.

May, Jochim, and Sapotichne (2009) explored national efforts toward building a unified homeland security approach highlighting the challenges of governing across levels of government and through various policy areas. More researchers have drawn concerns about possibilities and boundaries to governing across policy subsystems (May

& Jochim, 2013). Governance challenge was further substantiated in the aftermath of disaster crises, exposing limitations of governmental coordinated efforts to emergency responses. The September 11 attacks led to visible centralized control (May, Jochim & Sapotichne, 2009) though executive orders and further legislations. In the aftermath of those attacks, the centralization of power by the Executive along with the avoidance of legislative actions has created jurisdictional ambiguities and increases policy instability (Moynihan, 2005). DHS was foreseen as the force across the federal government at state and local levels for advancing homeland security efforts (May, Jochim, & Sapotichne, 2009). In analyzing homeland security through the intergovernmental angle, May et al. (2009) argued there is a missing basis for institutional influence in fostering cohesion and reinforcing shared purpose in support of a common goal. May and Jochim (2013) further reproved DHS for its weakness in instigating policy cohesion and fostering a resilient community among local interests and state. Yet, despite obvious weaknesses, homeland security remains to conciliate constant public apprehension over the threat of terrorism (May et al., 2009, p.39; Goodin, 2006).

While some PWD spend considerable time in long term care (Braddock et al., 2011), most of them share the same communal environment as the nondisabled and are entitled to equal access to emergency services (Stough, 2014). Studies have evidenced difficulties PWD are facing in accessing public services, such as unemployment benefits, in the aftermath of disasters (Stough, Sharp, Decker, & Wilker, 2010). At the same time, when disaster strikes, children with disabilities rely on custodial support (Peek & Stough, 2010) and go through unimaginable trouble. Consequently, in including PWD in

preparedness, current practice in emergency situations focus on PWD's functional needs rather than their diagnostic limitations (FEMA, 2010). Further, the ADA Amendments Act of 2008 has made important changes to the definition of the term disability by rejecting the holdings in several Supreme Court decisions (DBTAC, 2008), allowing people to seek for safety under the ADA without extensive analysis (Vickers, 2010; Zirkel, 2009), changing the way related legislative terminologies should be understood, and therefore dictating for reconsideration of prior regulations. Still, the impact of the federal government's power will be ever mounting as most local emergency managers do not have the expertise and the power to prevent terrorist attacks (Birkland, 2009) which functions are invested to Central Intelligence Agencies (CIA) and the Federal Bureau of Investigation (FBI) under the DHS.

# Disability Lawmaking and Midnight Period's Regulations

The Americans with Disabilities Act of 2008 was amended and decreed to be in effect on January 1, 2009, under new starting office. Such surges in regulatory activity have demonstrated that when an office running's time is at the termination stage, submissions of economically important guidelines virtually double. McLaughlin (2010) pointed out that such political burden to quickly approve changes in regulations overwhelms regulatory activity and hinders the review process at the Office of Information and Regulatory Affairs (OIRA). Brito (2009) highlighted that while submissions of new regulations increase during the "midnight period," the resources available to the OIRA remain constant. Brito (2009) has further proposed to reduce the

impact of midnight period's regulations by setting quantitative limits to agencies' submission to OIRA during that time period.

The term disability broadened with the ADA amendment (ADA, 2008) and extended the number of disabled and generated economically significant impacts for number of administrative agencies (Bissonnette, 2009; Cox, 2010), such as the Department of Education. In the United States, 54.4 million people are individuals with disabilities (U.S. Census Bureau, 2010). In California alone, more than 4.8 million individuals over 18 years old are disabled (National Center on Birth Defects and Developmental Disabilities, 2009). This has resulted in an increasing number of students with disabilities in need of special programs, the increased integration number of individuals with different types of disabilities in emergency preparedness planning and drills, the increased impact of the Disability Rights Section of the Department of Justice on buildings' safety codes for the removal of PWD from buildings; and the increased requirements from the Department of Labor for reasonable accommodations in accordance with the Equal Employment Opportunity Commission (EEOC). Each of these changes stimulate rethinking planning for and responding to disaster preparedness integrating PWD and related social benefits (Burkhauser & Daly, 2012; McInerney & Simon, 2012) as new regulations increase during the presidential midnight period have substantial impact on federal, state and local governmental program.

# Influence of the Agency Head on Rulemaking

Regulations are not something administrators can decide to implement or not; they are required by federal law. While the legislature uses restrictions in appropriations

to control rulemaking (Oleszek, 2013) that have substantial effects on public policy, Presidents appoint agency heads who share their political beliefs. Agency heads might influence rulemaking when using their discretionary power and choose to forgo prior notice and comment rules (O'Connell, 2011). Because of the position of administrative agencies vested with powers from government, DHS's decisions and doings come to be mandatory for the public (Kaufman, 2008). Ultimately, DHS and FEMA's agency heads are somewhat limited as rulemaking is a process with prescribed set of stages that must be followed to create rules, even though they may be able to pass new rules without prior opportunity for comment as direct or interim final rule (Downs, as cited in Kerwin & Furlong, 2011). Thus, public comments play an important role in shaping and revising regulations. So, by circumventing notice-and-comments, agency heads generate more litigation risk, somehow considered essential to the meaning and implementation of public policy (Carey, 2013)

In view of that, effective homeland security policy implementation is calling for a more decentralized approach of working with state and local government. A good example is the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act), which has a great impact on disaster preparedness strategy (Gasper & Reeves, 2010). Public laws have influenced the running of disaster assistances (Lindsay & Murray, 2011), and this has led FEMA to federalize a number of routine disasters based on the Stafford Act, with federal government providing 75 to 100% of declared disaster bills (McCarthy, 2010). In the aftereffects of Hurricane Sandy, the federal government provided a total emergency spending of over \$60 billion from the Disaster

Relief Fund (FEMA, 2013). Nevertheless, people frustrated for being left without homes, food, or clothing for weeks began to criticize FEMA's response (Chiaramonte, 2012).

Main complaints were about FEMA head's lack of communication (McGlone, 2012).

So, states have cut their budgets for public assistance and instead rely on obtaining emergency response bills from the federal government whenever a disaster strikes. The Heritage Foundation Emergency Preparedness Working Group (2012) has pinpointed that without returning responsibility back to the states, the federalization of routine disasters will keep on calling for more and more from FEMA. Mayer et al. (2011) stated that state and local governments should run their own disaster responses because they know their own geography, people, business conditions, and needs better than the federal government ever can.

Ultimately, the implementation of Americans with Disabilities Act (ADA) in FEMA disaster preparedness strategies has revealed controversies. The ADA was enacted by the Congress in 1990 to proscribe discrimination based on disability (The ADA, 42 U.S.C. §§ 12101 et seq). Hence, the implementation of ADA in relation to emergency preparedness revealed system shortfalls as the Congress creates statutory laws, the Judicial interprets related laws and those laws are improperly enforced by the Executive at the local level.

# **Challenges of Disaster Preparedness Rules Enforcement for PWD**

Because they are the first responders to emergencies, state and local level law enforcement agencies need to be committed to and in accordance with federal principles (Roberts, 2005) for effective disaster response preparedness. However, studies have

established that the majority of law enforcement officers hold low perceptions of federal-local cooperation (Stewart, 2011). In the same view, Marion and Cronin (2009) evidenced that following September 11, 2001, more law enforcement staff recognized the need to increase communication within the state and between state and federal institutions. On the other hand, Bean (2009) found that there is no evidence that information sharing among government levels improve preparedness. So, developing a culture of information sharing may not really help disaster response and recovery efforts (Gerber et al., 2005; Gerber, 2007), and ultimately undermine concerned agencies' related strategy.

The 9/11 terrorist attacks also brought mandated changes in law enforcement roles at all levels of government and local policing that led to unclear and undefined responsibilities in the DHS initiatives (Marion & Cronin, 2009). Stewart (2011) found that local law enforcement agencies have generally low perceptions of federal-local collaboration. Indeed, the level of collaboration influences the viewpoints of emergency preparedness planners and local agencies enforcing correlated regulations. In the same view, researchers like Giblin, Schafer, and Burruss (2009) looked at law enforcement agencies views of DHS and stressed the influences of funding and environment on local implementation of homeland security measures.

Hence, FEMA and its parent the DHS, are charged with enforcing the rules they have created to execute through "actions that encourage compliance with the Constitution," compliance with the Congress statutes, compliance with agencies rules, and "compliance with adjudicatory outcomes directed at individual parties" (Harrington

& Carter 2009, p. 266). Enforcement is a matter of compliance with policies/rules that provide unambiguous standards to facilitate the measurability of related rules' compliance. For Morgan and Young (as cited in Harrington & Carter, 2009, p. 268), regulation is the mix of three capacities: a capacity to set standard, a capacity to gather and monitor information, and a capacity to modify behavior. Harrington and Carter (2009) further stressed the characteristic of enforcement as related to the form of sanctions imposed, the strategies used to pressure constituents, and the impact of citizen litigations. The purpose of enforcement thought the regulatory process is to induce obedience with the law and obtain results. Thus, the Administrative Procedure Act (APA) in its Section 551 has defined various sanctions that are to be enforced for noncompliance to rules. While all forms of sanctions imposed for violations to regulations are punishments or sentences, they are not always proportionate to the damage created by noncompliance to regulations.

Indeed, current requirements of preparedness planning need to be enforced. The lack of enforcement of federal law provisions addressing the needs of people with disabilities is repetitively reflected in legal complaints, spotlighting local emergency preparedness practice being not in compliance with disability laws and regulations (National Council on Disability, 2012). Accordingly, the Federal Communications Commission (FCC) has started enforcing policies over emergency notifications and access to critical information for all (California State Independent Living Council, 2004). However, the majority of local emergency planners could not achieve preparedness plans that include proper notifications for the disabled with visual, hearing, and cognitive

impairments. Wentz et al. (2014) found that out of 26 counties evaluated, 21 had violations of Web alert sign-up processes for PWD. Thus, while local governments suggest Web page sign up as part of preparedness plans to receive timely emergency warnings, PWD have trouble acceding to emergency-related information at the same time that the general public.

For Silvers (2001), the medical description of disability continues to influence legal thinking despite contrasting evidence between biological identification with intrinsic limitation or inability. In her research, Silvers (2001) demonstrated that the methodology utilized by the Court in regard to the disability classification as a matter of juridical uniformity is biased and does not meet even the consistency standard. Indeed, PWD are not a homogenized group, as disability conditions might increase vulnerability of individuals. In fact, in enacting ADA, Congress has differentiated between disabled capable to perform social function and those unable to walk. Accordingly, people who report acute incapacity or severe cognitive disorder would be less likely to report household emergency preparedness and disaster communication plan.

In reference to the compliance to the Homeland Security Act of 2002, the Executive Order 13347), FEMA's 2009 Office of Disability Integration and Coordination, and the ADA, Kailes (2008) said, "The challenge people are facing is that emergency preparedness systems are planned for people who can see, walk, run, and quickly comprehend and react to directives and warnings" (p. 10). During recent violent storms on the East Coast, the nation's Emergency Alert System, which requires individual with disabilities' accessibility to emergency information, was never activated by local

authorities (National Council on Disability, 2006). Yet, the broadcasting agencies received fines and penalties instead of criminal sanctions for harming so many people. Kailes (2008) noted that people with disabilities continue to lose lives because lessons learned from prior disasters are not yet uniformly applied and enforced. In determining compliance, citizens must understand their state's disability rights laws as each state has its own disability rights laws (Stephen, Rosenbaum, and Boalt, 2011), with specific definitions, requirements, and enforcement processes that complement the ADA.

Indeed, laws need to be backed up with enough appropriation to fully implement them and avoid system failure (O'Reilly, 2009). O'Reilly (2009) further added that the execution of any public policy requires the administrative body in charge of running the program to have the people, the laboratory, the equipment, the technique and the ability to do what Congress are expected them to do. Thus, there is still much confusion as to agency roles and funding (Marion & Cronin, 2009), raising the problematic of the role of state and local forces in DHS/ FEMA in disaster preparedness rules enforcement.

#### **Landmark Lawsuits of FEMA Rulemaking**

During the terrorist attacks on September 11, 2001, when individuals with disabilities were left behind in the evacuation process because they responded to the "wait-for-help" practices as recommended by emergency evacuation protocol (Gerber, Norwood, & Zakour, 2010). This protocol meant the PWD were the last to be evacuated, and many died as a result of having to wait (Frieden, 2005). To combat this, the ADA (1990) has established that emergency planners should include the needs of PWD in disaster preparedness planning. Following that, ADA as amended (ADAAA, 2008) came

to reverse the courts' narrowing interpretations (Emens, 2012) of disabled Americans. Further, the Congress enacted the Homeland Security Act of 2002, which has engendered the DHS, aiming to prioritize disaster preparedness and recovery through the coordination of various agencies, including the FEMA. Similarly, the DHS (2013) recommended in its National Preparedness Report that PWD be integrated in disaster planning process, drill trainings, and evacuation plans.

Still, the Homeland Security Act of 2002 failed when put on trial during Hurricane Katrina. Congress has since revised policies and reorganized the FEMA and its parent the DHS (Bea, 2007) in order to enhance and clarify their mission, functions, and authorities with the "Post-Katrina Emergency Management Reform Act of 2006" (See Title VI of P.L. 109-295 (H.R. 5441). However, PWD keep maintaining that they will have difficulty evacuating to shelters (National Organization on Disability, 2004; United Nation Office for Disaster, 2013). Further, deficiencies in disaster preparedness planning for PWD were substantiated following revolutionary lawsuits of national importance against the County and City of Los Angeles (Marshall, 2011- Case 2:09-cv-00287-CBM -RZ; Disability Rights Advocates, 2011) and more recently against the City of New York (Furman, 2013 - Case 1:11-cv-06690-JMF 11/07/2013) in the aftermath of Hurricane Sandy. Both legal complaints' outcomes have revealed disaster planning shortcomings for PWD such as the inability of hearing-impaired individuals to understand disaster drill announcements or the unfamiliarity with evacuation plans for mobility impaired persons (Disability Rights Advocates, 2011) in need of essential assistance to efficiently and safely evacuate their habitation. And so, the lack of enforcement of federal law

provisions addressing the needs of PWD (National Council on Disability, 2012) is repetitively reflected in legal complaints, spotlighting local emergency preparedness practice not being in compliance with disability laws and regulations.

The plaintiffs contended grounds of deed such as

(1) violation of Title II of the Americans with Disabilities Act (ADA); (2) violation of Section 504 of the Rehabilitation Act of 1973 (Section 504); (3) violation of local statutes such as the California Government Code § 11153., and the California Disabled Persons Act (CDPA) California Civil Code § 54, et seq. (Marshall, 2011, Case 2:09-cv-00287-CBM -RZ)

The disagreement has highlighted that the defendants' disaster preparedness programs inadequately meet PWD' needs. On the other hand, defendants have failed to include adequate provisions in the emergency preparedness programs for hearing impaired or cognitive disabilities individuals in order to allow them to evacuate towards shelters during disaster. Further, no evidence in local government's records has corroborated compliance with laws in assisting PWD during a disaster (Marshall, 2011, Case 2:09-cv-00287-CBM -RZ). Thus, failure for agencies' policymaking to adequately enforce regulations may undermine the very quality that makes presidential policymaking generally desirable (Deacon, 2010).

Kerwin and Furlong (2011) sustained that when litigation occurs, judges frequently accept agreements reached by parties, and as such, settlements are a common means of ending a lawsuit (p.249). Consequently, related to the cases mentioned above, the landmark ruling has raised that cities have violated the ADA by failing to meet the

needs of its residents with mobility, vision, hearing, mental, and cognitive disabilities in planning for disasters (Marshall, 2011, Case 2:09-cv-00287-CBM -RZ). Further, court order calling for the revision of the local disaster plans to include PWD was established and accordingly settlement was attained for local authorities.

# Implication of Theory and Concept in Disaster Preparedness for PWD

This section of the literature review is based on a conceptual framework that draws on Sylves' (2014) normative political theories, including the Jeffersonian,

Hamiltonian, and Jacksonian approach to disaster policy and management; the principal-agent theory; and Wright's (1978) models of intergovernmental relations, stressing on the lack of sufficient guidance (FEMA, 2010) that would influence local disaster preparedness in addressing the needs of individuals with disabilities. This section will first cover the law implementation concept through the light of the organizational development, the top-down, and the multi-focus approaches. Next, the review covers the normative political theories sustained by Sylves' (2014) to seize the influence of emergency managers' attitudes in local preparedness plans and determine local disaster preparedness agencies' efficacies in performing functions such as warning, searching, evacuating, and rescuing PWD before and after disaster strikes. Then the review covers the concept of vulnerability to present the principle of giving equal chance at survival to each person (Taurek, 1977).

# Law Implementation Theoretical Concept

The implementation of disaster planning policy is fundamental for policy-makers and planning managers as well as for the general public, including the disabled

community. For the research community, implementation theory provides a substance for sustaining the processes and foreseeing outcomes. According to May (2013) implementation science needs comprehensive, robust, and rigorous theories that explain the social processes that lead from inception to practice. In this study, implementation is modifying actual social system by fulfilling law requirements and bringing into operation new practices in integrating PWD in the disaster preparedness planning. Thus, the aim of implementation of a theoretical concept is to allow field practitioners to identify and explain processes and related outcomes of preparedness planning activities from initialization to incorporation.

Events such as the September 11, 2001 terrorist attacks have given opportunity to a great system change for policy-makers in the homeland security and emergency preparedness policy, but policy change may not yield desired results (Cerna, 2013) if the related implementation process is not taken into consideration. The main question remains for how to reflect federal goals of legislating appropriate emergency preparedness policy and the implementation of policy requirements for integrating PWD into local-level plans.

#### **Organizational Development Approach of Law Implementation**

Although emergency preparedness is a fairly new domain of public policy (Sylves, 2014), the concept of policy implementation is a popular one. Contemporary academics' contributions have influenced preparedness phases of planning, response, recovery, and mitigation while overlooking the challenge of disaster preparedness policy implementation at the local-level. Scholars such as Pressman and Wildavsky (1973),

Hogwood and Gunn's (1984), and Ham and Hill (1984) are considered the precursors in the debates of policy formulation and implementation. They were followed by quite a few researchers recognizing the continued importance of the subject, pointing out shortcomings and proposing improvements (Barrett, 2004; John, 1995; Lester & Goggin, 1998; May, 2003; O'Toole, 2004; Parson, 1995; Ryan, 1996; Schofield, 2001; Schofield & Sausman, 2004; Sinclair, 2001; Winter, 2003). Along the same lines, the law implementation models of Yudof (1981) rejected the validity of one general implementation theory and elaborate on four implementation models of system management, bureaucratic process, organizational development, and conflict and bargaining.

Depending on socio-political environment, politics and public policy decisions such as integrating PWD in disaster preparedness planning may call for different implementation strategies (Coppola & Maloney, 2009; Patterson, Weil & Patel, 2010) and produce different outcomes. Actually, in carrying out the Court's directives, planners' objectives in achieving policy implementation are based on an organizational development approach (Yudof, 1981). In this approach, policy implementation of disaster preparedness planning is left largely to the discretion of local authority (Yudof, 1981), taking account of local concerns and problems for the PWD integration in the preparedness planning process. Thus, when legislatures and administrative agencies engage in implementing and promoting public policy decisions to manage social change, they often encounter difficulties when things do not always work out as decision makers anticipated. Yudof (1981) further stated that when the "Court feared that it could not

force compliance and that top-down orders would be ignored, the most feasible strategy is to co-opt those responsible for implementation and give them a shared sense of responsibility" (p. 449).

However, because of the lack of enforcement of federal law provisions addressing the needs of people with disabilities (National Council on Disability, 2012), the organizational development approach of policy implementation has exposed preparedness practices incompliance with disability regulations, in charge agencies lack of sufficient guidance (FEMA, 2010), and planning shortcomings during the evacuation of PWD before or during an emergency. As a result, critics have condemned discrepancies between written preparedness plans and evidence of jurisdictional preparedness provisions (Perry & Lindell, 2003), denouncing the lack of standardized federal preparedness planning for PWD. To substantiate that, researchers like Berke, Smith, and Lyles (2012) referenced the federal Disaster Mitigation Act (DMA) of 2000 calling for states plans engaged to hazard mitigation based on community vulnerability analysis.

Legislators enact laws that allow institutions to achieve plan implementation to reflect statute purposes. Yet, politics remains an obstacle for implementation based on the traditional implementation approach (Brodkin, 1990; Robichau & Lynn, 2009; Saetren, 2005), mainly due to translating policies to practices by administrators. Conversely, May and Jochim (2013) noted the relationship between policy and politics as an asset influencing the perception of policy implementation, as policy evolution. They stood by the notion of policy implementation to include politics is a tremendous contribution to policy theorizing (May & Jochim, 2013, p. 442). In the same view, Hacker (2010)

showed that the interplay of policy and implementation among level of government is central to governing (p. 872). Indeed, agencies like DHS are influenced by intergovernmental and interagency relationships. As such, its policy implementation is largely influenced by public feedback to policies or political governing realities.

Accordingly, disaster management that includes PWD required the integration and interrelations of various agencies, policies, and levels of government. For example, in creating the Homeland Security Act of 2002, legislature focused on the organizational concern (Waugh & Sylves, 2002), greatly emphasizing on responses to anti-terrorism efforts (Roberts, 2005) without paying much attention to priorities and cultural differences (May & Jochim, 2013) of other adding agencies.

#### Top-Down and Bottom-Up Concepts and Law Implementation

The top-down and bottom-up approaches have marked researches on policy implementation with scholars such as Hill and Hupe (2002). While bottom-up theorists have argued policy is in essence local, top-up theorists have perceived policy makers as principal actors. The top-down concept leads to centralism and control requirements such as budget and assessment (Elmore, 1978, p.185, p.189, p.191), seeing legislature acts as their starting point and implementation as a mere administrative process (Berman 1978; March & Sætren, 1986). Thus, critics have further condemned the theoretical and empirical norms of the top-down approach for being unable to faithful policy delivery in democratic societies.

On the other hand, the bottom-up perspective makes street-level bureaucrats the real policymakers in applying public policies (Winter, 2003, p.214), seeing a societal

problem as their starting point with implementation success depending above all on the expertise of people in the local implementation structure. For Winter (as cited by Hull & Hjern, 1987), central initiatives remain poorly adjusted to local conditions, so that rules generated by central actors are led by local implementing contextual factors (Berman, 1978). Thus, the bottom-up viewpoint is not providing satisfactory results either (Paudel, 2009). Indeed, researchers have not evidenced yet a theory of policy implementation that leads general agreement; scholars keep on working from diverse theoretical angles (O'Toole & Montjoy, as cited by Lester, 1995, p.84), further declaring early implementation research as misery research (Rothstein, 1998), stressing on application failures of disasters policy (Hill & Hupe, 2003). In combining the two schools, Matland (1995) deplored the lack of theoretical policy implementation structure (p. 170), contending that central authorities inevitably influence administrative microimplementation process of policy through decisions on funding and jurisdiction. As a result, implementation is still in its infancy (Goggin et al., 1990, p.9), making concrete theory of policy implementation still lacking.

The federal government's top-down control style of disaster managing never fully considered the way local preparedness organizers work in practice (Birkland, 2009). This is further substantiated as planning process and implementation are developed in spite of appropriate public opinion (Cullingworth & Caves, 2014). In the same view, Schneider (2011) made a great contribution in the field, stressing three possible patterns of policy implementation that are depending on the significance of the gaps between population emergent norms and bureaucratic norms of governmental response. For Schneider, the

smaller the gap, the more policy implementation provides appropriate guidance to communities for upcoming disaster. A moderate gap would translate contradictions between policy and practice that might lead to uncoordinated actions from different agencies at various level of government (Schneider, 2011). By the same token, a considerable gap between pre-existing policy standards and implementation practices would reveal the breakdown of the intergovernmental disaster response process along with criticisms of governmental activities, media and public attention. Under the last scenario, local and states governments would be unable or unwilling to handle the crises (Schneider, 2011). This description resembles the aftermath of disasters such as the September 11 attacks and Hurricanes Katrina and Sandy, where federal government stepped in, supplementing the bottom-up intergovernmental response by the top-down implementation process.

### **Multi-focus Perspective of Law Implementation**

Publications on policy implementation have continued to proliferate considerably in a more multidisciplinary way (Saetren, 2005). In this view, inter-governmental relationship and partnership with nongovernmental actors have influenced the process of policy implementation concerning service delivery's responsibilities (Kettl 2000; Kernaghan, Borins, & Marson, 2000; Pal, 2006; O'Toole 2000). Still, the principal concern shared by theoretical viewpoints on policy implementation remains the role of emergency managers in representing federal goals while interacting within local environments and with local actors in the provision of calamity responses' strategies. As a result, the approach to research on policy implementation has developed into a multi-

focus perspective that examines different levels of policy action of federal, state, and community levels and their organizations, consisting of interest coalitions within a policy subsystem (Hill & Hupe, 2003; Sabatier & Jenkins-Smith, 1993). Without expounding on these approaches and further elaborating on the growing body of literature on policy change and implementation, the present study's focus is on selected approaches of law implementation theoretical frameworks as substantiated by Sylves's (2014) normative political theories, which were deemed the most applicable in this view for understanding the multi-actor implementation context associated to homeland security initiatives and disaster response at the local level.

#### **Normative Political Theories**

Sylves (2014) provided an overview of how and where theory knowledge fits in the evolution of emergency management as a profession and disaster policy as a domain of public policy. In this study, I will use the normative political theories as study tools, relating disaster policy implementation to notions of emergency managers' know-how approaches (Sylves, 2014) as locally appointed federal officials in the context of intergovernmental and interagency collaboration in preparing for, responding to and recovering from calamities (Kendra & Wachtendorf, 2003; Moynihan, 2005).

Sylves (2014) argued for the development and application of theories and concepts related to disaster policy. Disasters to date have underlined the issues of policy implementation in a system of centralized control and decentralized execution provided by the federalism and the intergovernmental relation in emergency management (McGuire & Silvia, 2010). Hence, a disaster is fundamentally a local event; before the

nation sees the facts on the media and before national rescuers arrive, the locality has to use its capacities to respond to the calamity (Schneider, 2011). Hurricane Katrina showed that preparing for and responding to disaster by local government within federal goals through the DHS initiatives is a matter of emergency managers' know-how approaches (Sylves, 2014) and their understanding of intergovernmental joint effort in preparing for, responding to, and recovering from disasters (Kendra & Wachtendorf, 2003; McGuire & Silvia, 2010; Moynihan, 2005) during policies implementation process throughout the phases of preparedness, response, recovery, and mitigation. In that view, Sylves (2014) contended that emergency managers need to have the professional skills and abilities to establish their profession and understand their role in the policy process and grasp the significance of political and managerial theories relevant to their work.

Under the normative political theories (See Figure 1), emergency managers appear to be the application side of disaster policy (Sylves, 2014), coordinating disaster responses efforts of officials at different levels while contributing in agenda building, policy formulation, implementation, and evaluation. The three normative theories, based on America's forefathers, are the Jeffersonian, the Hamiltonian, and the Jacksonian. As Sylves (2014) has sustained, these three theories of disaster policy and management postulate that there is a continual tension between the need to promote political openness for representative democracy and the need to work professionally with minimal bias in putting policy into practice.

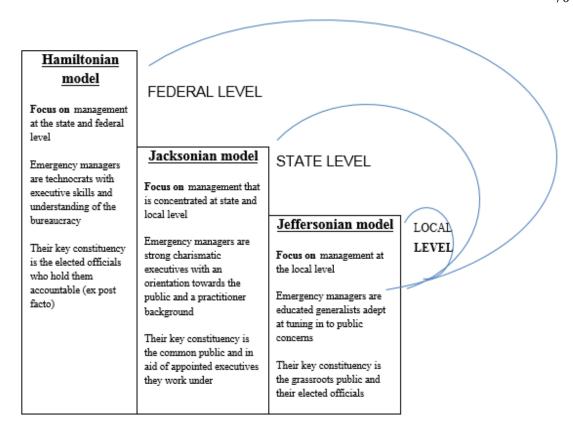


Figure 1. The normative political theories: Public Management Models

Jefferson's approach supports decision making ensuing from consultations with interest groups, suggests a strong community participation of emergency preparedness, and recommends emergency managers to maintain community support from local officials and public (Sylves, 2014). On the other hand, the Hamilton model is concerned with performance and evaluation under public law and expects emergency managers to have decision making expertise and professional knowledge in order to maximize efficiency (Sylves, 2014). The FEMA's all hazards approach (DHS, Office of the Inspector General, 2006) promotes the Hamiltonian style management with well-educated professionals. Conversely, the Jackson model promotes direct governance to achieve better results (Sylves, 2014). The Jacksonian style emergency manager is

expected to be a good intermediary between states and local government in reaching federal political goals (Sylves, 2014). As such, they need to be self-reliant, courageous, and able to take initiatives to pursue new directions. Indeed, policy implementation aims to connect governmental goals and actual results (O'Toole et al., 1995, p.43), identifying ways governments use to put policies into effect (Howlett & Ramesh, 2003, p.13). Thus, without focusing on simplifying the process, or sustaining behavior change (Paudel, 2009), this study instigates that finding a simplified model provides a framework for identifying and addressing barriers or enhancers factors that would influence disaster policy implementation process.

# **Principal Agent Theory**

The principal agent theory will frame the debate regarding government emergency managers' interactions with federal, states, local, and private/nonprofit agencies. This theory assumes that emergency managers work in environments where they cannot observe whether or not the instructions they issued as principals are properly carried by agents, whether or not disaster policy are properly implemented, or whether or not disaster–related needs are properly addressed in realizing goals emergency managers are mandated to meet. Thus, emergency managers deal with gray areas that required them to be able to use their practical knowledge and reasoning to adapt to unusual or unpredicted disaster events or establish new rules taking in account "administrative-legislative interaction, intergovernmental relation, agencies, and interest groups" (Sylves, 2014, p. 41), and based on their know-how expertise.

# **Intergovernmental Relations Theory**

Wright (1978) developed three models of intergovernmental relations: (a) the coordinate-authority model describing disaster management in conformity to federalism and dual federalism with a distinctive separation between relationships of level of government; (b) the inclusive-authority model emphasizing the predominant role of the national government with little collaboration between level of government and where major disasters are handle by local jurisdiction who experienced them; and (c) the overlapping-authority mode highlighting the overlaps between national, state, and local units simultaneously, through state declaration of emergency to request federal assistance in personnel, funding, goods and services.

The September 11 terrorist attacks brought the inclusive-authority model (Sylves, 2014) with the enactment of the Homeland security act of 2002 and the creation of the National Response Framework and the Incident Management System. In this contemporary model, the federal government has the key coordinating role, yet the excess of the top-down commands with less local freedom of action, making states and localities "mere minions of national government" (Sylves, 2014, p. 43). Further, the new reforms and grants that were introduced placed terrorism preparedness above preparedness of all other disasters and increased the influence of emergency managers appointed through the federal DHS directives on local government and agencies' participation in integrating PWD in disaster preparedness planning programs.

Thus, with the rise of disaster managing organizations at the different levels of government, the understanding of local governments for effecting within the federal

system and the recent amendment of the disability law (ADA, 2008) provide insights to the significance of the research questions. Indeed, putting national goal policies, such as disaster response preparedness integrating PWD in need of essentials, into practice at a community level is a legitimate concern and a real challenge (Saetren, 2005). In the 1990s, the profession of emergency manager was not very well-known. The emergency manager role in protecting our communities was evidenced (Haddow & Bullock, 2013) as the United States went through unprecedented types of disasters. According to Haddow and Bullock (2013), these new intensified disasters called for new skilled, better educated, and multidisciplinary emergency managers. In fact, the terrorist acts of 9/11 and Hurricane Katrina have vividly demonstrated the importance of enhancing emergency management discipline, practice, and policies. These disasters forever changed the way all levels of government addressed emergency preparedness, the way emergency practitioners apprehended hazards and communities' vulnerabilities, and the way general public perceived emergency management incompetence in responding to planned preparedness.

Emergency management is shaped by responses to events and leadership styles. For, Haddow and Bullock (2013), emergency management is an essential role of government, and in respect of that, the DHS (2013) recommended in its National Preparedness Report that PWD be integrated in the emergency planning process, as well as drills and evacuation plans. Conversely, in increasing the role of the federal, the incidences disasters have modified the traditional role of the federal government. Thus, federal officials have the authority to respond to an emergency in a state without the

governor's request (Haddow & Bullock, 2013), leading responders' crew. While essentially centered on terrorist attacks, the National Response Plan (NRP) significantly restructured the way major disaster events used to be handled in the past.

The demands placed on emergency managers have risen, and an improvement in the discipline is needed to advance knowledge. For McEntire (2004), to continue with the learning process and correctly conceive and implement policies, "all scholars interested in disasters should desire emergency management theory" (p. 5) to support the changes the profession is experiencing. Thus, in sustaining that not enough disaster managers have the proficiency to ensure that preparedness planning make adequate provisions for disabilities (NOD, 2014), researchers have raised general concern about preparedness planning and the capacity of emergency management to foster public awareness about disasters, perform functions of evacuation, and rescue before and after disaster strikes, and build communities' capacities in taking account of PWD vulnerability.

Accordingly, Haddow and Bullock (2005) argued that the future of emergency management is in rebuilding its constituency by incorporating communities in everyday operations of disaster preparedness planning and decision-making locally.

#### **Considering Vulnerability**

The concept of vulnerability supports the principle of giving equal chance at survival to each person (Taurek, 1977) while prevailing individual responsibilities over community responsibilities, stressing the level of needs of PWD as compared to those of the general public (Barnes, 2013). Hazards quickly come to be calamities for PWD (Smith, Jolley, & Schmidt, 2012). And during a disaster, the social, economic, and

cultural barriers face by PWD uphold addressing disability-driven vulnerability from human rights and development perspectives (United Nations, 2011). This study aims to consider disaster vulnerability and give voice to underrepresented groups in the planning process, such as PWD, their related caregivers, and advocacy groups, to address common problems of disaster preparedness policy implementation that call for emergency manager know-how while influencing intergovernmental relations, homeland security, human rights, and social justice.

When disaster strikes, attention of the general public, media, and officials, remain focused on the immediate impacts. Hence, in the aftermath of calamities, considerations are not customarily given to vulnerability perspectives, even though a number of studies have established that disaster events disproportionately affect the socially vulnerable people of the community (Flanagan et al., 2011). In the same view, other researchers have argued that the lack of public exposure to disaster vulnerability prevent communities from assessing their resource capability and the nature of their environmental hazards (Hemingway & Priestley, 2009; Perry & Lindell, 2003) to better plan for and respond to upcoming threats. In support of that, Yeletaysi, Ozceylan, Fiedrich, Harrald, and Jefferson (2009) argued that social factors engendering vulnerability conditions may have an impact on the aptness of preparedness planning activities. This has been evidenced when Hurricane Katrina revealed inconsistencies in preparedness planning, and exposed communities' disaster vulnerability as well as PWD as group.

# **Community Disaster Vulnerability**

In developing policies and procedures, local governments are required to meet community needs for disaster responses (Henstra, 2010) while complying with broader state and federal goals (Deyle & Smith 1998). In this view, written plans alone are insufficient for community disaster preparedness (Perry & Lindell, 2003), though they describe an important part in the process. According to the 2000 federal Disaster Mitigation Act (DMA), states and local plan development need to reflect localities' hazard mitigation activities founded on their specific vulnerability investigation. For example, a municipality in southern California would examine susceptibility to earthquakes and wildfires environmental hazards, while coastline community in Florida would look at susceptibility to floods and Hurricanes.

Accordingly, Ross (2013) stressed the importance of building community resilience to disaster through the scheme of local answers to local issues. For Ross (2013), reducing disaster vulnerability and building community resilience depends on availability of local resources, pertinence of group activities, and development of infrastructures and institutions within the locality. Thus, disaster mitigation strategies have driven communities to capture physical factors encompassing susceptibilities of location and built environment (Adger, Kelly & Ninh, 2012; Borden et al. 2006; Cutter, Boruff, & Shirley, 2006; Yeletaysi et al., 2009). Ultimately, building resiliency to respond to disaster aftermaths (Beatley 2009; Godschalk et al. 2009) transpire community collective efforts (Ross, 2013) that enable changes (Berke & Smith 2010), embracing intergovernmental broader strategies.

Disaster planning and practice differs from one community to another, as it is influenced by the incentive of those involved in that activity and the availability of community resources (Perry & Lindell, 2003) such as residents, equipment accommodations, and provisions. Appropriate disaster planning allows concerned community to achieve a reasonable translation of vulnerability into a workable emergency response (Blaikie, Cannon, Davis & Wisner, 2014; Perry, 2003). Human populations need to comprehend the changing environment they interact with (Klein, 2006; Smith, 2013) under climatic hazards vulnerability perspectives. A number of studies have evidenced community vulnerability in disasters (Adger, Kelly & Ninh, 2012; Borden et al. 2006; Cutter, Boruff & Shirley, 2006; Cutter, Emrich, Webb & Morath, 2009; Wood, Burton, & Cutter 2010), underlining the relativeness of human vulnerability to natural and climatic hazards.

The trend of disaster response emphasizing the all-hazards approach (DHS, the Inspector General' Office, 2006) is supportive of emergency prevention (Birkland, 2009) over mitigation. Instead of focusing on assessing community specific vulnerability (Birkland, 2009; Burby, 2006) of locality hazards, the all hazards approach suggests localities to accommodate for variety of hazards, making communities become more vulnerable. Ultimately, with the all-hazard approach, state and local governments remain more and more dependent on federal incentives through disaster assistance as economic and political palliative (Birkland, 2009) to rebuild distressed areas, increasing communities' disaster vulnerability.

# **Community Group Disability Vulnerability**

For having contextual vulnerabilities with higher susceptibility of exposure to risk (Lemyre, Gibson, Zlepnig, Macleod, & Boutette, 2009), PWD do necessitate specific care and preparedness planning that integrate their needs. Yeletaysi et al. (2009) contended that social factors influence needs and impede recovery and are the least known (p. 3). Other studies have identified social vulnerability as a by-product of social inequities (Cutter, 2006), underlining connections between social factors and issues of social equity (Yeletaysi et al., 2009).

The current trend of social theory stands that disability and disaster are socially produced (Hemingway & Priestley, 2014). Accordingly, PWD vulnerability to disasters is reasoned from a social model perspective (Hemingway & Priestley, 2014). Within that model, vulnerability of PWD in disaster situations is rooted in the compound factors of environmental barriers, institutional discrimination, and other social structures (Flanagan et al., 2011; Hemingway & Priestley, 2014; Yeletaysi et al., 2009). Indeed, limited literature has mentioned social factors through social equity issues perspectives (Yeletaysi et al., 2009), considering the multifaceted characteristic of vulnerability concept.

While sharing pollution, recession, and disaster threats, communities are not homogenous (Yamin et al., 2005). Thus, accesses to resources as well as physical and social factors affect community as a whole, further influencing and highlighting vulnerability and adaptive ability of individual members. According to Hemingway and Priestley (2014), vulnerability in the light of socio-economic angle shows that

inequalities within or between communities are both noteworthy. Peek and Stough (2010) mentioned that traumatic loss or separation from caregivers associated to poor disaster outcomes have increased vulnerability of children with disabilities in disasters. In support of that, Hurricanes Katrina and Sandy have evidenced that PWD lives were threatened not because of their own limitations but because of the inappropriateness of warning system, the inadequacy of evacuation plans (Bethel, Foreman, and Burke, 2011), and the vulnerability of facilities unfriendly to PWD, or again the uncoordinated actions of rescue staff.

Little research exists on the progress of changes induced by disasters that may alter communities' ways of thinking and acting (Birkmann et al., 2010), and vary legislators' policy change for future disasters. In view of that, Somers (2009) challenged the traditional emergency planning utilizing the step by step process, proposing the creation of organizational structures and methods to shape the all-community resilience potential. Yet, whereas the all-community approach in giving equal chance to each person at survival (Taurek, 1977) is a trend, the approach prioritizing the needs of PWD as compare to general publics without enhancing the levels of need (Barnes, 2013) is privileged in the study. As Taurek (1977) sustained, if there was a choice to be made, then either numbers matter, in which case the focus is on saving the greater number, or numbers do not matter and there is moral value in giving each person an equal chance of survival (Taurek, as cited by Scanlon, 1998, p. 221).

This study stipulates that there is moral value in giving each person an equal chance of survival in situations where there is a choice to save one person or another, but

the chances of success are different. Thus, whereas local emergency management planners are promoting individual and family responsibility to protect themselves and assist family members with disabilities at the time of disasters, the Department of Justice (DOJ) issued an ADA guide highlighting the role of local government's primary responsibility for protecting their citizenry from harm and proclaiming disaster preparedness, response, and recovery plans available to PWD (DOJ, 2010). Indeed, by implying that people with disabilities needed to hold on individual responsibility to elude disasters' terrors, emergency preparedness management and first responders are circumventing social responsibilities of disaster planning. Further, front-runners may purposefully avoid recognizing their unique role in increasing hazards (Blaikie et al., 2014), in an effort to promote a safer environment for everyone (National Council on Disability, 2009), accordingly covering up local government's answerability for functioning disaster preparedness.

#### **Qualitative Case Study**

The broad variation among communities, particularity within PWD groups, and the paucity of evidence for successful local disaster response from DHS Initiatives uncover challenges identifying a generally accepted congressionally mandated national performance standards (Nelson et al., 2010) for disaster preparedness policy implementation that integrate PWD. Berke and Smith (2010) recommended a coordinated strategy aimed at accomplishing real changes in the future of disaster response.

Considering inter-government relationship and agencies' culture that influence disaster policy implementation without setting clear, practicable, and achievable goals

(Hemingway & Priestley, 2014; Kettaneh & Slevin, 2014) reduces the prospects for real social change in local disaster responses. In this view, diverse and sometimes contradictory literature supports this research through the qualitative case study methodology.

Since 1948, the case study methodology has been exploited in public administration research (McNabb, 2002), allowing scholars to "retain the holistic characteristics of real-life happenings" (Yin, 2003a, p.2). For Stake (2006) the case by itself stands as thing, noun, or entity, and is rarely viewed as verb, or functioning (p. 1), while Merriam (1988) has defined it more like program, event, process, person, or social group (p. 9). Stake (1995) further added that as embedded within a system, the case is presented not as process but object (p. 4). A number of authors have pointed out that because of the presumed ease of case study method, its usage increased substantially over the past few decades (David, 2006; Denzin & Lincoln, 2005; McNabb, 2002; Stake, 2006; Yin, 2003b). Stake (2006) further sustained that the case approach is ultimately the most complex and challenging of study methods. Stake (2005) also promoted the use of the qualitative case study sustaining that for a research community, case study

optimizes understanding by pursuing scholarly research questions. It gains credibility by thoroughly triangulating the descriptions and interpretations, not just in a single step but continuously throughout the period of study. For qualitative research community, case study concentrates on experiential knowledge of the case and close attention to the influence of its social, political, and other contexts. (Stake, 2005, pp. 443-444)

This case study emphasizes the NPG's recommendation (DHS, 2013), scrutinizing the effectiveness of predisaster rescue planning and practices through the determination of a parallel between the application of current requirements for integrating PWD into local preparedness plans and PWD's anticipations. The study explored how emergency management preparedness plans take into account PWD needs to avoid increased risks during disasters and assesses the disconnect between the two groups of plan providers and beneficiaries as related to accessing warnings and evacuating from disaster scenes. The study further considered the influence of emergency managers' attitudes on local preparedness planning and practice integrating PWD, as well as the availability of back-up plans included in preparedness strategies for persons living with disabilities necessitating essential assistance.

While quantitative research aspires to test objective theories by investigating the relation among variables (Creswell, 2008) in investigations, and qualitative research strives for understanding of human behavior in honoring inductive style (Creswell, 2007), a mixed methods design is "desirable when either the qualitative or quantitative approach by itself is insufficient to best comprehend a research problem" (Creswell, 2013, p.18). For my research problem, as mentioned earlier, a qualitative study was the most applicable approach. As such, this study ambitioned to provide in-depth understanding of disaster preparedness practices through data analysis of multiple sources of information (Creswell 2013), drawing from the advocacy worldview (Creswell 2013, p. 9-10), and following the case study approach of Yin (2012) to narrow down the field of research in

investigating whether current requirements for disaster preparedness planning actually work on the county level.

Ultimately, this study used a collective case study method as the ideal strategy to determine the data gathering process in counties of Orange and Riverside, two sites at the same county level. This study planned to be an exploratory qualitative case study where interview participants were invited to share in-depth experiences that informed their thoughts and ideas about current requirements of disaster preparedness planning for PWD, stressing the inductive nature of the conducted research (Merriam, 2009) and calling for a qualitative approach (Creswell, 2009). While this study did not provide answers to all difficulties PDWs come across in disaster, it does provide a basis to challenge local-level implementation of current requirements on disaster preparedness planning and gives clear indications for further elaboration and hypothesis creation on the matter.

# **Summary**

This chapter incorporated a review of the literature, sustaining the reasons behind selecting the research question and synthesizing research theories that added up to the conceptualization of the research. The literature review presented an integrated analysis of the type of disasters and examples of preparedness plans, highlighting the unique needs and recurring challenges faced by PWD and ways in which disaster planning is, or should be, for PWD as compared to the general public. This chapter also analyzed the effect of ADA laws on the evolving disaster preparedness policies, evoking lessons learned on previous disasters to corroborate the implication of the study as one of the

important policy arenas and agendas facing today's legislators. Further, the literature review related to the research questions and contemporary theories drawn on Sylves' (2014) normative political theories, Jeffersonian, Hamiltonian, and Jacksonian approach to disaster policy and management; the principal-agent theory; and Wright's (1978) models of intergovernmental relations. Ultimately, the review incorporated the concept of vulnerability, addressing disaster vulnerability and disability vulnerability contributing to local level disaster responses and the homeland security initiates in the United States.

To avoid further injustices similar to the ones experienced by PWD during September 11 and Hurricanes Katrina and Rita, Frieden, (2006) suggested that emergency plans must include PWD to better address their needs. Boon (2013) found that disaster preparedness was mainly linked to an individual's financial capacity to meet the costs of the calamity. Emergency specialists stand that crisis survivors will need partial or complete self-sufficiency for at least the first 72 hours following a disaster. Not everyone is able to sustain the 3 days' self-sufficiency requirements. Increasing numbers of people are experiencing the day-to-day survival with very little capacity for disaster preparedness or recovery and disabled people are geographically and socially dispersed and disproportionately poor.

Extensive literature on calamity management and homeland security is related to disaster preparedness, response, and consideration for special need population. However, Kusumasari, Alam, and Siddiqui (2010) expanded on the role and/or challenge encounter at local level for disaster implementation and response. Indeed, there have been few studies on the role of local government, stressing on challenges in the implementation

and enforcement of disaster preparedness rules for the most vulnerable member of the communities.

The chapter determined room for improvement in the implementation of public policies, demonstrating how the influence of intergovernmental relations and federalism have led to a lack of seminal role municipalities and states play in instigating federal policy and procedures for disaster response involving PWD. The literature underlined that written plans alone are insufficient for community disaster preparedness, when most places do not have emergency evacuation plan that people know about. Ultimately, the literature review considered community disaster vulnerability perspectives in the light of disability vulnerability as the basis for understanding the evolving disaster preparedness scheme for PDWs and its reflection on the increasing community involvement for social changes in the counties of Orange and Riverside in California.

Chapter 1 presented to the problem statement, demonstrated the significance of the study, and identified the research questions guiding the research. Chapter 2 included a literature review to establish the reasons behind selecting the research questions and synthesize related theories that contribute to the conceptualization of the study. Chapter 3 identifies the research approach, and how I ensured quality through validity and triangulation of data using different data sources within the same method.

# Chapter 3: Research Method

#### Introduction

This chapter provides the reasoning for the selected study approach, collective case study, and methodology used to address the research questions. The primary questions that guide the study, were as follows:

RQ1: How do emergency management preparedness plans take into account PWD needs to avoid increased risks during disasters in Riverside and Orange County, California?

*RQ2:* How do emergency managers' attitudes influence local preparedness planning and practice integrating PWDs?

This chapter also describes the sample and population, method of data collection and analysis, ethical considerations, and how I ensured quality through validity and triangulation of data using different data sources.

Benbasat, Goldstein, and Mead (1987) said that the type of the topic influences the selection of a research approach. This chapter addresses a variety of methods in accordance with Creswell's five qualitative traditions, and the case study approach was well-suited for the investigation of the actual, rather than presumed, application of current policy by coding and examining real experiences. Accordingly, this study used a collective case approach to explain a phenomenon regarding preparedness implementation practiced in a real-world context that is appropriate in such circumstances where the context of action involving PWD in disasters is critical. For this collective case design, the review defines the case being the current implementation

process of the disaster preparedness policy integrating PWD in the disaster implementation programs. Orange and Riverside County are two sites at county level. The experiences of practitioners are fundamental for this stage of research where there is not yet evidenced compliant theory.

Literature on emergency management and homeland security knowledge related to disaster preparedness, response, and consideration for the special needs population stressed the importance of enforcing policies, but also highlighted challenges in doing so. Kusumasari, Alam, and Siddiqui (2010) stressed the operational challenges faced by local governments in the implementation and enforcement of disaster preparedness rules for the most vulnerable members of the populations. This research stipulated documenting disaster preparedness plans and practices integrating PWD to capture proficiency and approaches of emergency professionals.

My research design included a small targeted sample size, contextual settings, data from multiple sources, and in-depth analysis of participants in Orange and Riverside County. The research led to the understanding of preparedness plans and policy implementation practices. The research further informed the influence of emergency managers' attitudes regarding local level government approach within and outside the PWDs'community through documentary review, questionnaires, and interviews of state emergency administrators, disability advocacy personnel, and caregivers for PWDs.

I present this chapter in five sections, beginning with the research design as an action plan linking information and conclusions. I then describe the appropriateness of the data collection techniques and analysis approaches. A subsequent section explains

how reliability and validity can be sustained through triangulation of data using two counties as data sources within a collective case study. This research consists of a qualitative case study methodology through a set of interview questionnaires, targeted semistructured interviews, and document and archival reviews.

# Research Design

According to Hathaway (1995), choices regarding the best research method to use depend on the research questions, the researcher's preferences and personal experiences, population under study, proposed audience for findings, and other available resources such as time and money. Investigators must carefully select the research design by determining what makes the most sense for the research and responding to the research questions. I chose to use a qualitative rather than a quantitative design as I intended to obtain more in-depth information regarding participants' feelings, impressions, and viewpoints.

Strategies of inquiry related to quantitative and qualitative approaches have been extensively debated by various researchers. The main distinction between the two methods is that the quantitative approach is deductive, and the qualitative approach is inductive. I am opting for a qualitative approach as my ultimate ambition is to provide a comprehensive and exhaustive analysis of the research subject matter. Quantitative research focuses more on numerals and statistical descriptions to describe investigational study (Cresswell, 2009), and so is not appropriate for my study claiming an inductive approach. Further, the data-gathering strategies used in in the study, such as individual in-

depth interviews, documentary analysis, participant observation, and archival research involve qualitative inquiry.

Patton (2002) said that qualitative researchers emphasize the meanings and understanding of social phenomena and processes in the specific contexts in which they happen. This study's research questions refer to real situations where the phenomenon of interest is not manipulated. This study used qualitative data to allow better interaction and greater spontaneity between the study participants and researcher to share in-depth experiences that informed partakers' thoughts and ideas about the disaster preparedness practices, including PWDs, and focus on the inductive nature of that organizational process. The interviews included open-ended questions that were not phrased with the same identical words or the same exact way with each interviewee, giving respondents the freedom to reply using their own words.

#### **Case Study Research**

A case study approach ensures that there is a clear vision of what is to be accomplished by investigating in-depth current phenomenon that the researcher could not isolate from its context. In the case study methodology, investigators explore a case or multiple cases through detailed, in-depth data gathering from multiple information sources. Yin (2003) suggested the use of replication in the multiple case method for the researcher to replicate the approaches for each case expecting reaching the same results.

I deemed the qualitative case approach the most appropriate method of inquiry for this study to link my data collection and eventual conclusions to the initial questions and answer questions about a current disaster preparedness integrating PWDs. The study addressed disaster preparedness implementation approaches that are subject to evaluation, and where the boundaries are not clear between a phenomenon of preparedness policy and its context of implementation programs for PWDs. I needed to learn from participants' experiences in order to present their viewpoints, exploring an emerging phenomenon where there is little practical knowledge available.

# **Defining the Selected Case Design Approach**

Although scholars such as Gerring (2004), Platt (1992), Perry & Kraemer (1986) disagree about the case approach as a research methodology, or a strategy (Hesse-Biber & Leavy, 2011; Yin, 2009), other researchers like Berg & Lune (2012), Corbin & Strauss (2008), Lincoln & Guba (1985), Stake (1995, p. 49), and Yin (2009, 1994, p. 93) agree that archival records, interviews, direct observation, documents, participant observation, and physical artifacts as suitable sources of evidence that can be used to conduct qualitative case studies. Most of all, case study researchers need to make a distinction between an embedded approach (Yin, 1994, p. 41), relating to more than one unit of analysis; a holistic approach that calls for narrative, phenomenological descriptions; and single case and multiple cases formats (Scholz & Tietje, 2002). Yin (2009, 2013) provided four possible qualitative case study designs according to the number of cases in relation to the number of units of analysis: (a) single-case, holistic; (b) single case, embedded; (c) multiple cases, holistic; and (d) multiple cases, embedded (pp. 46-47)

Whereas case studies have been noted as lacking rigor when objectively compared to other research methods, they are still widely used at the exploratory stage of various research projects, offering perceptions that might not be attained with other

approaches and that could be used as a basis to embolden the theory building process. Opponents of the case research methodology view the efficacy of such research merely as an exploratory tool and stand that the research on a small number of cases provide no grounds to establish reliability or generality of findings (George & Bennett, 2004). Yet, researchers continue to use the case methodology with success in studies of real-life situations stressing on learning rather than proof of predictive theories (Flyvbierg, 2006).

This study used a case study to approach the general problem, narrowing down a manifestly extensive field of investigation into one researchable matter, establishing that minor attention has been paid to the standardization of the notion although studies have shown that the impact of implementing disaster response policy according to the All Hazards – All Community perspectives do not give the same chance of survival to PWD as to general public. Using the case approach, the study addressed common problems of policy practices that influence all levels of government relations. The research matter to be investigated in depth in this case study refers to community members in two counties and their interrelation to disaster preparedness issues for PWD. To investigate the contemporary phenomenon of disaster response preparedness within its real-life context and answer the research question that lead to the understanding of the case, a variety of data gathering methods will be used (Yin, 1984, p. 23) to yield evidence for the case approach.

The qualitative study of a single-case method is suitable to this set of localities in examining the issues of how emergency management preparedness plans take into account PWD needs to avoid increased risks during disasters in the Riverside and Orange

counties of California; and how emergency managers' attitudes influence local preparedness planning and practice integrating PWD, thus meeting the needs of local communities as a whole and what pertinence that might imply. The strength of the present case research consisted of using various sources and techniques in the data collection process and predetermining the type of analysis techniques to use with the data to answer the research questions. Further, this study offered the opportunity to explore a phenomenon in its context, outside a laboratory or pilot location as esteemed way of beholding the environment.

### **Rationale for the Design**

For this selected single-case design, the case is the current (i.e., the contemporary period) implementation process of the disaster preparedness policy (i.e., the phenomenon) integrating PWD in the DHS All-Hazards / All-Community disaster implementation programs (i.e., the context). The study focused on two counties on the same level, Orange and Riverside, that participate in instituting and organizing planning and practice for disaster response. Data about Orange and Riverside community members' experiences, emergency planners' know-how, and advocacy personnel' perceptions emerged from interviewing people within relatable groups of program providers and beneficiaries of related program including PWD. Evidential information regarding procedures, policies, and decisions outcomes were gathered from source documents and archival records. Thus, this study aimed to provide in-depth understanding of disaster preparedness practices through data analysis of multiple sources of information (Creswell 2013), drawing from the advocacy worldview (Creswell 2013,

p. 9-10), and following the case study approach of Yin (2012, 2013) to narrow down the field of research in investigating whether current requirements for disaster preparedness planning actually work on the county level.

Instead of using embedded case study, the study used the holistic case study approach to examine the counties as one collective case unit, focusing on similar issues, eventually highlighting specificities in the unit of analysis, and thus underscoring the pertinence of the original research design. The study used-a collective case design to explore a present-day problem within its real-life context, and gain insight into the structure of a phenomenon, so that the outcomes from these counties are draw up to produce a broad picture. In this study, interview participants were invited to share indepth experiences that informed their thoughts and ideas about current requirements of disaster preparedness planning for PWDs, stressing the inductive nature of the conducted research (Merriam, 2009).

As previous related research has focused essentially on PWD, this case study emphasized the role of emergency managers in implementing current requirements at the local level, examining how disaster preparedness rescue planning for PWD compares with disaster preparedness rescue planning for the general public. Accordingly, the study included conducting in-depth studies of related strategy for PWD to compare with the one for general public in the community, using the within-case analysis technique (Busha & Harter, 1980) to explore similarity and difference. I also cross compared data (Busha & Harter, 1980) from the two selected counties of Orange and Riverside in California,

isolating themes or patterns, to highlight commonalities and state relationships in answering to the research questions.

## **Prospective Emergent Model**

Though the study did not intend to generate theory, it encouraged future research because theory is needed, and an emergent model may be evidenced from findings to assert or contradict a potential gap between preexisting policy standards and implementation practices (Schneider, 2011). Thus, for this study, available models referring to emergency planners' attitudes or know-how were incomplete to explain the concept because they miss addressing some of the study's supposedly important variables of interest related to disaster policy implementation.

Sylves (2014) contended that emergency managers need to have the professional skills and abilities to establish their profession, comprehend their role in the preparedness planning process, and grasp the significance of managerial and political concepts relevant to their work. Similarly, McEntire (2004) mentioned theoretical concepts to push forward the future development of an of emergency management theory, stressing local disaster preparedness agencies' capability in performing functions such as warning, searching, evacuating, and rescuing PWD before and after disaster strikes. Sylves (2014) further mentioned a continual tension between the need to promote political openness for representative democracy and the need to work professionally with minimal bias in putting policy into practice.

According to the contemporary inclusive-authority model (Sylves, 2014), the federal government has the key coordinating role, yet the excess of the top-down

commands with less local freedom of action, making states and localities "mere minions of national government" (Sylves, 2014, p. 43). Congruently, the new reforms and grants that were introduced after the September 11 terrorist attacks have placed terrorism preparedness above preparedness of all other disasters and increased the influence of emergency managers appointed through the federal DHS directives on local government and agencies' participation in integrating PWD in disaster preparedness planning programs. As a result, emergency managers deal with gray areas that required them to be able to use their practical knowledge and reasoning to adapt to unusual or unpredicted disaster events or establish new rules based on their know-how expertise.

Indeed, researchers have not yet evidenced a theory of putting policy into practice that harmonizes general agreement; researchers keep on working from varied theoretical viewpoints (O'Toole & Montjoy, as cited by Lester, 1995, p.84), further declaring previous implementation research as misery research (Rothstein, 1998), stressing on application failures of disasters policy (Hill & Hupe, 2003). In combining the two schools, Matland (1995) has deplored the lack of theoretical policy implementation structure (p. 170), contending that central authorities inevitably influence an administrative micro-implementation process of policy through decisions on funding and jurisdiction. As a result, implementation is still in its infancy (Goggin et al., 1990, p.9), making concrete theory of policy implementation still lacking.

On the practical side, a theory may be useful to underscore people's perceptions of the effect of disaster planning policy implementation and vision about the All-Hazards All-Community program as a solution. Accordingly, without focusing on building theory,

this study aimed to use case study approach in anticipating that the outcome process of inducting eventual emergent model would develop from the research and provide such a general framework.

#### **Sources of Data**

Yin (1994) suggested several evidences as suitable sources in case study to support deeper and more exhaustive analysis for a contemporary event where relevant behavior cannot be manipulated. At the conception of the design phase, I defined the counties of Orange and Riverside in California to be the unit of analysis as foundation for the case. Accordingly, questions about the unit of analysis refer only to the case under study. As well, the boundaries that delineate the unit of analysis determine the evidences and the sources of evidence collected (Rowley, 2002).

Based on data gathering details according to Yin (1994, p. 93) and Stake (1995, p. 49), I conducted semi-structured, open-ended interviews (Bouchard, 1976; Cook & Campbell, 1979) with two categories of informants from each county to obtain facts, opinions, and insights, using a check-list during the data gathering to ensure uniformity of information while capturing the contextual complexity. In support of that, the two categories of informants were: (a) the DHS/FEMA appointed emergency officers responsible for the implementation of the All-Hazards, All-Community disaster policies, and (b) program beneficiaries group encompassing the administrators of regional disability center, PWD advocacy groups and nonprofit organizations members, and PWD with their caregivers.

I also examined documents and records such as administrative reports, organization charts, agendas, letters, minutes, existing plans, disaster preparedness tools, handbook, regulation, and news clippings for each county aiming to obtain rich set of data surrounding the particular research question. In this case study, I did not use direct observation as a tool because of the sensitivity of some participants and thus the unpredictability of data. Instead, I surveyed all state-appointed emergency officers of southern California proposing a questionnaire as a third data collection instrument. Within-case and cross-case examination of data were applied as investigation techniques.

A qualitative approach calls for selection of interviewees and documentary evidence according to their experiences, sensitivities, and participation to the study, while quantitative researches emphasize on participants' representativeness in a population. In the same view, McNamara (2099) argued that the strength of the interview techniques remains in the researcher's ability to consent to a degree of freedom and adaptability when collecting information within the same general areas from each interviewee, in obtaining related evidence. In building such system, the study applied three sampling approaches. First, I used a stratified purposeful sampling technique to pick participants among already identified groups. Then, I placed emphasis on cross-examining local program beneficiaries' representatives using theory-based sampling technique to anticipate emerging notions from circumstances and real-world happenings. Last, I chose participants within the same level of accomplishments and activities connection per counties, applying a homogenous sampling technique. Further, I employed questionnaires and collected and reviewed documentation related to existing plans, disaster preparedness

tools, handbooks, regulation, de-identified individual reports and historical documents from State records, organization charts, and memorandums and minutes of meeting held between state agency planners and NGOs representing PWD.

Accordingly, I filed an application with the institutional review board (IRB) for the study with the informed consent form, information indicating the prospective usage of participants' interview data for academic research. The Walden University IRB approved related materials and gave consent to continue with this research – IRB approval # is 03-19-18-0277202. I also investigated in public websites to find existing relevant documents for this study. Additionally, I contacted the members of the Disability Advisory Committee of the State of California to identify possible participants. Guiding questions were formulated for interviews to last between 60 and 90 minutes and be recorded when permitted. For PWD, questions were first asked in English, and then translated in sign language by their caregivers, when needed.

## **Target Population**

The inhabitants of the counties of Orange and Riverside constituted the population in this study. Interviews were conducted in each county with participants encompassing (a) state emergency planning officers, and (b) administrators of regional disability centers, PWD advocacy groups /and nonprofit organizations members, and PWD with their caregivers. The State of California has an appointed officer of the Governor's Office of Emergency Services (OES) who oversees the 58 County Emergency Managers, sharing 23 Regional Centers (RC) for people with disabilities, and

24 southern California Emergency Management chapters located throughout the State (Southern California Association of Governments, 2013).

I collected questionnaires (see Appendix G) from the 24 southern County

Emergency Managers to build understanding of participants' thoughts, experiences,
skills, and perceptions. Simultaneously, using a checklist to guide interviewers (see
Appendix H), I also conducted standardized open-ended interviews with the other
category of people composed of 18 purposefully selected persons (see Figure 2): 2
emergency managers, 2 executive members of the Regional Centers (RC) for people with
disabilities serving Orange and Riverside counties, 5 community-based organizers or
disability advocacy personnel of activist organizations that work with people with
disabilities, 5 individuals among caregivers personnel for PWD, and 4 actual PWD. Al
the interviewees who participated in this study reside within the counties of Orange and
Riverside in California, where people are living with the permanent threat of
unpredictable wildfires and earthquakes.

	Categories of Informants	Questionnaires Participants	Interviewees in Orange and Riverside Counties
(a)	DHS/FEMA appointed officers responsible for the implementation of the All-Hazards, All-Community disaster policies:		
	Emergency managers	24	2
(b)	Program beneficiaries group encompassing:		
	Regional Centers executive members		2
	Community-based organizers or		
	disability advocacy personnel of activist organizations		5
	Caregivers personnel for PWDs		5
	PWDs		4
	Total	24	18

Figure 2. Participants per category in using multiple sources of data and evidence.

#### **Site Locations and Natural Hazards**

Riverside County is the fourth largest county in the state of California with over 1.3 million residents. The Prevalence of Disability in Adults by Age Group is between 10 to 36% (see Table 1) primary hazards causing disasters are earthquake, wildfire, flood, and drought. In the 2005, the County Operational Area (RCOA) cautioned about significant prospective hazards based on its Multi-Jurisdictional Local Hazard Mitigation Plan, which was reorganized in 2012 in accordance to FEMA recommendations. But due to staffing shortages or to lack of funding during budget cuts, review and update processes were delayed (County of Riverside, 2012). According to the County of Riverside OES (2012), the occurrence of earthquakes is less frequent than the other treats turning out to disasters, but earthquakes remain the ones causing the most combined losses of injuries, deaths, and damage costs. During this period, floods have contributed to the number of total deaths, and wildfires engendering the highest losses. Still, earthquake damages topped wildfire costs by four times.

Table 1

The Prevalence of PWD by Age Group in California

State of California	Age under 18	Age 18-44	Age 45-65	Age Over 65
Male Population	4,736,258	6,998,943	4,700,793	1,537,969
Female Population	4,527,451	6,919,759	4,992,086	2,020,881
* Total Population	9,263,709	13,918,702	9,692,879	3,558,850
** % PWD Per BRFSS 2009	(Not Available)	10.4	24.1	35.5
Estimated number of PWD		1,447,545	2,335,984	1,263,392

<sup>\*</sup> Census retrieved from: https://suburbanstats.org/population/how-many-people-live-in-california

Orange County, California has a 100% urban population of over 3,090,132 habitants. The Prevalence of Disability in Adults by Age Group is between 10 to 36%. The number of OC's natural disasters in is considerably more than the US average. Thus, floods, fires, storms, landslides, earthquake and hurricane are the causes of natural disasters. In OC earthquake and tornado activities are considerably above CA average, and 2458% more than U.S. average.

Unpredictable wildfires, floods, and earthquakes are permanent threats occurring in the counties under study. Recently, the state of California announced a state of emergency for Solano, Napa, and Sonoma counties after a 6-point magnitude earthquake (Weise & Bello, 2014) followed by about 60 aftershocks with 5-point magnitude within the following week. According to Weise and Bello (2014), more than one million people felt the quake, which killed 63 and left hundreds wounded and 64,000 without power. Weiss and Bello further declared that the quake damaged many homes, buildings, historic edifices, and infrastructures including 50 gas-main breaks and 30 water-main breaks. Although PWD are the largest minority representing 15% of the population (United Nation, 2010), no mention was made, nor statistics given about PWD. Yet, PWD have suffered from the aftermath of this disaster, especially from power shortage.

## Researcher's Role in Data Collection Procedures

McNamara (2009) emphasized the impact of the preparation stage on the interviews' structure to ultimately be advantageous to the research study. I made the participants feel respected and their contribution appreciated with the nature of the

standardized open-ended, neutral, and clearly worded questions, allowing full expression of viewpoints and experiences. Further, I informed the participant of the project prior to the interview day. Then, on starting the interview, I explained the purpose of the interviews, addressing the terms of confidentiality, explaining the format of the interview, indicating how long the interview would take, and specifying that the interviewees would have the opportunity to review and correct the transcript. To gain access to the potential participants, I built trust through personal phone and e-mail contacts. Then, I provided participants with study information sheet (see Appendix B) and obtained their consent (see Appendix A) before the conducting the interviews (Creswell, 1998; Patton & Sawick, 1993). I further stated that their contribution in the research is fully voluntary and absolutely anonymous, and that their information will remain confidential and their identity protected.

Further, McNamara (2009) mentioned the strength of interview approach, indicating that the interview should start with a mandatory statement:

Before we begin the interview itself, I would like to confirm that you have read and signed the informed consent form, that you understand that your participation in this study is entirely voluntary, that you may refuse to answer any questions, and that you may withdraw from the study at any time. (para. 1)

## Crawford (2000) articulated:

As an interviewer, you are a scientist and an artist. As a scientist, you must use strong and rigorous research designs and procedures. As an artist, you are painting a relationship to establish comfort with your participant so that the participant can

contribute as much as possible to the study using open-ended question and probes; balancing rapport and neutrality; appropriate body language.

Accordingly, I displayed appropriate body language and a pleasant nonprovocative smile to establish trust in order to encourage participants to provide clear information to reach or even exceed expectations.

Goulding (2002) and Polkinghorne (2005) argued that a qualitative researcher should be skilled with relevant practice in interviewing to be able to obtain relevant data for the study. I was the instrument for data collection, having the necessary experience to undertake this study. I am a public administrator of a governmental agency, working for health care programs. Thus, I am used to reviewing operating practice compliance to policies and procedures developed for care centers such as skilled nursing facilities, acute hospital and regional centers in care of PWDs, aging citizens, and acute care patients. This experience was an opportunity for me to become familiar with the of governmental agency's organizational culture as well as regional centers and skilled nursing facilities' practice for special needs populations. This experience was also the occasion for me to ascertain that drills were not consistently performed in most of those facilities, wonder about disaster preparedness awareness, and pinpoint the differences between homeland security policies and emergency management practices. Also, as a human rights activist I have had personal exposure to social problems that burden parents of disabled children and have participated as an interviewer in a research group for employers employing PWD.

I addressed my own bias throughout the research process, reporting any discrepancies during the research, seeking peer review comments to enhance the credibility of the findings (Goulding, 2002) and the reliability of the data analysis process. Ultimately, I used multiple sources of data to corroborate findings enhanced the credibility of research outcomes.

# Sampling

Sampling strategy depends on the study's research questions and the chosen style of data collection and analysis. The study stressed a collective case involving two sites at the same county level as the unit of research, using questionnaires, interviews, and documents/artifacts as methods of data collection; each of which called for discernable perspectives and each of which required different sampling strategies. Thus, this research employs stratified purposeful sampling, theory-based sampling strategy, and homogenous sampling.

Stratified purposeful sampling. Patton (2001) argued that purposeful selected stratified or nested samples vary according to practice size (small, medium, and large) and practice setting (urban, suburban, and rural). Thus, this case study encompassed 24 questionnaires and 18 interviews. For Patton (1990), "it is important to select information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposive sampling" (p. 169). In the same view, "since qualitative inquiry seeks to understand the meaning of a phenomenon from the perspectives of the participants, it is important to select a sample from which most can be learned; called a

purposeful sample" (Merriam, 2002, p. 12). Thus, interviewees were purposefully selected to be representative of the major stakeholder groups: those who manage community emergencies responses in the community and those advocating for the disaster needs of PWD in the community.

I used purposeful sampling, anticipating interaction with experienced and knowledgeable people of the phenomena under study (Lofland et al., 2006; Rubin & Rubin, 2005). Purposeful sampling permits selecting precisely sensitive participants to reach balanced and accurate information from different perspectives. Accordingly, I purposefully selected the 24 DHS/FEMA appointed emergency managers of southern California responsible for the implementation of the All-Hazards, All-Community programs of disaster policies to collect questionnaires from. I also conducted standardized open-ended interviews with 18 purposefully selected program beneficiaries encompassing PWD with their caregivers, administrators of regional disability center, advocacy group/non-profit organization members in positions of leadership and responsibility (actively performing for human rights and disaster responses for PWD at their organizations locations). These participants were crucial to the success of the present study in gathering a broad range of data.

Theory-based sampling strategy. As data are collected and analyzed, an interpretative framework is constructed, conveying the study's sampling strategy to contribute in emergent models or building on the developing concepts. Patton (2001) defined theory-based sampling as "The process of selecting "incidents, slices of life, time periods, or people on the basis of their potential manifestation or representation of

important theoretical constructs" (p. 238). As stated earlier, the study did not anticipate in building theory as the overarching methodology to study data from exploratory cases study. The study's goal was intended to develop an understanding and an interpretative framework of the process with provider and beneficiaries of disaster preparedness programs encompassing county-units' representatives, community advocates and PWD for various data gathering processes.

Accordingly, theoretical sampling was an important component for the study to reach the goal of understanding the depth of visions, inspiring emergent models, and evolving concepts, based on participants' real-life events and circumstances. In the same view, Glaser and Strauss (1967) stated that theoretical sampling method aims to develop a rich understanding of the dimensions of a concept across a variety of settings and circumstances. Further, Urquhart and Fernandez (2006) indicated that in theoretical sampling the concern is to check and refine the researcher's emerging categories of the phenomenon that should be directed by the logic and the types of coding procedures used in analyzing and interpreting data (Strauss & Corbin, 1998) in the aim to keep the data gathering process presented to all options driving the greatest opportunity for discoveries.

**Homogenous sampling.** At this stage of selecting participants from particular subgroups of representatives and community leaders, the study was focused on those whose experiences were expected to be somewhat alike. This strategy of homogeneous sampling allows researchers to describe the experience of each subgroup in depth for richness of evidence.

## Sample Size

Strauss and Corbin (1998) provided a general rule stating that data should be collected until each category is saturated. The final number of participants in the sample is then determined when the outcome of the interviews becomes repetitive and no new themes emerge, translating that the research becomes saturated with information (Glaser & Strauss, 1967; 2001; Strauss & Corbin, 1998). In the same view, Sandelowski (1995) pointed out that suitable sample size determination in qualitative research is ultimately a matter of the researcher's judgment and experience in assessing the quality of the data gathered, the research method, sampling and analytical strategy employed. Accordingly, the study intended to gather rich, in-depth evidence and to continue with the previously described sampling process until achieving informational redundancy or saturation.

Creswell (2002) suggested the "widest array of data collection as the researcher attempts to build an in-depth picture of the case" (p.123), putting emphasis on data source diversity rather than quantity of participants. Thus, I considered obtaining information from diverse categories of participants until reaching a saturation point rendering additional findings redundant (Creswell, 1998). Other researchers have argued that participants should be drafted principally for goal reaching to "potential yield of findings" (Wertz, 2005, p.171). Accordingly, I predicted that new information or themes might stop emerging after about 14 interviews for the study to instigate building an acceptable interpretative framework expected to adequately answer to the research questions.

## **Sampling Bias**

To avoid sampling bias, I selected two categories of participants within two units of analysis composed of counties already identified in the State of California. My study relevantly built understanding on whether the implementation of the current federal /state policy requirements for integrating PWD into local preparedness plans in California adequate in addressing the unique needs they face in disaster situations; how and why emergency managers' aptitudes are considered barriers or enhancers factors relating the All-hazard/All-Community programs to county-level disaster implementation process; and how and why locality hazards vulnerability and PWD vulnerability are carried out in putting disaster preparedness strategy into practice.

## **Data Collection and Analysis**

For data collection, I visited both counties for five days conducting interviews and gathering other forms of data. Interview notes were structured around different topics using the guiding questions (see Appendix H). Hence, the first step consisted of a chronological and noninterpreted summary of data for each case. In the following step, data were within-case and cross-cases analyzed with the purpose to pinpoint emerging patterns of perceptions and connect the data.

#### **Data Collection and Data Management Techniques**

Yin (2003) argued that a strong point of case study design is the use of multiple data sources. Various sources of evidence provide opportunities for comparison of data among and between respondents as well as between the varieties of data sources (Stake, 1998). Thus, in this case study my concern was to apply purposeful selection techniques

(Creswell, 2005) to show different perspectives and to perform some comparison.

Accordingly, to prepare for data collection, I first contacted the person in charge of the sector of emergency management in each county under study to clarify the purpose of the research, formulate intent to request documentation related to the research, and seek their cooperation.

I anticipated that through this data gathering process, in depth description of the case (Stake, 1995) would emerge with models or lessons to be learned. I purposefully selected the 24 DHS/FEMA appointed emergency managers of southern California responsible for disaster policies implementation to complete questionnaires. I also conduct standardized semi-structured interviews with 18 purposefully selected program beneficiaries. I collected data using questionnaires and interviews sustained by video recordings, audios tapes, and field notes. Further, I collected source documents and historical facts to perform document analysis. These procedures of data collection are discussed thoroughly under this section.

Questionnaires. I mailed questionnaires (see Appendix G) to all appointed emergency management officer of southern California with a requested return date and a stamped return envelope, expecting 20% response rate. I have received 7 responses out of 18 questionnaires, representing 38.88% rate. Then, I coded the responses received and entered the data into a database to explore outcomes independently and/or blend data for more meaningful results as the research develops to the point of cross-case analysis of data for the two counties under review.

Interviews and field notes. A number of scholars have sustained that researcher can develop various forms of interview design to obtain thick, rich data in relation to the case under study (Creswell, 2007; Berg & Lune, 2012; Hesse- Biber & Leavy, 2011; Yin, 2009). Accordingly, I conducted in-depth, semi-structured interviews with planners of disaster policies as well as beneficiaries of related programs, to gather opinions about the adequacy of disaster policies implementation for the all community integrating PWD. I made sure that similar information was collected from each participant while permitting some freedom and flexibility in obtaining information (McNamara, 2009).

Interview techniques can be individual or one-on-one, telephone, or focus group discussions (Creswell, 1998; Hall & Rist, 1999; McReynolds, Koch, & Rumrill, Jr, 2001; Polkinghorne, 2005). In this view, the case study employed in this study encompassed 11 one-on-one interviews with members of the Regional Centers (RC) for PWD, community-based organizers or disability advocacy personnel of activist organizations that work with people with disabilities, PWD, and caregiver personnel for PWD. With the standardized open-ended interview, the same wording of identical questions were asked to participants, while allowing open-ended responses for participants to contribute as much detailed information as they desired to fully express their viewpoints and experiences.

According to Gall and Borg (2003), standardized open-ended interview questions lessen researcher biases within the study. In support of that, I adopted Patton's (1990) suggested in-depth interview in preparing interview protocol with open-ended questions for the two categories of respondents (see Appendix H), adapting probes as needed based

on interviewee category and further anticipating to rephrase them as allowed in openended questions (McReynolds, Koch, & Rumrill, Jr. 2001) based on participants' responses to alleviate potential ambiguity. In addition to these in-depth semi-structured, standardized open-ended interviews, I kept field notes to document feelings, experiences, and perceptions throughout the research process. I wanted field notes to grasp stories told during the interviews for potential use in the final report.

Although interviews are considered strong qualitative techniques, they have limitations based on environments, circumstances, and investigator-participant interactions that influence findings results (Gorden, 1992; Lofland et al., 2006; Rubin & Rubin, 2005). Accordingly, I was prepared to meet with different types of interviewees who were not equally communicative or cooperative. I proposed a preliminary discussion about question wording appropriateness and comprehensibility with strategic persons from each county involved in the study while ensuring that the integrity of the research questions, as IRB approved, remain in the study. All things considered, to properly manage the interviews, investigators need to multi-task, writing notes, gauging replies, and heeding for nonverbal languages while paying close attention to the participant replies.

Other documents used in the study. Singleton and Straits (2005) identified public documents, mass media, and personal/private and archival documents as additional data sources. In this view, the analysis of relevant reports and documents such as letters, administrative reports, minutes, organization charts, agendas, existing plans, disaster preparedness tools, handbook, DHS regulation and news clippings, as well as online

FEMA database and federal GAO audits were gathered for this study to put emphasis on the suitability of the All Hazards – All Community disaster implementation programs in the selected counties. These document reviews further informed the relationships between community advocacy groups and local government as well as within the three levels of government in planning and practicing disaster preparedness policy integrating PWD.

The extensive review of documents added to the richness surrounding the openended concept of the research design while establishing construct validity by pinpointing known data before the exploratory fieldwork (Yin, 2003a, 2003b). Accordingly, collected documents were explored to ascertain the rationale for giving the same chance of survival to PWD as to general public when disaster strikes, and underline the impact of ensuing incentives or performance hint available to hearten the local implementation process considering locality disaster vulnerability and community disabled members' vulnerability.

Conducting qualitative interviews. According to Creswell, some of the most common information found within the literature relating to interviews includes (a) the preparation for the interview, (b) the constructing effective research questions, and (c) the actual implementation of the interviews (Creswell, 2003; 2007).

**Preparation for the interview.** McNamara (2009) suggested the importance of the preparation stage in order to maintain an unambiguous focus as to how the interviews will be erected in order to provide maximum benefit to the proposed research study. I obtained approval from the Institutional Review Board (IRB) committee, as well as the

consent form for participants to deliver honest, critical answers to questions. Further, in applying McNamara's principles to the preparation stage of interviewing, I described the purpose of the interview, disclosed terms of confidentiality, and explained the format and the estimated length of the interview.

Constructing effective research questions. Creswell (2007) also suggested being flexible with research questions being constructed. Further, Creswell believed that the researcher must construct questions in such a manner to keep participants on focus with follow-up questions or prompts in order to ensure that they obtain optimal responses from participants. In the same view, McNamara (2009) suggested wording of interview question be open-ended, as neutral as possible, worded clearly in carefully avoiding asking "why" questions.

Implementation of interviews. As with other sections of interview design, McNamara (2009) recommended that during the implementation stage of the interview process, the researcher remain as neutral as possible, encouraging responses without influencing answers to future questions. I conducted both telephone and face-to-face interviews. Respondents were contacted through e-mail and phone. E-mails, phone, and fax contact information was accessed through attendance rosters of meetings related to Eastvale emergency team meeting in Riverside County on July 14, 2014; and the Villa Park public safety meeting in Orange County on May 4, 2015. Thus, before conducting an interview, I passed along informed consent to interviewees in accordance to protocols, then briefed the team on the purpose of the visit before proceeding with the interview

based on participants' election to sign the informed consent form or to decline to participate in the study.

The study employed semi-standardized approach of qualitative interviews questions using predetermined questions and topics (Berg & Lune, 2012), asking the core and follow-up inquiry in a consistent and methodical order. This method allows researchers to ask probing questions digressing from the guide. Accordingly, audio and numerical techniques of recording were used so that I could review each interview and then compare to the transcription of interview digital audio files to ensure accuracy and veracity, and further check against interviewees personal transcriptions for revision and rectification (Lincoln & Guba, 1985).

## **Data Analysis and Interpretation Plan**

Documents, field notes and interviews were collected and processed utilizing the constant comparison approach that involves transforming interview data, field notes, and documentary evidences into findings, and then interpreting into study findings such results of data reduction to answer to the central research questions.

#### Creswell (2007) stated:

Data analysis in qualitative research consists of preparing and organizing the data (i.e., text data as in transcripts) for analysis, then reducing the data into themes through a process of coding and condensing the codes and finally representing the data in figures, tables, or a discussion. (p. 148)

Further, data analysis of most projects starts as soon as any reflections on the subject matter, research design, or literature review materials can be used to set up or create early themes for analysis. Following the sampling methodology and data collection strategies, I recaptured the data analysis ongoing processes using NVivo "auto coding" as well as "the open coding technique" that allow the researcher to expose thoughts and meanings within the text, discovering the dimensions of the concepts contained in each of the interviews.

# **Constant Comparative Method**

In developing the codes, I utilized the constant comparative method. "By constant comparison of all current incidents in a category, the researcher begins to develop ideas about the category, its dimensions and limitations, and its relationship to other categories" (Mellon, 1990, pp. 72-73). Using this method, I read all the data in its entirety over and over again for new insights until reaching saturation, meaning no additional insight emerged. Then, I conducted a closer review of the data examining interview transcripts and documents to capture their logic and essence, further acquainting with the data before coding (Wet & Erasmus, 2007), to avoid hasty conclusions based on most apparent themes.

Data coding is crucial to the transformative way of grouping data into categories through sorting interview transcripts and documents by themes and topics. In this view, I intended to first explore data content thoroughly to identify and develop ideas about each category, its dimensions and limitations, and its relationship to other categories (Mellon, 1990, pp. 72-73). Thus, I anticipated placing emphasis on ways of connecting enthusiasm

and reasoning using the constant comparative approach, comparing study sites, and asking questions of the data, to elaborate themes and pattern of emergent models (Patton, 2002), and further draw consequences and eventually develop a story line (Corbin & Strauss, 2008 p.118). I processed interview transcripts, coding in the order interviews are conducted, using NVivo's request for evidence to make sure of code saturation. In further bringing together selected data, I identified emergent themes, hierarchies of data, and explanations that conducted to themes and categorizations. To complete the coding process, I linked data sections to notions and polished codes as investigation progress, to finally generate findings and draw conclusions.

# Managing and Analyzing Data Using NVivo Coding

The transcribed interview data and field notes were transferred into electronic formats and stored as Microsoft Word documents and were converted from word format into rich text file format, in order to process them as NVivo document files using rich text and visual coding features. Also, audio and video taped observations were transformed from visual and verbal expressions to written text after encoding the transcripts. In the same way, written artifacts were entered as text files using document browser of NVivo, ready for coding and further analysis. Hence, after completing these conversions all the interview files, field note files, observation notes, memo files and characteristics of interviewees were visible in the NVivo document browser where other features of the project files such as file size, linked nodes, documents created, and modified dates could also be seen.

Using NVivo software, I coded single words, phrases, or all paragraph highlights and links to a new or existing node during the coding process. As such, documents were structured with each interview question in a heading paragraph style and auto coded by heading level. Accordingly, emerging patterns from the study were captured by reviewing the nodes in the nodule browser. All the significant codes were pulled together around the study goal exploring the main research question. Indeed, the coding using NVivo was helpful in remodeling the codes by assembling all the relevant information and presenting them in a readable and understandable form to draw conclusions.

Theme organization from quick word to arduous, in-depth, line-by-line examination, is one of the most important tasks in qualitative study. They range from short answers to open-ended questions, to more compound responses appropriate for rich, complex narratives. Thus, the coding using NVivo, was intended to give me the opportunity to timely process node classification, extant a word frequency query, present a report on the node structure and the coding summary, and draw a matrix for results.

Richards and Richards (1991) noted that software is essential to the data scrutiny procedure, adding rigor, while for others relying on software can result in wrong data analysis. Indeed, compared to manual coding, the electronic coding process is quick, making more coding possible using software than with only manual methods, cutting and pasting pieces of text. Further, writing notes within the software rather than manually linking diverse sections of data together through electronic notes can be advantageous when developing themes across the data. As well, details can be checked on the content of particular nodes and this could affect the inter-relationships of the thematic ideas.

NVivo is reasonably easy to utilize as documents can be directly imported from a word format and be coded on screen and glance at the margins of documents to see which codes have been used where. However, it is difficult to use NVivo in analyzing individual themes, to understand how the different themes weave together to form a whole. Using software in the data analysis process eases the coding processes without attaining any real benefit to better comprehend data. But, NVivo is less useful for searching through the thematic ideas themselves in order to gain a deep understanding of the data, or in acquainting the emergence of patterns and themes to expound the central phenomenon.

Thus, NVivo as a tool allowed me to improve the rigor of the analysis process by validating (or not) my own impressions of the data. However, the software was less useful in terms of creativity and in addressing issues of validity and reliability in the thematic ideas that emerged during the data analysis process. As a result, I used a combination of manual as well as electronic tools (Welsh & Elaine, 2002) for data analysis and management in the study to make use of the advantages of each.

## **Moving from Coding to Model or Pattern Generation**

Data was analyzed around emerging codes, reducing questions into main codes that referred to major research goals. Thus, throughout the analysis process, nodes and code were created as thoughts occurred while reading through the documents to gather the answers from each of the 18 interviewees of the project. As a result, I was expecting to develop the emergence of some patterns and themes coded under the tree node option, representing the concepts and categories that relate or explain the central phenomenon.

Tree nodes were used to represent the concepts and categories that relate or explain the

central phenomenon and further, matrices are to be created by using matrix coding queries and be presented in a tabular format to show how the contents of different categories relate to each other, eventually generating the emergence of a model. Once the process was completed for all interview transcripts making clear that additional interviews would not add substantially to the understanding of the phenomenon, saturation was reached.

## Within-case and Cross-case Techniques in Evaluating and Analyzing the Data

I used within-case analysis technique with planners of disaster policies as well as beneficiaries of related programs under study. In this approach, I explored written documentation, survey responses, interview data, and field notes to pinpoint data' unique patterns for that county-unit. Accordingly, interviewers produced thorough case study reviews for each unit of research, sorting interview questions and answers and scrutinizing the information for within-group likenesses and dissimilarities. In addition, cross-case examination was performed to analyze the two county-units, sorting the similarities and differences across both.

#### **Mitigating Threats to Quality**

Creswell (1998, 2003), David (2006), McNabb (2002), Potter (1996), Stake (1995, 2005) and Yin (1981, 2003a, 2003b) looked at the quality of the case study's research design and have suggested necessary strategies researchers may use to establish completeness of their studies' internal validity, construct validity, external validity, and reliability. While Potter (1996) considered external validity as what the reader believes (p. 201) and internal validity as the value of the evidence that is gathered (p. 197), Yin

(2003b) perceived the quality of case study on examinations that have been generally utilized to institute the quality of any empirical social study (p. 33). Patton (2002) stated:

The credibility of qualitative inquiry depends on three distinct but related inquiry elements: rigorous methods for gathering high quality data in doing fieldwork, the credibility of the researcher (training, experience, status and presentation of self), and the philosophical belief in the value of the qualitative inquiry. (p. 552-553)

So, the choice of this research topic was the mixed products of my reasoning, intellectual curiosity, more of personal belief, values, and politico-socio-justice views of the topic about the adequacy of disaster policy implementation at local level integrating PWD.

Quality standards in a qualitative study are different compared to standard procedures in quantitative research (Creswell, 1998). As well, reliability and validity have different implication in qualitative and quantitative research (McReynolds et al., 2001). Guba and Lincoln (cited in Trochim, 2001) suggested testing credibility, transferability, dependability, and confirmability of adopted procedures, to validate findings in qualitative research. So, in planning the proposal I pointed out the data gathering tools to be used for a proper collection of info. Then, in the design phase I made sure that the research was well built with respect to construct validity, internal validity, and external validity; that proper data analysis strategies were employed to validate the accuracy of the findings; and demonstrated "the reliability of the procedures, and discuss the role of generalizability" (Creswell, 2009 p. 201). As follows, I took in consideration the mentioned tests to enhance the learning base of the field of research.

Construct validity. This related test calls for the investigator to use the right processes for the notions under study. Thus, to demonstrate construct validity, researchers need to underline right operational processes for the notions under study (Yin, 2003), underlining the relationship of data collection inquiries and processes to research questions. In support of that, the field research for this study involved (a) source documents and archive review, (b) questionnaires with 24 appointed emergency management officers, and (c) 18 semi-structured interviews. Data were gathered using this three-phase approach to provide strength to the construct validity of the research in accordance to Yin's (2003b) suggestion of developing of a case approach databank and sustaining a succession of data by means of numerous evidence details (pp. 97-105). Thus, by using multiple data sources and techniques, I addressed construct validity through specific accuracy checking strategies, taking in account validity relativeness to research questions and data collection inquiries and processes to ensure strength to the validity of the research.

**Internal validity.** This test, only a concern for causal case researches, is not performed for this exploratory case study (Yin, 2003b, p. 36) where some circumstances are presented to lead to others, and not for descriptive or exploratory researches.

**External validity.** External validity calls for generalizable findings beyond the case under study. Accordingly, generalizations for case studies, referred as analytical generalizations stand that previously established concept be utilized as a template in comparing the experimental outcomes (Rowley, 2002) of the case study. And so, theory generalizations can be applied to the other persons, places, and times (Trochim, 2001;

Yin, 2003b). Although the study addressed an eventual emergent model in the research design, to carry on the qualitative external validity test, I used investigation methods such as cross-case analysis and within-case analysis along with literature review.

Triangulation. I considered triangulation of evidence as the essential means of establishing validity in the study, converging multiple data sources and methods such as questionnaires, interviews, and documentation review. Creswell (1998) wrote that verification is critical to evaluating the quality of qualitative research and identified eight procedures for verifying qualitative research findings and recommends that any research study employ at least two of the eight procedures he identified including triangulation and peer review or debriefing. Further, Denzin (1978) and Patton (1999) identified four types of triangulation encompassing methods, sources, analysis, and theories triangulation.

Creswell (1998, p.213) emphasized "searching for convergence of information." In support of that, this case study emphasized the role of emergency managers in implementing current requirements at the local level, examining how disaster preparedness rescue planning for PWD compares with disaster preparedness rescue planning for general public. The study included conducting in-depth studies of related strategy for PWD to compare with the one for general public in the community, using the within-case analysis technique (Busha & Harter, 1980) to explore similarity and difference. I also cross-compared data (Busha & Harter, 1980) from the two selected counties of Orange and Riverside in California, isolating themes or patterns, to highlight commonalities and state relationships in answering to the research questions.

Documents and archives are helpful in verifying details from interviews, such as titles and names spelling, substantiating data from other sources, and presented comprehensive reportage about events, time, and locations. Even though document evidence conceals individual and organizational biases or lead to potential denial of access (Hesse-Biber & Leavy, 2011; Yin, 2009; Lincoln & Guba, 1985), the strengths of utilizing documentary data overshadow its weaknesses because it provides evidences that other data gathering techniques cannot capture (Berg & Lune, 2012). In view of that, the analysis of relevant reports and official papers such as administrative info, organization charts, agendas, minutes, existing plans, disaster preparedness tools, handbook, DHS regulation and news clippings, as well as online FEMA database and federal GAO audits corroborated triangulation of sources. These documentation reviews further informed the relationships between community advocacy groups and local government as well as within the three levels of government in planning and practicing disaster preparedness policy integrating PWD. The study further demonstrated triangulation of sources in checking the consistency of findings generated by different data collection methods, comparing people with different view point such as officials and grassroots community leaders to meet triangulation of sources in examining the consistency of different data sources from within the same method. Indeed, triangulation during the analysis phase of the study increased accuracy of findings and thus strengthened the study providing prospective for better acceptance.

**Transferability.** Participants' involvement in the study contributed to apprising disaster preparedness and responses, assisting researchers to identify the benefits and

barriers in existing disaster plans integrating PWD, and allowing emergency managers to make judgments on the findings. Future researchers may address concerns exposed in this study (Creswell, 2009) that remain unresolved.

**Trustworthiness of the data.** The test of trustworthiness calls for credibility of researcher findings and interpretations. Thus, to achieve trustworthiness qualitative research must meet some criteria to include credibility and transferability of findings (Lincoln & Guba, 1985) as well as triangulation of information, and peer debriefing for feedback sharpening up the study (Erlandson et al., 1993; Lincoln & Guba, 1985).

Ensuring credibility. As principal interviewer in the study, I ensured credibility by employing the three phases of data gathering from questionnaires, semi-structured interviews, and documentation review, thus prolonging engagement in the research (Erlandson et al., 1993; Lincoln & Guba, 1985). Indeed, ensuring credibility of the research ultimately rests in achieving triangulation of sources, emergent codes, methods, and findings and the likelihood to replicate the research phases, procedures and the findings. Accordingly, future research with an unlike population sampled at different sites could be conducted based on recorded and transcribed data and field notes. To further sustain objectivity, the study followed recommended protocols for case approach, comprising data collection's guidelines and field procedures.

Mitigating threats to quality is not an easy task. As such, I periodically detached myself from the situation to review records from the neutral position of a social scientist, chose interview environments and conditions in which participants felt comfortable, secure, and at ease to speak openly, and avoided presenting "yes" or "no" questions

which tend to smother details. Further, in accordance with Wolcott's (1990) view in maintaining the validity of qualitative research, I was a listener, recorded accurately, initiated writing early, revealed any relevant feelings that impel personal bias or prejudice, and allowed peers to critique the research manuscript.

Further, in order to prevent the research from being a narrative of my own opinions, I planned that detailed field notes be recorded for peers and mentor reviews, and that open attitude be adopted in admitting my own subjectivity. Moreover, regular reviews of written notebooks or journals put researchers more in touch with reality beliefs and biases and assist them in being aware of their tendency to judge people and actions on the basis of own believes, emotions and feelings. Additionally, to help ensure that the work's findings were the result of the experiences and ideas of the participants, rather than the characteristics and preferences of the researcher, the study provided detailed methodological description that enables the reader to determine and assent emerging data and constructs.

#### **Ethical Considerations**

Keeping bias out of the study is the ultimate challenge of researchers. For Krieger (1991), external reality is inseparable from inner reality, which, in essence, is based on knowledge of self. Hence, the main challenge to deal with while carrying out this study was to keep out my personal biases. I am a human rights activist and public administrator dealing on the everyday basis with public policy. I am familiar with the organizational culture of governmental departments as well as the general performance of social movement's organizations. So, I had to make sure in fulfilling sessions and running out

questionnaires that my personal biases do not interfere with data collection or data interpretation.

Through u Institutional Review Board (IRB) scrutiny and obtaining a signed and dated written informed consent form before beginning each interview, I ensured that participants were not harmed during the interview processes. I preserved confidentiality by identifying participants by category instead of by name, further assigning random codes to transcribed data records, to protect the identity of interviewees (Creswell, 1998; Goulding, 2002; Nachmias & Nachmias, 1987). Further, I used password-protected data storage in a secure site only available to the dissertation committee, in accordance with Walden University's IRB procedure in conducting social research.

In addition to providing each prospective participant with a consent form (see Appendix A) and a study information sheet (see Appendix B), I kept on maintaining the study in compliance with existing legal and ethical codes and principles including in Walden IRB guiding principle, the Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 et seq.) amended in 2008 and its implementing regulations, the Federal Policy for Human Subjects (34 CFR Part 97), the HIPAA rule referred to as Federal Health Insurance Portability and Accountability Act of 1996.

Because the ultimate goal in doing research is to provide information others learn from while inspiring their own judgments, any bias in the research misleads readers by releasing only one-sided story and minimizing the awareness of the audience. Hence, in qualitative research, bias affects the validity and reliability of findings, distorts truth, and affects decision making. Whereas some influences are unavoidable, control of biases can

be increased by remaining as neutral as possible. Accordingly, to sustain my opinion, I had to consider my topic not only as a researcher but also as a human being (Mehra, 2002). As a matter of fact, experiences, beliefs, feelings, wishes, attitudes, culture, views, state of mind, reference, error, and personality can bias analysis as we are human. Therefore, I kept my target sample bias free, maintained objectivity as best as I could and kept my mind open, as the conscious and subconscious are at work. To mitigate bias, I remained aware of my bias, developed listening and observation skills in capturing and documenting interviewees, and carefully separated "opinions" from "investigation." Most importantly, I paid attention to where the sources of information are coming from, for the sources to be factual and free of bias. If the source person is biased, facts may be weak or leave out information that does not support one opinion. This is considered unethical; people are generally willing to persuade others to believe their point of view as the most correct. I was aware of my own biases as well as people's biases in representing actual facts instead of someone's personal version of the facts.

## Reiterating the Significance of the Study

The drive of this research was to investigate current policies and procedures put into practice in county-level disaster preparedness for integrating PWD and to seize emergency managers and planners' approaches in coordinating local disasters actors, and inspiring community responsibilities over individual responsibilities for the most vulnerable members of society. In addition, the study broadened the understanding of the effectiveness of pre-disaster rescue planning and practices through a parallel between PWD's anticipations and the application of current requirements for integrating PWD

into local preparedness plans. Accordingly, this study was based on the assumption that emergency planners, support groups, and community members ought to enhance responses to emergency preparedness rescue procedures for PWD so that no one is left behind during a disaster (Fox, White, Rooney & Rowland, 2007; Hemingway & Priestley, 2014; Kailes et al., 2005; Olshansky, Hopkins & Johnson, 2012; White, 2014). The study ambitioned to minimize happenings such as the recent wildfire in California where PWD who were unable to self-evacuate were left behind as responders were not able to rescue (Freedman, 2015). The study contributes to the forming of an understanding and an awareness of the need for a policy to enhance local pre-disaster preparedness planning and practices for individuals with disability. As a result, the outcomes of the study could lead to improved local emergency preparedness related to warning, evacuating, and rescuing people with disabilities.

Through the exploration of the normative theories as reviewed by Sylves (2014), this research demonstrated the ability of emergency management in carrying out their role, the reasoning that guides their decision-making, and participants' insights of collaborative emergency management within the three level of government and the whole community integrating PWD, as perceived at the local level. The study aimed to encourage emergency managers and planners in coordinating local disasters actors, integrating the all-community, and using their savoir-faire to induce residents' engagement and awareness of the imperative that PWDs be granted the same chance as other community members to survive disasters.

Additionally, in accordance to Creswell's (1998) views, I present this study's findings using descriptions, informants' quotes, and interpretations within the framework of disaster policy implementation at local level integrating PWD. Indeed, there is "no standard format for reporting a case study research" (Merriam, as cited in Creswell, 1998, p.186). However, while Merriam sustained that proper balance should be maintained between background information and analysis /discussion of 60%/40% or 70%/30% in favor of background information, Creswell (1998) posited that matters involving the structure should be left "to writers to decide" (p.188). The strength of this study remains in its in-depth and detailed data gathering and examination of the phenomenon to fill the literature's gap.

#### **Summary**

This chapter outlined the research method for this exploratory case study. The rationale behind this method is that qualitative case study of two sites at the same county level of research analysis was deemed to be the most applicable approach to provide an in-depth understanding of disaster preparedness practices at county level integrating PWD. Data was analyzed through multiple sources of information, drawing on the advocacy worldview, and following prior case study approach. Chapter 4 presents collected data results and analysis.

### Chapter 4: Results

#### Introduction

The aim of this research was to examine current disaster preparedness policies and procedures and identify whether the counties of Orange and Riverside in California are following existing laws and policies related to integration of PWDs. To address this purpose, along with the research study's two research questions and two sub-questions, I collected and analyzed survey questionnaire data from 24 emergency managers and interview questionnaires from 18 persons purposefully selected as beneficent of sub mentioned counties disaster preparedness programs. I used QSR's NVivo 12 software to process the content analysis of collected participant responses and identify certain themes. The findings were organized by themes, in line with the two research questions and two sub-questions.

The questionnaires from the participants addressed the first and the second research questions to explore the coordinating role of Southern California's county emergency managers. The interview questionnaires from people who responded to the recruitment flyer (see Appendix I) addressed sub-questions. The chapter includes the research methodology applied to data collection and analysis, presentation of findings, and a summary of this chapter.

### Research Methodology Applied to Data Collection and Analysis

Using a purposefully selective method, invitations were emailed to 24 southern California emergency managers out of California's 58 county operational areas. Twelve managers did not respond while five declined to take part. Seven emergency managers

agreed to participate. Once the seven specific participants were identified, a random process was used assigning each participant a unique identifier between A01 and A07 to preserve anonymity.

Further, 11 people responded to the recruitment flyer and accepted the invitation to participate in the interview process: one emergency executive from RCs for PWDs serving Orange and Riverside County, four community-based disability advocacy persons who work with PWDs, five caregiver personnel for PWDs, and three actual PWDs. Once the 11 participants were identified, a random process was used to preserve anonymity, assigning each participant a unique identifier between B01 and B11.

The questionnaire and interview tools were developed to capture demographic and content data related to the two sub-questions with the goal of answering research questions. The first research question in conducting this study was: Do emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in the Riverside and Orange counties of California? Table 1 illustrates the relationship between the interview/questionnaire sections, purpose of the question, and specific interview questions.

Table 2

Interview/Questionnaires Sections in Relation to Interview Questions

Interview / Questionnaire Sections	Purpose of Question	E-mailed Questionnaire Number	Interview Question Number
Demographic	Demographics	1, 3,	
Content	Do emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in the Riverside and Orange	1, 2, 3, 4, 6,	
	How do emergency managers' attitudes influence local preparedness planning and practice integrating PWD?	3, 5, 7, 8, 9, 10, 11	
	How do advocacy organizations and caregivers for PWD perceive individual responsibilities of self-safeguard in time of disasters according to prevailing promoted plans and kits? Then, what are the challenges to developing a sense of community responsibility?		1, 2, 3, 4, 5, 6, 7, 8
Closing	Are back-up plans included in preparedness strategies for PWD necessitating essential assistance? If not, what are the alternatives? If yes, how do those plans influence changes in the community behavior and thus bring about social change?	6, 7	6, 7, 9, 10, 11

Table 3
Snapshot of Responses From Emergency Managers

AMES	o emergency managers include PWDs preparedness plans and activities to after serve their needs and avoid creased risks during disasters in the verside and Orange counties of alifornia?	bw do emergency managers' attitudes fluence local preparedness planning nd practice integrating PWD?	re back-up plans included in eparedness strategies for PWD sessitating essential assistance? not, what are the alternatives? If ss, how do those plans influence langes in the community behavior nd thus bring about social change?	b you feel that community properly arries your instructions about eparedness essentials? o you believe that disaster policy are operly implemented?
MAILED QUESTIONS	1, 2, 3, 4, 6,	3, 5, 7, 8, 9, 10	6, 7	11
A01	hings are in place currently,more can a implemented to accommodate ymmunity members living with sabilities in drills training, site visits and planning activities and add needs of ose who depend on assistive devices or mobility or communications-  3-40% PWD participation - do yt conduct own drills.	o not lead agency in developing ounty wide plans- Individuals / Sces roviders may develop and run mergency drills - decision making pproach left to 1st responders; no versees.	o "shelter in place" scenarios to ccommodate the needs of PV/Ds - o special needs registry system to ccord PWD' locations	o you feel that community properly arries your instructions about reparadness essentials? NA o you believe that disaster policy are roperly implemented? NA
A02	reparing for disasters is up to the dividual and/or family. From a 350 articipants' survey, 48% indicated they o not have an emergency plan for their pusehold, 50% indicated they do not ave basic emergency supplies ready, at 22.7% self-identified that they are repared for disasters. Thus, preparing in disasters is up to the individual add/or family.	am not in the position to define ecision processes on including PWDs plans, policies and procedures are enerally conducted in the collaborative orking group Plans, policies and rocedures continue to evolve following aining, exercises and real-world cidents.	case of emergency, request for WD requiring assistance to call for ssistance. No special needs egistry system to record PWD' cations	nderstanding that resources are mited during a disaster, it is perative for community members to uild an emergency tit, create a plan ith redundancies and sign up for mergency alerts.
A03	o not believe the community is dequately prepared for a major saster. Probably 30-40% are repared enough to survive on their own r a few days Do not know hether any PWD participate in the rills. Have not actively involved the WD population recently in planning, rills, etc., but this lack of involvement ill hopefully be addressed soon with Jr active participation in the County orking group. We support the needs the community, whoever it may be. (e remain an equal service provider.	ly decisions are based off ommunity needs. We are not dequately informed of the various sability issues that people have. We are established networks, but we are of well connected to them. on the believe residents are aware of all otential hazards in our community. on the believe the disaster-related eeds of the PWD are properly ddressed. This is something we need I work on as a community and across in region.	le maintain a list of vulnerable opulation members via various ganizations throughout the city. ut do not know if it has been odated recently.	es, community preparedness osolutely makes a difference. When sidents can take care of themselves illowing a disaster, preparedness lows emergency officials to focus on isponding to major incidents. I'm oncerned residents do not fully aparling emergency preparedness. I on the believe the disaster-related aeds of the PWD are properly ddressed. This is something we need work on as a community and across in region.
A04	ommunity not prepared for a long uration or large-scale eventless than 3% improvement needed. PWDs ave very low participation and are very aprepared.	/e utilize a Whole Community pproach to emergency management. o drills several mes a year (5-10), in some cases, lore. /e develop flexible all-hazard plans that an be utilized to guide the decision laking process before, during and after n emergency.	or facilities, yes. For individuals ing independently we enlist the alp of public service gencies and nonprofits to get some ithis information but it is not a implete registry. I/e need to make emergency reparedness a part of the school urriculum to make any sort of gnificant impact that leads to atual community-wide reparedness.	hink that the community hears us but irely takes action unless they were cently threatened by an emergency, azard, threat, etc.
A05	levery event, every exercise and every aining we identify gaps in our reparedness, response and recovery perations. 40% are adequately repared. (e have agencies which represent the WD population but little direct articipation from the population emselves. We have % PWD participation.	ecision making approached is based n past experience and collective istorical knowledge, strategic thinking, rofessional knowledge, local officials nd community input. Citizens are NOT ware of all potential disasters that ould occur in their community.	/e have established networks; We on ot use any registry system.  As resources to respond are likely be limited and if each individual at family are prepared for an ciden	o feel that community properly arries your instructions about reparedness essentials, but do not alieve that disaster policy are properly plemented.  The ush for inclusion of PWDs is a recent genda. While the population has ways been present, the responsibility consider their particular needs uring a disaster event is relatively
A06	le believe our community is well repared; Yet, gaps exist which could gnificantly improve our capability to ispond and recover from a major saster. No data of WDs participation.  I case of disaster, we would work osely with our County Office of mergency Services and as part of the zivated Incident Command System. le believe a large percentage of tizens are aware of the community's p identified hazards.	n After-Action Report-Improvement lan is completed after every event. ach of these activities is appreciated ithin the community and is effective nce even an exercise or drill that besn't go perfectly helps to identify aps in preparedness and response, hese gaps can then be incorporated to our work plans. Agencies which arve PWD populations are regularly wited to participate in all trainings, rills, and exercises.	s resources to respond are likely to a limited, each individual and mily should be prepared for an cident. We do not use any registry /stem. We have established atworking system.	aw and been brought to the forefront ue to recent disasters across the U.S. Community preparedness can make very significant difference in an mergency as resources to respond re likely to be limited and if each dividual and family are prepared for nincident, the outcomes for rotection of life and property are such better.

#### tablecontinues

A07

place,..more that can be implemented better include PWDs in preparedness We never really evaluate our apability to respond and recover from a ajor disaster.

o not believe the disaster-rela
e maintain a network system, focus on
eds of the PWD are properly

e needs of the community as whole nd not the differences, and believe

le serve despite differences... Info are le are not adequately informed of the arious disability issues that people ave. Decision making approached is ased on past experience and rofessional knowledge. o not believe the disaster-related

ddressed. This is something we need work on as a community.

o "shelter in place" scenarios to ccommodate the needs of PWDs o special needs registry system to cord PWD' locations

nderstanding that resources are nited during a disaster, it is perative for community members to uild an emergency kit, create a plan ith redundancies and sign up for mergency alerts.

### **Presentation of Findings**

Three major themes resulted from emergency managers' questionnaire responses.

### Major Theme 1: Lack of Inclusion

The first major theme that emerged was the lack of PWD inclusion in preparedness activities, which involved whether emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in Riverside and Orange County, California. Seven emergency managers (100% of respondents) said that one-third of citizens in Riverside and Orange County, California are generally prepared for a major disaster. Four emergency managers (57% of respondents) indicated that local preparedness plans are being implemented to include PWDs, but A07 did not believe the disaster-related needs of the PWD are properly addressed. A03 did not know whether any PWDs participate in the drills, while A04 had not actively involved the PWD population in drills; consequently, PWDs remain very unprepared. A06 had no data regarding PWDs' participation in drills, while participant A01 indicated that they were in the process of ameliorating local preparedness plans and activities regarding PWDs.

Managers A01, A04, A05, and A06 acknowledged gaps exist in terms of preparedness, response, and recovery operations that could significantly impede their capability to respond and recover from a major disaster, and admitted that there is room for improvement through the network system registering within respective county working groups, in terms of reaching out to people with a variety of disabilities and involving them in emergency preparedness drills. Thus, 86% of the participating emergency managers either implemented plans with respect to integrating PWDs or reported being in the process of evolving such strategies.

Overall, A04, A06. A07 stated disaster plans are prepared for the community as a whole, and the community is generally prepared for a major disaster. A05 further said that agencies which represent the PWD population are included in preparedness plans, implying that they were dedicated to providing service to diverse communities, regardless of differences or handicap. None of the participants mentioned statistics about PWD participation, but all participants noted PWDs do not have enough exposure to preparedness activities and they remain very unprepared. In addition, according to some emergency managers, preparing for disasters is up to the individual and/or family.

For example, A02 stressed that disaster preparedness planning and activity accessible to PWDs is a family role, promoting individual and family responsibility to protect themselves and assist family members with incapacities at the time of calamities:

Preparing for disasters is up to the individual and/or family. From a 350 participants' survey, 48% indicated they do not have an emergency plan for their household, 50% indicated they do not have basic emergency supplies ready, and

22.7% self-identified that they are prepared for disasters. Thus, preparing for disasters is up to the individual and/or family.

A03 mentioned that the lack of involvement of PWDs in preparedness activity will be addressed to reinforce strategies regarding their support of and approach PWDs:

Do not know whether any PWD participate in the drills. Have not actively involved the PWD population recently in planning, drills, etc., but this lack of involvement will hopefully be addressed soon with our active participation in the County working group. We support the needs of the community, whoever it may be. We remain an equal service provider.

A01 and A04 similarly reported a need for improvement of PWDs integration in preparedness plans and activities, stressing that they utilize a emergency management's Whole Community approach that looks beyond differences and has service and support in mind, while A07 explicated how their agency emphases on communities' needs and not the differences or handicap:

We utilize a Whole Community approach to emergency management... less than 30% of community members are prepared... improvement is needed. PWDs have very low participation and are very unprepared.

We maintain a network system, focus on the needs of the community as whole and not the differences, and believe citizens are somehow aware.

Participants generally reported the same self-perception regarding PWD integration in preparedness plans and activities, promoting individual and family responsibility in

preparedness, and explained that their agency focuses on communities' needs as whole and not the differences.

The responses of the questionnaires indicate that the participants had a deep self-awareness of the impact emergency managers' profession may have on communities and try not to favor one person over another. In these responses, the emergency managers sustained that emergency professionals were trained to serve despite differences, especially that PWDs integration is part of preparedness planning process and activities. At the same time, management planners indicated preparedness process is up to each person in community, promoting individual and family responsibility (Participant A02) to protect themselves and assist family members with incapacities at the time of calamities.

Sub-theme 1: Evolving PWD integration. In the first subtheme the emergency managers perceive that PWDs' integration in preparedness plans and activities is evolving. Two participants indicated that emergency managers' perception of PWDs incorporation in preparedness plans and activities was evolving or in the process of improving, admitting that they were in the process of enhancing/ promoting ways to accommodate their inhabitants living with disabilities (A01) in their disaster preparedness processes to enhance their service quality. A01 specifically highlighted the need to incorporate PWDs in preparedness planning activities and better accommodate those who depend on assistive devices for mobility or communications, articulating that more can be implemented to accommodate community members living with disabilities in drills training, site visits and planning activities and add needs of those who depend on assistive devices for mobility or communications.

The responses received from participants as part of this study emphasized that the emergency managers envisioned serving their PWDs constituent with the necessary care. Even though they promoted individual and family responsibility for self-protection and assistance to family members with PWDs, managers believe more can be done for PWDs to have a voice in community preparedness planning. One participant mentioned lack of PWDs representatives in the field, without ending up representing a sub-theme, relevant to Major Theme 1.

## Major Theme 2: Decision-Making Approaches Based on Expertise and Professional Knowledge

The second theme relates to the experiences and perceptions of the emergency managers. The second research question of the study stressed on whether emergency managers' attitudes/ approaches influence local preparedness planning and practice integrating PWD. Emergency managers believed having appropriate decision-making approach concerning preparedness planning and practice integrating PWD.

Major Theme 2 received four and two occurrences from the following: (a) decision making approach based on your expertise and professional knowledge (b) decision making approach based on consultations with local agents and community, including PWDs.

The results indicated that the emergency managers have the professional knowledge necessary for their decision-making approach. For example, Participant A04 is developing flexible all-hazard plans that can be utilized to guide the decision-making process before, during, and after an emergency. Participant A04 further

sustained that emergency preparedness should be part of the school curriculum saying: we need to make emergency preparedness a part of the school curriculum to make any sort of significant impact that leads to actual community-wide preparedness.

Similarly, A03 and A06 explained that connections between community and preparedness team is make easier with the established network system, or the Improvement Plan report completed after every event, that could help approachability to and support of PWDs, saying that each of these activities is appreciated within the community and is effective since even an exercise or drill that doesn't go perfectly helps to identify gaps in preparedness and response.

A05 and A07 indicated the same self-perception concerning the effectiveness of their decision-making approach, stressing again how their organization focuses on experience and professional knowledge and not differences or handicap, saying that decision-making approached is based on past experience and professional knowledge.

Although A01 said having a decision-making approach left to first responders, emergency managers' decision-making approach appear to be essentially based on expertise and professional knowledge in planning preparedness for the community as a whole despite any particular difference. In these responses, the emergency managers (Participants A01, A04, A05, A07) indicated using decision-making approach based on expertise and professional knowledge, to serve the community as whole, despite differences and /or handicap.

**Subtheme 1: Prioritizing consultations with local agents.** In the first subtheme the emergency managers perceive that consultations with local agents and community, including PWDs, is being prioritized. Two of the emergency managers stated that decision-making approach are based on community needs to increase citizens awareness about potential disasters that could occur in the area. Emergency managers believe that establishing work plan might improve cognizance of instructions about preparedness essentials, admitting that they were in the process of After-Action Report-Improvement Plan to be completed after every event that is appreciated within the community. Thus, exercises or drills that do not operate smoothly help to identify gaps in preparedness and response. These gaps can then be incorporated into work plans. In this view, agencies that serve PWD populations are regularly invited to participate in all trainings, drills, and exercises as a way to add the needs of their inhabitants living with disabilities in their disaster preparedness processes and thus, enhance their service quality. The questionnaire results indicated that the emergency managers are eager to cooperate and communicate with residents with disabilities, making that a priority and something they need to work on as a community. One participant was not in the position to answer the question.

# Major Theme 3: Community Participants' Increased Awareness of Emergency Managers' Instructions

The third major theme highlighted that community participants have increased awareness of emergency managers' instructions and be able to carry out properly those instructions for themselves and regarding PWDs. This perception is one more essential findings of the study. The theme stressed on properly carrying out emergency managers'

instructions regarding PWDs even before disasters and emergencies occur. These instructions include the ability of community members and PWDs to self-evacuate in the effort to help reduce causalities when disasters strike.

A03 expressed more concerns about ways of receiving country officials' directives while advocating that connection between emergency managers, local agents, and community, including PWDs, should bring more awareness carrying out emergency managers' instructions on how to get ready before disasters happen, saying: I am concerned residents do not fully implement suggestions by the City regarding emergency preparedness. I do not believe the disaster-related needs of the PWD are properly addressed.

More participants voiced the opinion that community preparedness can make a very significant difference in an emergency as resources to respond are likely to be limited and if each individual and family are prepared for an incident, the outcomes for protection of life and property are much better. It is vital for PWDs and their caregivers to have adequate knowledge and properly carry out instruction and tips in relation to how to self-protect and care ahead of disasters. Participant A05 added further apprehensions about PWDs inclusion in preparedness:

The push for inclusion of PWDs is a recent agenda. While the population has always been present, the responsibility to consider their particular needs during a disaster event is relatively new and been brought to the forefront due to recent disasters across the U.S.

The suggestion stemmed from the perception that the needs of PWDs cannot be addressed without proper carried out of instructions and consultations with local agents and community. Therefore, increased communication between community members and emergency managers can strengthen awareness and lead PWDs to open up.

Thus, the emergency managers who sustained that preparedness planning includes PWDs, posited that preparedness activities could make a difference in the ability of emergency officials to respond after a disaster as long as community properly carries instructions about preparedness essentials. Emergency managers believe that following the directives is key for having disaster policy properly implemented and PWDs disaster—related needs properly addressed.

Table 4
Snapshot of Responses from Community Members

NAMES

How do advocacy organizations and caregivers for PWD perceive individual responsibilities of self-safeguard in time of disasters according to prevailing promoted plans and kits? Then, what are the challenges to developing a sense of community responsibility?

Are back-up plans included in preparedness strategies for PWD necessitating essential assistance? If not, what are the alternatives? If yes, how do those plans influence changes in the community behavior and thus bring about social chance?

INTERVIEW
QUESTIONS

1, 2, 3, 4, 5, 6, 6, 7, 8, 9,10, 11

B01	<ul> <li>½ Emergency Plan in place;</li> <li>½ Practice Drills;</li> <li>¾ No designated Shelter in place;</li> <li>¾ Get info from Public Agencies;</li> <li>¾ Not a PWD - No :"Plan B";</li> </ul>	3/4 Not registered with the County; 3/4 Not much confident in government in term of response to disaster; 3/4 Worried about possible major dissaster; 3/4 Worried about County to meet PWDs' needs;
B02	<ul> <li>½ Emergency Plan in place;</li> <li>¾ NO Practice of Drills;</li> <li>¾ No designated Shelter in place;</li> <li>¾ Get info from Public Agencies Fire Department;</li> <li>¾ Not a PWD - No :"Plan B";</li> </ul>	<ul> <li>Not registered with the County;</li> <li>Not much confident in government in term of response to disaster;</li> <li>Worried about possible major dissaster;</li> <li>County need to know where PDWs reside.</li> </ul>
B03	<ul> <li>½ Emergency Plan in place;</li> <li>½ Practice Drills;</li> <li>¾ No designated Shelter in place;</li> <li>¾ Get info from News;</li> <li>¾ PWD.</li> </ul>	% Not registered with the County; % Very little confident in government in term of response to disaster; % Worried about PDWs using special equipement, if major dissaster strikes; % County need to know about PDWs' differences in needs; More compassion should be showed
04	% Emergency Plan in place; % NO Practice of Drills; % Don't know of about designated shelters; % Get info from News; % Caregiver of PWDs - No :"Plan B";	and practiced  34 Not familiar with the County' registration system;  34 Very little confident in government in term of response to disaster;  34 Worried about PWDs not able to survive major dissaster;  34 County to establish backup plan such as a special needs registry system to record PWDs' locations;
B05	<ul> <li>% Emergency Plan in place;</li> <li>% NO Practice of Drills;</li> <li>% Don't know where to go if I need to evacuate. No shelters have been designated;</li> <li>% Get info from News - If phone service is interrupted, my client won't be able to contact me;</li> <li>% Caregiver of PWDs - No:"Plan B";</li> </ul>	% There is no County's special needs registry; % Not much confident in government - County to be more visible in the community - County topaid greater attention to disabled, all type of disabilities; % Worried about PWDs not able to evacuate because of their disabilities or because they cannot reach help; % Emergency managersto understand the vulnerability that PWDs feel more deeply. County to provide vulnerability awareness training in communities;
B06	<ul> <li>¾ Emergency Plan in place;</li> <li>¾ Practiced Fire Drills;</li> <li>¾ No designated Shelter in place;</li> <li>¾ Get info from News - No other idea;</li> <li>¾ No disclusure if PWD or not;</li> </ul>	% Get info from News % Worried – Not much confident in government's response to disaster. % Not registered with the County; % Worried – Not confident in government in term of response to disaster.3/ Don't know how County could better meet PWDs' needs;
B07	<ul> <li>% Get info from News;</li> <li>% PWD.</li> <li>% Emergency Plan in place;</li> <li>% Practiced Fire Drills;</li> <li>% No designated Shelter in place;</li> <li>% Get info - don't know from where;</li> <li>% PWD - No :"Plan B";</li> </ul>	% Never hear of County's registry system, I don't know the criteria to get pre-registered with a 9-1-1 provider or on the County's registry system; % Don't know if confident in government in term of response to disaster. % Community including PWDs to have adequate knowledge and training to know how to self-protect and care ahead of disasters.

B08	% Emergency Plan in place; % NO Practice of Drills; % No designated Shelter in place; % Get info - don't know from where; % PWD - need someone to walk with - will have hard time to self-evacuate - No other alternatives	3/ Don't know about County's registry system; 3/ No idea if confident in government in term of response to disaster. I am worrying to experience personal injury, or a major disruption of routine if my caregiver cannot make it to me during a major disaster. 3/ County need to know where PDWs live;
<b>/</b> еов	<ul> <li>% Emergency Plan in place;</li> <li>% Some Practice of Disaster Drills;</li> <li>% No designated Shelter in place;</li> <li>% Info from Caregiver - No other idea where to get info;</li> <li>% PWD - not able to speak;</li> </ul>	3/4 Not registered with the County; 3/4 Worried – Not confident in government in term of response to disaster. 3/4 No idea how County could better meet PWDs' needs;
B10	% Emergency Plan in place; % Some Practice of Drills, but not sure if effective; % Not aware of any shelters. Don't know where to go if need to evacuate.No designated Shelter in place;; % Get info from TV and RedCross, Community including PWDs should have adequate knowledge of the types of potential disasters in their area; % Not a PWD. Yet, caregiver with clients unable to evacuate without being taken care of;	34 Not registered with the County; 36 Not at all confident in government in term of response to disaster, need more visibility from County to build trust; 36 County should paid greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs.
B11	<ul> <li>½ Emergency Plan in place;</li> <li>¾ Some Practice of Drills, but not sure if effective;</li> <li>¾ Don't know of about designated Shelter in place;</li> <li>¾ Get info from News, Red Cross;</li> <li>¾ Not a PWD. Yet, caregiver with clients unable to evacuate without being taken care of;</li> </ul>	3/4 Not registered with the County; 3/4 Very little confident in government in term of response to disaster; 3/4 Very worried in case major disaster strikes; 3/4 County could visit the homes of the residents with disabilities. The only barrier I see is if they don't want to;

### Major Theme 4: Preparedness Teams not Addressing PWDs' Needs

The fourth major theme emerged from disability advocacy personnel who work with PDWs, caregivers, as well as other members of the Regional Centers (RC) for PDWs. This fourth major theme corresponds with the third research question, which investigated how advocacy organizations and caregivers for PWD perceive individual responsibilities of self-safeguard in time of disasters according to prevailing promoted plans/kits, and the challenges to developing a sense of community responsibility.

Overall, PDWs stated that emergency managers were not sensitive to their type of disabilities; Community including PWDs need to have adequate knowledge and training

to know how to protect and care for themselves ahead of disasters. PWDs and their caregivers believed the services they expecting to receive before and during a disaster should be sensitive to needs. Even though participants stated having gathered emergency kits, PWDs do not seem ready for individual responsibilities of self-safeguard in time of disasters. According to the data generated in this study, PDWs and their related caregivers as well as other personnel directly working with/ for PWDs, do not recall any designated shelter they can go to in case of disaster. They have very little to no confidence in government in term of response to major disaster, especially for PDWs using special equipment and their caregivers, believed they may not survive to major disaster (B03, B04, and B05) as the emergency preparedness teams handle all disabilities alike.

B03 raised major concerns saying that County need to know about PDWs' differences in needs; More compassion should be showed and practiced.

B10 pinpointed the lack of PWDs needs awareness:

County should paid greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs.

Participants B07 further indicated PWDs lack of enthusiasm in taking individual responsibilities of self-safeguard in time of disasters, by adding that community including PWDs need to have adequate knowledge and training to know how to self-protect and care ahead of disasters.

More participants voiced the opinion that community preparedness can make a very significant difference in case of an emergency if they could locate PWDs ahead of disaster. According to the study's generated data, PDWs and their related caregivers are not registered, as counties do not have a registry system.

This lack of PWDs identification and needs responsiveness on the part of county services providers' teams was bring out by most participants, showing that PDWs, their caregivers, and related advocacy personnel do not believe in taking individual responsibilities of self-safeguard in time of disasters, according to disaster preparedness teams sensitivities to their needs. This perception was inspired by the approach of the emergency preparedness teams during drills or prior unpredicted disasters.

According to responses, all participants indicated having their emergency plan in place with the necessary supply kit in their home, which includes items related to basic emergency things like food, water, a first aid kit, batteries, a flashlight, and other tools that may be in need in the event of a disaster. However, results showed that most participants are not aware of potential disasters that could affect their area.

Thus, the fourth major theme revealed how PDWs have concealed the lack of thoughtfulness to their disabilities issues. From their perspective, the emergency managers give more attention in including the Community as a Whole in the preparedness plans and activities, rather than the individual need or PWDs.

The belief expressed by the participants is that preparedness drills and activities are not adequately addressing PWDs needs and stimulating their readiness in taking individual responsibilities of self-safeguard. Nine participants—B01-B05, B7, B08, B10

and B11 (82% of the PDWs, their caregivers and other related personnel)—shared this belief. The PWDs interviewed as part of this study shared how concerned they are about upcoming major disaster. These participants stressed being unable to go to the shelter without being taken care of, especially when using specialized devices. Again, participants are expecting emergency managers to have a more visible presence in the community.

For Participant B02, County need to know where PDWs reside, while B10 sustained that the county should be more sensitive to PWDs needs, adding that County should pay greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs. Meanwhile, Participant B04 persisted that "Plan B" it up to the county:, adding that it is up to County to establish backup plan such as a special needs registry system to record PWDs' locations

Based on these interviews, three participants, B09, B10 and B11, have some practice of drills, while four participants, B02, B04, B05 and B08, revealed that they never practiced emergency drills. None of the participants knew about or could identify designated shelters where to go in case of disaster. Seven participants revealed being a PWD or caregiver of a PWD and were not pre-registered with the County's registry system. PWDs pointed out that, while they were frustrated in the level of the service, there remained possibility for improvement.

### **Major Theme 5: Focus on Targeted Needs**

The fifth major theme emphasized the perceptions and experiences of the disability advocacy personnel, of the PWDs and their caregivers, as well as other members of the Regional Centers (RC) for PDWs. The fifth major theme was related to the fourth and last research question, which contained the idea that back-up plans need to be included in preparedness strategies for PWD necessitating essential assistance. PWDs and their caregivers mentioned that emergency managers should show some manifest understanding of PDWs' vulnerability by knowing more about PWDs location in the community and differences in their needs. Major theme 5 appeared eight times during interviews with the PDWs and caregivers (73% of the participants).

B07 expressed the opinion that it is crucial for community, including PWDs, to develop sufficient skills and knowledge regarding how to care for and protect themselves before disasters occur. Participant B05 said that local preparedness teams and emergency managers should provide community including PDWs with vulnerability awareness training and proper guidelines on how to take control and assume responsibility when disaster strikes. B05 further added that County should pay greater attention to disabled, all type of disabilities; Emergency managers should understand the vulnerability that PWDs feel more deeply; County should provide vulnerability awareness training in communities.

The fifth major theme stressed on the recommendation to increase the emergency managers' visibility and level of presence in PWDs communities to further understand PWDs issues and thus target on their needs for backup plan. Participant

B08 need someone to walk with while participants B09 is not able to speak; both of them would rely totally on their caregiver in receiving info from authorities in a large-scale calamity:

I am worrying to experience personal injury, or a major disruption of routine if my caregiver cannot make it to me during a major disaster.

This theme stressed that the emergency specialist's responsiveness during disaster preparedness should not be generalized, but also focused towards the needs of the PWDs (Appendix J -5/). The proposition of the participants points out PWDs would prefer emergency managers to know where they are, who they are, in order to have a more targeted disaster preparedness planning position. In this view, PWDs will not perceive a lack of know-how toward their vulnerabilities, as their needs will be met. For example, Participant B10 proposed that the emergency managers know more about PDWs and their necessities, so that general disaster preparedness focus should include the specific needs of the PWDs communities. B10 said that County should pay greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs.

Similarly, participants B08, B10, and B11 sustained that in case of mandatory evacuation due to a large-scale calamity, they will have hard time evacuating. Those participants highlighted physical and emotional health issues of PWDs using special accessories, such as a wheelchair, a cane, a special telephone, and a special bed. Participants B08, B10, and B11 do have disabilities that may prevent them from self-evacuating, and have no backup plan, and no other alternatives. The suggestion

emanated from the insight that PWDs' needs cannot be addressed through the current "one-size fits all" method.

Sub-theme1: Compassion should be more effective and displayed. The first subtheme related to the fifth major theme included the idea that back-up plans need to be included in preparedness strategies for PWD necessitating essential assistance. Two participants, B03 and B04, their caregivers and other related personnel shared the belief that more compassion should be shown and practiced to determine the needs of the PWDs for backup plan such as a special needs registry system to record their locations. For example, Participant B07 never heard about the county's special needs registry system to record PWD' locations and was wondering about the criteria for inclusion in the registry, if any. B07 said that he never hear of County's registry system, and don't know the criteria to get pre-registered with a 9-1-1 provider or on the County's registry system.

B05 recognized that if phone service is interrupted, he won't be able to contact his caregiver or home health aides' service provider in the event of calamity:

Don't know where to go if I need to evacuate. No shelters have been designated.;

If phone service is interrupted, my client won't be able to contact me; Worried about PWDs not able to evacuate because of their disabilities or because they cannot reach help

Another significant proposition by the PWDs who took part in this study is to see further visible emergency managers in PWDs' community, looking to know where they are. For those participants, the act of being present shows that the emergency managers are disposed to act together and communicate with the local residents, including PWDs. Conversely, participant B11 sustained that improved visibility could enhance connections between emergency managers and community members including PWDs, develop trust, and enhance the effectiveness of the emergency managers services. B11 further said that County could visit the homes of the residents with disabilities. The only barrier would be that they don't want to.

PDWs and their caregivers implied that emergency managers should have a insightful perceptiveness and awareness of the vulnerability of PWDs. Therefore, more compassion could increase social contact with emergency managers and inspire PWDs to open up and reinforce communicating with the emergency managers. In view of that, emergency managers' understanding of PWDs vulnerability could be improved.

Overall, PDWs and caregivers who took part in this study assumed emergency managers ought to know PWDs in their community and understand the vulnerability they deeply feel. This could be sighted one of the most significant findings in this study. While emergency managers promoting individual responsibility to self-evacuate in case of calamity, they should admit needing to be more informed as regards to PDWs included in the diverse populations they served. Accordingly, training drills have to be designed for public as well as for PWDs and provided regularly so that they can be more responsive of the necessities and conditions of PDWs communities. Further, a system of registry should be implemented to facilitate PWDs' identification in case of major disaster.

### Major Theme 6: Building Trust Between Emergency Managers and PWDs

The sixth major theme emphasized the perceptions and experiences of the PDWs' caregivers and PWDs as well as emergency specialists, from the participant interviews. Lack of trust on each other, was mentioned by the two groups of service providers and benefit receivers.

PWDs' respondents pointed out that they depend on others for assistance, especially in times of emergency. Accordingly, PWDs sustained that the support of family members and caregivers in emergency preparedness training and drills is vital, emphasizing the need for individualized plans to reduce confusion when disaster strikes.

The term trust was never mentioned directly by any participant. However, it was revealed in participant's interviews. Trust issues from participants' responses essentially fell into two words: (a) confidence in government in term of response to disaster, and (b) belief in County support for PWDs that were mentioned repeatedly by nine participants. According to the interviews engaged for this study, 82% of the PWDs and caregivers pointed out the need for trust to be established between emergency managers and PWDs community. Similarly, emergency managers have mentioned the building of relationships with the PWDs they assist, where trust appears be one of the key building cubes.

B03 and B04 sustained having very little confident in government in term of response to disaster. Participant B02 also explained he has not much confident in government in term of response to disaster; he worries about possible major disaster in

case of major disaster; County need to know where PDWs reside. B10 also remarked that emergency managers and PWDs should work together for county to know more about PDWs' needs and thus, enhance preparedness planning system saying he is not at all confident in government in term of response to disaster, need more visibility from County to build trust. For B010, County should paid greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs. Further, B06 admitted being Not confident in government in term of response to disaster; and don't know how County could better meet PWDs' needs;

Finally, participants mentioned that emergency managers are in great need of vulnerability awareness knowledge when dealing with PWDs communities.

Participants' responses in the study showed that, emergency managers and PWDs need mutual understanding in order for the relationship to prosper and lead to more appropriate and effective results.

Participant B11 described how confidence between the two parties could be developed to help the vulnerability awareness experience of the emergency managers, as PWDs may then be more comfortable exposing their weaknesses and sharing their needs for more effective results in preparedness strategies and drills activities, saying that County could visit the homes of the residents with disabilities. Sustaining that to be the only barrier he is seeing is if they don't want to.

Without stating their level of trust in county preparedness team, PWDs participating in the study mentioned having very little confidence in the emergency

managers in terms of their readiness to respond to disasters, such as a major earthquake in community including PWDs. B02 and B08 proposed that emergency experts, local officials and public servants have to take the time to improve visibility within PWDs' community to better understand their needs, worrying about possible major disaster. For B02 and B08, County need to know where PDWs reside.

Further, B07 mentioned the role and responsibility of emergency managers in organizing drills to help for PWDs readiness in case of calamity. B07 alleged that he does not know if he is confident in government in term of response to disaster. B07 is wishing that PWDs community get sufficient knowledge and trainings to determine how to accommodate care for and protect themselves before disasters occur.

While PWDs were present among respondents and required the attention of emergency managers in planning and drills training efforts, their greatest limitations related to decision-making to evacuate when needed, and the ability to independently manage to survive/complete tasks outside their home or at designated shelter. These are precisely the skills required to effectively respond to an emergency, especially during an evacuation.

**Sub-theme1: Strong connection needed.** According to the interviews, 18% of the participants sustained that a strong connection between emergency specialists and PWDs is needed. PWDs pointed out the need for a strong connection between them and emergency experts and proposed that by developing such a connection, both parties could better comprehend each other better. For example, Participant B10 mentioned the need for a relationship between the PWDs community and the county emergency managers:

Not at all confident in government in term of response to disaster, need more visibility from County to build trust; County should paid greater attention to disabled not only community in general, and need to send representatives out into the community to know more about PDWs and their needs

Strong connection between emergency managers and PWDs is necessary to enhance their relationship.

# Interpretation of Findings Regarding Answers to the Research Questions RQ 1

Research Question 1 queried: Do emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in the Riverside and Orange counties of California?

The responses from questionnaires with the emergency managers revealed a major theme: emergency officers' perceptions are that they either were implementing plans concerning the integration of PWDs or were in the process of developing such strategy. It further showed that some emergency managers do not believe the disaster-related needs of the PWD are properly addressed, as there was a lack of PWD representatives in preparedness activities. While two participants stated they were in the process of improving local preparedness plans and activities with respect to PWDs, other emergency managers believed their organizations have not actively involved the PWD population in preparedness trainings. Finally, another emergency manager participant indicated having no data of PWDs' participation in drills.

The literature review for this study showed that, despite mandates to do so, functional needs and contribution from individuals with disabilities are not integrated in municipalities' disaster preparedness plans. As a result, critics have condemned discrepancies between written preparedness plans and evidence of jurisdictional preparedness provisions and further revealed that the needs of PWD are not addressed in disasters. Preparedness plans tend to be uniform for every household, yet when disaster strikes, members of a community are not affected the same way (Hemingway & Priestley, 2014), and accesses to resources remain disparate within communities, affecting susceptibility and adaptive capacity of vulnerable individuals (Yamin et al., 2005).

Quality care transpires from the ability of a provider and PWDs' community to work together and comprehend matters in the same viewpoint. Currently, there is a clear lack of evidenced-based knowledge about how best to organize preparedness and response efforts for PWDs (Gerber, Norwood, & Zakour 2010, p. 11). Gerber et al. (2010) described their experiences in assessing the attitudes, behaviors, and needs of PWDs. They sustained there is a "clear lack of research validating best practices" and "a lack of evidenced-based knowledge about how best to organize preparedness and response efforts" for PWDs (p.11). In the same view, recent research indicated that people with disabilities largely recognized they will have real trouble to evacuate from calamity scenes toward shelters if disasters strike (United Nation Office for Disaster, 2013), but little research exists on just how to address this issue.

The principal agent theory frames this debate about government emergency managers' interactions with federal, state, local, and private agencies. This theory assumes that emergency managers work in environments where they cannot observe whether or not the instructions they issued as principals are properly carried out by agents, whether or not disaster policies are properly implemented, or whether or not disaster—related needs are properly addressed in realizing goals emergency managers are mandated to meet. Study responses collected showed that preparing for and responding to disaster by local government within federal goals is a matter of emergency managers' know-how and approaches in dealing with eventual gray areas when coordinating political intent and PWD expectations.

The significant outcome that emerged from the major theme 1 is that emergency managers stood that even though communities as a whole have basic information, PWDs do not have enough exposure to preparedness activities and they remain very unprepared. As disaster preparedness teams, state emergency managers and local-level law enforcement agencies need to be committed to and in accordance with federal principles (Roberts, 2005) for effective disaster response preparedness. Accordingly, emergency managers agree on the need to improve the current care provided to the PWDs community. However, divergent viewpoints were discovered with PWDs responses that argued the opposite of what the emergency officers expressed in their interviews. These insights will be further mentioned in the following sections.

Research Question 2 asked: How do emergency managers' attitudes influence local preparedness planning and practice PWD? Responses collected from the study indicated that emergency managers' decision-making approaches appear to be essentially based on expertise and professional knowledge in planning preparedness for the community despite any particular difference.

The study results indicated that emergency managers have the professional knowledge necessary for their decision-making approach. Although one participant sustained having a decision-making approach left to first responders, emergency managers believe their decision making approach to be essentially based on expertise and professional knowledge in planning preparedness for the community as a whole despite any particular difference. Two emergency managers stated that decision-making approaches are based on community needs to increase citizens' awareness about potential disasters that could occur in the area, while another participant suggested to make emergency preparedness a part of the school curriculum to make any sort of significant impact that leads to actual community-wide preparedness.

The questionnaires indicated that the emergency specialists are eager to cooperate and communicate with residents with disabilities, making that a priority and something they need to work on as a community. One participant expressed more concerns while advocating that connection between emergency managers, local agents, and community, including PWDs, should bring more awareness, carrying out emergency managers' instructions on how to prepare before calamities happen. More participants voiced the

opinion that PWDs and their caregivers receive increased awareness of emergency teams' instructions and tips relating to protecting and caring for themselves ahead of calamities and be able to carry out properly those instructions. This perception was one of the crucial findings of the study. The findings call for properly carrying out emergency managers' instructions regarding PWDs, even before disasters and emergencies occur. Emergency managers believe these instructions include the ability of community members and PWDs to self-evacuate in the effort to help reduce causalities when disasters strike.

The literature review results showed disaster regulation connects with and crosses through parts of other ruling (Sylves, 2014, 2008) concerning housing, labor, education, environment, social services, transportation, defense, and more. As local and state governments remain in charge of emergency management (Birkland, 2009), they should also consider emergency management as coordinated activities of different level of government (Sylves, 2014), underlining the importance of intergovernmental relationship. Prior disasters exposed the conflictual interest in this "shared governance system" as related to disaster management (Birkland & Waterman, 2008; Birkland, 2009; Gomez & Wilson, 2008; Kearney, Scavo, & Kilroy, 2008; Kweit & Kweit, 2006; May & Williams, 1986; Schneider, 1990). Forming a powerful regime through the DHS initiatives has pointed out the challenges of governing across policy subsystems (May, Jochim & Sapotichne, 2009), and the federal government further impacted the disaster response system with the introduction of FEMA's all-hazards concepts.

Hence, the "all hazards" notion was introduced to recommend localities to accommodate for a variety of hazards (DHS, Inspector General's Office, 2006) instead of focusing on recognizing and assessing their locally-specified hazards (Birkland, 2009; Burby, 2006). This approach has made communities more vulnerable. Accordingly, while PWDs and their caregivers participating to the study have articulated dissatisfaction with local disaster planning (e.g., Burby, 2006; Campanella & Berke, 2006; McConnell & Drennan, 2006; Olshansky, 2006; Tierney, 2005), other participating emergency managers called for properly carrying out of their instructions regarding PWDs even before disaster occurs. Eventually, with the all-hazard approach, states and local governments will remain more and more dependent on federal incentives through FEMA, and the federal government will keep on using disaster aid as an economic and political palliative (Birkland, 2009) to rebuild disaster areas, increasing existing community vulnerability. The Heritage Foundation Emergency Preparedness Working Group (2012) has pinpointed that without returning responsibility back to the states, the federalization of routine disasters will keep on calling for more and more from FEMA.

There is an emerging need to consider enforcing current requirements of preparedness planning. The lack of enforcement of federal law provisions addressing the needs of people with disabilities is repetitively reflected in legal complaints, spotlighting local emergency preparedness practice being not in compliance with disability laws and regulations (National Council on Disability, 2012). Ultimately, the implementation of Americans with Disabilities Act (ADA) in FEMA disaster preparedness strategies has revealed controversies. In reference to the compliance to the Homeland Security Act of

2002, the Executive Order 13347, FEMA's 2009 Office of Disability Integration and Coordination, and the ADA, Kailes (2008) said, "The challenge people are facing is that emergency preparedness systems are planned for people who can see, walk, run, and quickly comprehend and react to directives and warnings" (p. 10). Accordingly, the Federal Communications Commission (FCC) has started enforcing policies over emergency notifications and access to critical information for all (California State Independent Living Council, 2004). However, the majority of local emergency planners could not achieve preparedness plans that include proper notifications for the those with visual, hearing, and cognitive impairments.

Based on the contrast in the responses of the emergency officers and the PWDs' community, one must recall the normative political theories sustained by Sylves (2014) to seize the influence of emergency managers' attitudes in local preparedness plans, and determine local disaster preparedness agencies' efficacies in performing functions, such as warning, searching, evacuating, and rescuing PWD before and after disaster strikes. Normative political theories relate disaster policy implementation to notions of emergency managers' know-how approaches as appointed federal officials conducting local emergency management process. In this context, where policy application calls for collaboration between actors at various levels of government and coordinated group of local agencies' professionals, emergency managers' approaches are fundamental in the process of integrating people with disabilities (PWDs) to community preparedness.

As Sylves (2014) sustained, the three theories of disaster policy and management based on America's forefathers—the Jeffersonian, the Hamiltonian the Jacksonian—

postulate that there is a continual tension between the need to promote political openness for representative democracy and the need to work professionally with minimal bias in putting policy into practice. The Jefferson approach supports decision making resulting from consultations with interest groups. On the other hand, the Hamilton model is concerned with performance and expects emergency managers to have decision-making expertise and professional knowledge, while with The Jacksonian style emergency manager is expected to be a good intermediary between states and local government in reaching federal political goals. While PWDs and their caregivers suspect emergency managers for considering all disabilities as alike in preparedness plan, emergency managers stand to have the professional knowledge necessary for their decision-making approach. These reported perceptions between the provider and receiver of services who participated in this study show some divergences of views and expectations that could be perceived as a lack of involvement on the part of emergency specialists to resolve and comfort the PWDs community readiness for upcoming disaster.

The emergency managers who sustained that preparedness planning includes PWDs also posited that preparedness activities could make a difference in the ability of emergency officials to respond after a disaster as long as community properly carries out instructions about preparedness essentials. Emergency managers believe that following the directives is key for having disaster policy properly implemented and PWDs disaster—related needs properly addressed. The proposal derived from the perception that the needs of PWDs cannot be addressed without properly carried out instructions and consultations with local agents and community. Therefore, increased communication between

community members and emergency managers can strengthen awareness and lead PWDs to open up. Finally, a vital theme was the assertion of one participant (emergency manager) that the push for inclusion of PWDs is a recent agenda. While the population has always been present, the responsibility to consider their particular needs during a disaster event is relatively new and been brought to the forefront due to recent disasters across the U.S. This unawareness of PWDs' vulnerability needs is not a conclusive assertion, and more study may be needed to claim the experience as effective.

### **SQ** 1

Sub-Question 1 asked: How do advocacy organizations and caregivers for People with disabilities (PWD) perceive individual responsibilities of self-safeguard in time of disasters according to prevailing promoted plans and kits? Then, what are the challenges to developing a sense of community responsibility? From the outcomes in relation to the third research question, PDWs stated that emergency managers were not sensitive to their type of disabilities; PWDs and their caregivers believed the services they expected to receive before and during a disaster should be sensitive to needs. Even though participants stated having gathered emergency kits, PWDs do not seem ready for individual responsibilities of self-safeguard in time of disasters. According to the data generated in this study, PDWs and their related caregivers as well as other personnel directly working with/ for PWDs, do not recall any designated shelter they can go to in case of disaster. In addition, they had very little to no confidence in government in terms of response to major disaster, especially for PDWs using special equipment.

Three PDWs using special equipment and their caregivers believed they may not

survive to major disaster, as the emergency preparedness teams handle all disabilities alike. One participant pinpointed the lack of PWDs needs awareness, while another one indicated PWDs lack of enthusiasm in taking individual responsibilities of self-safeguard in time of disasters.

More participants voiced the opinion that community preparedness can make a very significant difference in case of an emergency if they could locate PWDs ahead of disaster. According to the data engendered in this study, PDWs and their related caregivers are not registered, as the county does not have a registry system. This lack of PWD identification and needs on the part of county services provider teams, which was emphasized by most participants, shows that PDWs, their caregivers, and related advocacy personnel do not believe in taking individual responsibilities of self-safeguard in time of disasters. The belief expressed by the participants is that preparedness drills and activities are not adequately addressing PWDs needs and stimulating their readiness in taking individual responsibilities of self-safeguard. Still, PWDs sustained that, while they were dissatisfied in the level of the service, there was room for improvement.

The literature review results showed preparedness plans tend to be uniform for every household, yet when disaster strikes, members of a community are not affected the same way (Hemingway & Priestley, 2014), and accesses to resources remain disparate within communities, affecting susceptibility and adaptive capacity of vulnerable individuals (Yamin et al., 2005). Accordingly, researchers such as Levac, Toal-Sullivan, and O'Sullivan (2012) have stressed challenges facing PWD in

preparedness activities, while emergency policies, guidelines, and plans are invariably emphasized on household and individual responsibility.

In comparing the preparedness behaviors of families with and without PWDs, Uscher-Pines et al. (2009) declared that families with PWD are less expected to get involved in disaster preparedness behaviors such as emergency kits purchasing and drills scheduling. While some researchers have distinguished between types of disabilities encompassing handicap imposed by society and handicap imposed by nature (Liachowitz, 2011), other researchers like Baynton (2013) argued that disability is used to justify discrimination against PWD. Liachowitz, (2011) further defined socially imposed handicaps as constructed and stressed that the nature of disability must influence legislatures and implementation strategies. Thus, examining which disability laws have influenced disaster preparedness reveals that less is known about the influence types of disabilities has on the enactment and implementation of emergency preparedness policy.

Already disproportionately affected by disparities in education and income (Baker, Hanson & Myhill, 2009), PWD are further marginalized in their access to critical information needs (Baker et al., 2009), facing greater barriers in their neighboring community. As a result, emergency preparedness practices linger without much generalizable findings for planning efforts or evidence-based practices of "what works for PWDs in disaster" (Gerber et al., 2010 p 4), for the reason of noticeable inconsistencies between provisions as practiced and strategies as planned.

Preparedness is an ongoing process of readiness in responding to and recovering from calamities. Accordingly, Perry and Lindell (2003) pointed out that a written plan is not sufficient to guarantee community disaster preparedness. Indeed, written emergency plans are of no use without people and responders' awareness of their existence and usefulness. Further Kailes and Enders (2014) pointed out that no documented evidence has shown that registries have made a difference in protecting PWD lives—registries have become a default strategy. Still, PWD are encouraged to provide required information for the special registry database that could be used during evacuation for upcoming disasters. For Kailes and Enders (2014), the bias under maintaining a registry is to see PWD as easy to locate or in a fixed place because of their disabilities. In fact, knowing where PWD live does not tell where they would be if disaster strikes. The difficulty in relying on a registry system was further exposed during the 2003 California wildfires, when emergency responders could not access registry records to identify PWDs necessitating help to evacuate. Researchers such as Norwood et al. (2011) stood in favor of neighbor-to-neighbor programs for PWD emergency preparedness as an alternative to the registry system. Yet, unless emergency planners keep on developing technologies, ideas, and plans that inclusively integrate the "whole community" (Fugate, 2011, p. 2; National Council on Disability, 2011), PWD such as individuals with mobility impairments may face frustration seeking to evacuate or hide during speedy catastrophes, such as earthquakes (Blaikie et al., 2014; Fernandez et al., 2002; NCD, 2009; Zobel & Khansa, 2014).

Indeed, many PWD use durable medical equipment with assistive breathing machines (respirators, ventilators), power wheelchairs and scooters, support oxygen, and suction or home dialysis equipment that needs electricity to power on (Norwood, Gerber, & Zakour, 2011). As such, blackouts during tornadoes, earthquakes, and hurricanes critically undercut PWDs' abilities to survive (NCD, 2009). Ochi, Hodgson, Landeg, Mayner, and Murray (2014) revealed that many PWD lose hearing aids, essential medical aids such as insulin pens, and prescriptions during the evacuation process. Consequently, at the time of disaster when the familiar caregiver support systems fail and no other alternatives addresses their functional needs, PWD endure life-threatening experiences beyond those experienced by the nondisabled (Liu, 2008), limiting their ability to evacuate to identified shelters. For Ochi et al. (2014), PWD with chronic conditions are most at risk of dying during or after evacuation. Compounding the threat surrounding electrical dependency is the fact that disaster preparedness plans are generally unfavorable to PWD. Many PWD suffer from inaccessible communications plans and alerts for hearing or visually impaired persons. Thus, requirements of disaster preparedness planning should be adapted to PWD needs, standardized, and further enforced at the local level.

Accordingly, researchers such as Levac, Toal-Sullivan, and O'Sullivan (2012) have stressed challenges facing PWD in preparedness activities, while emergency policies, guidelines, and plans are invariably emphasized on household and individual responsibility and the importance for maintaining a 72-hour supply of food, water, and medicine at all times to respond to upcoming disaster. While emergency planners are

encouraging the ideal of PWDs' all-inclusiveness in the entire phases of preparedness, they are not sufficiently ready to face the challenges to realizing this in practice (Twigg, 2014). Accordingly, PWD, as part of their communities, need to be integrated (Meaney, 2014; Salinsky, 2012) in the steps taken by preparedness planners who have been trusted with such responsibility through specific and established plans that include their unique needs. PWD such as individuals with mobility impairments may face frustration seeking to evacuate or hide during speedy catastrophes, such as earthquakes (Blaikie et al., 2014; Fernandez et al., 2002; NCD, 2009; Zobel & Khansa, 2014).

Given the responses of the PWDs' community, the intergovernmental relations models advanced by Wright's intergovernmental relations models in the context of disaster management are increasingly important. The coordinate-authority model describes disaster management with a distinctive separation between relationships of level of government. The inclusive-authority model emphasizes the leading role of the national government with little collaboration between level of government. The overlapping-authority model highlights the overlaps between level of government units, simultaneously through state declaration of emergency to request federal assistance in personnel, funding, goods, and services. Participant responses in the study further underlined the practice of the inclusive-authority model according to the Homeland Security Act of 2002 where the federal government has the key coordinating role, while major disasters are experienced by local jurisdiction, yet the excess of the top-down commands with less local freedom of action.

According to managers, preparing for disasters is up to the individual and/or family, and disaster preparedness planning and activity accessible to PWDs is a family role, promoting individual and family responsibility to protect themselves and assist family members with incapacities at the time of calamities. Conversely, PWDs and their caregivers posited that the county should be more visible in the community and provide backup plan for the most vulnerable members in the community.

## SQ 2

Sub-Question 2 stated: Are back-up plans included in preparedness strategies for People with disabilities (PWD) necessitating essential assistance? If not, what are the alternatives? If yes, how do those plans influence changes in the community behavior and thus bring about social change?

Regarding the last research question, PWDs and their caregivers who participated in this study acknowledged having disabilities that may prevent them from self-evacuating, and admitted having no backup plan or any other alternatives. Participants indicated that PWDs would like emergency managers to know where they are and who they are in order to have a more targeted disaster preparedness planning approach so that their needs will be fulfilled and that they will not notice a lack of know-how toward PWDs vulnerabilities. One participant suggested that the emergency managers know more about PDWs and their necessities, and that general disaster preparedness focus should include the specific needs of the PWD communities. In the same way, another participant sustained that the county should pay greater attention to

the disabled community in general and send representatives into the community to learn more about PDWs and their needs.

Overall, PWDs and caregivers who contributed in this study believed emergency managers should know PWDs in their community and understand the vulnerability they feel more profoundly. This could be presumed one of the most significant findings in this study. While emergency professionals promoting individual responsibility to self-evacuate in case of calamity, they should admit needing to be more familiar about PDWs included in the diverse populations they served.

Accordingly, training drills have to be designed for public as well as for PWDs and provided regularly so that they can be more responsive of the needs and conditions of PDW groups.

Without stating their level of trust in the county preparedness team, PWDs participating in the study mentioned having very little confidence in the emergency managers in terms of their readiness to act in response to calamities, such as a major earthquake in a community including PWDs. While PWDs were present among our respondents and require the attention of emergency managers in planning and training efforts, their greatest limitations were related to decision-making to evacuate when needed and the ability to independently manage to survive/complete tasks outside their home or at a designated shelter. These are precisely the skills required to effectively respond to an emergency, especially during an evacuation.

Gershon et al. (2013) underlined deficiencies in preparedness strategies, including lack of back-up plans for PWD in need of essential assistance. Critics have

condemned discrepancies between written preparedness plans and evidence of jurisdictional preparedness provisions (Perry & Lindell, 2003), denouncing the lack of standardized support. Thus, Norwood et al. (2011) sustained that the efficient way to get people to evacuate when calamities occur is to have them practice or drill ahead of time. Although practicing an evacuation with PWD is recommended, most of the time employees with disabilities are not invited to participate in evacuation training because of liability involved (NCD, 2009). Ultimately, the relationship and involvement of PWD as key stakeholders throughout disaster planning development and evaluation process is essential to determine the appropriateness of policy implementation procedure in integrating PWD into local disaster preparedness plans and addressing their unique needs in disaster situations (Bricout & Baker, 2010).

For having contextual vulnerabilities with higher susceptibility of exposure to risk (Lemyre, Gibson, Zlepnig, Macleod, & Boutette, 2009), PWDs do necessitate specific care and preparedness planning that integrate their needs. Yeletaysi et al. (2009) contended that social factors influence needs and impede recovery and are the least known (p. 3). Other studies have identified social vulnerability as a by-product of social inequities (Cutter, 2006), underlining connections between social factors and issues of social equity (Yeletaysi et al., 2009). Thus, from a social model perspective (Hemingway & Priestley, 2014), vulnerability of PWD in disaster situations is rooted in the compound factors of environmental barriers, institutional discrimination, and other social structures (Flanagan et al., 2011; Hemingway & Priestley, 2014; Yeletaysi et al., 2009). According to Hemingway and Priestley (2014), vulnerability in the light

of socio-economic angle shows that inequalities within or between communities are both noteworthy. Peek and Stough (2010) mentioned that traumatic loss or separation from caregivers associated to poor disaster outcomes have increased vulnerability of children with disabilities in disasters.

Similarly, the NOD (2014) sustained that not enough emergency plan organizers have the necessary proficiency required to ensure adequacy of emergency preparedness provisions for PWD. Accordingly, Foster (2012) pointed out that decision makers' responses to threat arise only after disaster has ensued. Indeed, the elected officials remain the ultimate responsible party to ensure that inclusive plans are implemented (Foster, 2012). Thus, the development of uniform guidance by states that is generalized to all crises events is desirable, such as a regulation related to medical institutes' ethics in disasters (Gostin & Hanfling 2009), as ethical norms do not change during disaster.

The concept of vulnerability was used in the study to incorporate the principle of giving equal chance at survival to each person, while stressing the level of needs of people with disabilities (PWDs) as compared to those of the general public. The concept of vulnerability supports the principle of giving equal chance at survival to each person (Taurek, 1977) while prevailing individual responsibilities over community responsibilities, stressing the level of needs of PWD as compared to those of the general public (Barnes, 2013). Responses in the study show that PDWs believe their disabilities may prevent them from self-evacuating, and they have no backup plan, nor any other alternatives. The proposal emphasized the perception that the needs

of the PWDs cannot be fulfill through the current "one-size fits all" method. Hazards quickly come to be calamities for PWD, and the barriers they anticipate facing during a disaster uphold addressing disability driven vulnerability from human rights and development perspectives.

# **Triangulation of Findings**

To triangulate the findings, an additional analysis of the findings was carried out.

The results engendered by the author of this study were contrasted and compared with the triangulated outcomes to define the most significant aspects of PWDs integration in preparedness plans and activities, as well as the most effective ways to enhance serving their needs and avoid increased risks during disasters.

The participants for study reside within the counties of Orange and Riverside in California, where people are living with the permanent threat of unpredictable wildfires and earthquakes. Thus, data from the two selected counties of Orange and Riverside in California were cross-compared to determine a parallel between the application of current requirements for integrating People with disabilities (PWD) into local preparedness plans and their anticipations for effective evacuation before and during a disaster. Study results of both counties showed convergence of information highlighting that participants from both counties have similar concerns and responses.

Data was further analyzed to assess the disconnect between the two groups of providers and beneficiaries. The study included conducting in-depth studies of related strategy for PWDs to compare with the one for general public in the community, using the within-case analysis technique to explore similarity and difference. According to the

examination of data collected from the two group (emergency specialists and PWDs with their related caregivers), the most crucial result remained the diverging views of the emergency officers and the PWDs' participants on the ability of PWDs integration in preparedness plans and activities to meet their needs. This difference in perception may have germinated from the fact that the emergency specialists are not responsive to the questions believed by PWDs to be alarming and eventually considered as vulnerability incompetence.

It stemmed from the participants' responses that preparedness planning and activities curriculum are designed for the community as a whole to address all disability as alike. The one size fits all in emergency managers' mind, that is going to have to work for everybody. Thus, encouraging disability representation within local emergency planning teams will encourage strength-based self-determination for PWDs as well as emergency managers to improve integration of the needs of PWDs into guidelines, registration system, drills trainings and evacuation processes.

PWDs and caregivers accentuated the need for trust to be established between emergency managers and PWDs community. Similarly, emergency specialists have mentioned developing relations with the PWDs they serve, where trust can be one of the main construction cubes. Indeed, emergency managers admitted that PWDs have very low participation and are very unprepared (A04). Emergency managers further revealed that the PWD population have not actively being involved in planning recently and they do not know whether any PWD participate in drills (A03). However, they expressed willingness to improve this lack of PWDs' involvement, addressing it through the County

working group. For emergency managers like A04, emergency preparedness should be a part of the school curriculum to make any sort of significant impact that leads to actual community-wide preparedness.

## Summary

Chapter 4 argued the thematic analysis of questionnaires and interviews with the emergency specialists and PWDs community relating to whether emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters. Six significant experiences and perceptions were expressed by both the emergency managers and PWDs. With the advantage of the computer software NVivo12, major themes and subthemes were then substantiated.

Analysis of the questionnaires data indicated that emergency officers believed that preparing for disasters is up to the individual and/or family. It further steamed from the participants' responses that preparedness planning and activities curriculum are designed for the community as a whole to address all disability as alike. At some point, emergency managers consider the push for inclusion of PWDs as a recent agenda, adding that, while PWD have always been present, the responsibility to consider their particular needs during a disaster event is relatively new and been brought to the forefront due to recent disasters across the U.S. Emergency managers further admitted that PWDs have very low participation and are much unprepared, while expressing some concern on if community properly carries instructions about preparedness essentials. Emergency managers believe that following the directives is key for having disaster policy properly implemented to address PWDs disaster—related needs.

On the other hand, PWDs and their caregivers believe preparedness planning and activities curriculum are designed as a one size fits all, addressing all disability as alike. PWDs and their caregivers exposed some negative experience with emergency managers, and their responses reveled the need for trust to be established between emergency specialists and PWDs community. They explained that this perception can be refine by:

(1) enhancing the presence and visibility of emergency professionals in PWDs' community; (2) ameliorating the integration of PWDs' needs into guidelines, registration system, drills trainings and evacuation processes; and (3) targeting the needs of PWDs in preparedness plan and activities instead of promoting a general disaster response and recovery effort as a one size fit all for the community as whole.

# Chapter 5: Discussion

## Introduction

The aim of this research was to examine current disaster preparedness policies and procedures and to identify whether local agencies are following existing laws and policies related to integration of PWDs. To address this purpose, along with the study's research questions and subquestions, this chapter includes a discussion of the findings based on the review of scholarly literature, through the interpretation of the findings in terms of the theoretical frameworks. I present this chapter in five sections, beginning with a discussing of the findings based on the review of scholarly literature, to draw the conclusion in connection to the theoretical Framework, and conceptual elements. The chapter also includes the conclusions, and the recommendations for researchers and future scholars. A subsequent section presents the implications to social changes. This final chapter also provides a summary of the research.

### **Connection to Theoretical Framework**

### **Normative Political Theories**

The study indicates that emergency managers in Orange and Riverside County have the professional knowledge necessary for their decision-making approach. In their responses, A01, A04, A05, A07 indicated using a decision-making approach based on expertise and professional knowledge to serve the community as whole despite types of inabilities differences and/or handicaps. These viewpoints relate to the approaches of the normative political framework of the current study. The normative political theories relate disaster policy implementation to emergency managers' approaches as appointed

federal officials conducting local emergency management processes. Regarding the three tendencies of the normative political theories, the Jefferson approach supports decision making resulting from consultations with interest groups, while the Hamilton model is concerned with performance and expects emergency managers to have decision-making expertise and professional knowledge. With the Jacksonian style, emergency managers are expected to be a good intermediary between states and local government in reaching federal political goals integrating PWDs in disaster preparedness plans and activities. In this context, where policy application calls for collaboration between actors at various levels of government and a coordinated group of local agency professionals, emergency managers' approaches are fundamental in the disaster preparedness policy application process of integrating PWDs regarding community preparedness.

Although 29% of the emergency manager participants espoused the Jefferson approach and sustained having decision making approach left to first responders, study participants' responses showed that the emergency manager decision-making approaches appear to promote the Hamilton model, based on expertise and professional knowledge in planning preparedness. The results indicated that the emergency managers embraced the Hamilton model. Fifty seven percent of the emergency manager participants mentioned their self-perception regarding the effectiveness of their decision-making approach, stressing how their organizations focused on their past experience and professional knowledge for the citizens as a whole despite any particular difference.

# **Principal Agent Theory**

Both groups of emergency managers and PWDs proposed that nurturing an understanding of the needs of PWDs and developing strong relationships and connections with them will help emergency specialists overcome their competency shortfalls concerning PWDs' integration in preparedness plan and activities. These suggestions dovetail with the main theoretical outline of the current study, the principal agent theory. The principal agent theory mentions government emergency managers' interactions with federal, state, local, and private agencies. This theory assumes that emergency managers work in environments where they cannot observe whether or not the instructions they issued as principals are properly carried by agents, whether or not disaster policy are properly implemented, and whether or not disaster-related needs are properly addressed in realizing goals emergency managers are mandated to meet. The insights of the emergency specialists and the perceptions and experiences of PWDs convey to the concepts of the principal agent theory. Participants' responses in the study showed that preparing for and responding to disaster is a matter of emergency managers' expertise and approaches in dealing with eventual gray areas, when coordinating federal political intent and PWDs confidence in county disaster preparedness systems.

Emergency managers rated their competency regarding including PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters as high and evolving. Emergency specialists revealed how they struggle to comprehend and consider the needs of the PWD community as professionals with fairness and equality, and specifically highlighted the need to incorporate PWDs in

preparedness planning activities to better accommodate those who depend on assistive devices for mobility or communications.

The emergency managers were also honest when 57% of respondents admitted that local preparedness plans are being implemented to include PWDs, but they did not believe the disaster-related needs of the PWD are properly addressed or whether any PWD participate in the drills, and have not actively involved the PWD population in drills. According to emergency managers' responses, PWDs remain unprepared. This suggests that the emergency specialists were aware of the shortfalls of PWD integration in terms of preparedness plan, activities, and stressing the processes and steps needed to reach their disaster preparedness goal. Twenty nine percent of emergency managers stated that their perception of PWD incorporation in preparedness plans and activities was evolving or in the process of improving.

## Wright's Intergovernmental Relations Models

Another conceptual frame for the study is Wright's intergovernmental relations models in the context of disaster management. PWDs and their caregivers assumed that emergency officers should enhance their presence and visibility in Orange and Riverside County, to build a more targeted approach involving their needs. Wright's intergovernmental relations in the context of disaster management relates to three models: the coordinate, inclusive, and overlapping models. The coordinate-authority model describes disaster management with a distinctive separation between relationships of level of government, while the inclusive-authority model emphasizes the leading role of the national government with little collaboration between level of government. The

overlapping-authority model highlights the overlaps between level of government units simultaneously through state declarations of emergency to request federal assistance for personnel, funding, goods, and services.

Participant responses in the study brought on the inclusive-authority model with the Homeland Security Act of 2002, where the federal government has the key coordinating role through nominated emergency managers, while major disasters are experienced by local jurisdictions/cities, further revealing the excess of the top-down commands with less local freedom of action. Emergency managers participants said that preparedness activities could make a positive impact in terms of the ability of federally-appointed emergency officials to respond after a disaster as long as local communities properly follow instructions regarding preparedness essentials. Emergency managers of Orange and Riverside County believe that following counties directives is key for having disaster policy properly implemented to address PWD disaster-related needs. One of the crucial finding of the study is the participants' perception for properly carried out of emergency managers' instructions regarding PWDs even before disasters and emergencies occur. These instructions include the ability of citizens and PWDs to self-evacuate, in the effort to help reduce causalities when disasters strike. The concept of vulnerability was also use in the study to incorporate the principle of giving equal chance at survival to each person, while stressing the level of needs of people with disabilities (PWDs) as compared to those of the general public.

### **Conclusions**

The emergency specialists and PWDs who contributed to this study conveyed varying beliefs regarding their perceptions of the integration of PWDs in terms of disaster preparedness plans and activities. The most vital finding of the study was that emergency managers acknowledged gaps exist in terms of disaster preparedness that could significantly impede response and recovery operations after a major disaster. To explain that, emergency managers participants stressed that the push for inclusion of PWDs in disaster preparedness plans and activities was a recent agenda.

To assess the disconnect between the two groups of providers and beneficiaries the study conducted in-depth studies of preparedness strategy for PWDs to compare with the one for general public in the community, using the within-case analysis technique to explore similarity and difference. Accordingly, while the PWDs population has always been present, the responsibility to consider their particular needs during a disaster event is relatively new and has been brought to the forefront due to recent disasters across the U.S. When disaster strikes, attention of the general public, media, and officials remain focused on the immediate impacts, considerations are not customarily given to vulnerability perspectives, even though a number of studies have established that disaster events disproportionately affect the socially vulnerable people of the community (Flanagan et al., 2011).

Nevertheless, emergency managers are in the process of improving local preparedness plans and activities with respect to PWDs, admitting that there is room for improvement through the network system within their respective county working

groups, in reaching out people with a variety of disabilities in the community and involving them in emergency preparedness drills. Accordingly, participating emergency managers mentioned that they either were implementing plans with respect to integrating PWDs or in the process of developing such strategy. In participants' responses, the suggestion stemmed from the perception that the needs of PWDs cannot be addressed without proper carrying out of instructions and consultations with local agents and community. Therefore, increased communication between community members and emergency managers can strengthen awareness and lead PWDs to open up. In view of that, PWD communities can help emergency professionals to define areas that need attention and improvement. This suggestion is not farfetched since both the emergency managers and PWD community have faith in reaching an agreement where the implementation of preparedness plans and activities might be achieved by developing awareness of PWDs' needs and enhancing the presence of emergency managers in the communities. According to the interviews' responses collected for this study, both parties appear disposed to come together to advance PWD integration in preparedness plans and activities to improve emergency responsiveness for upcoming disaster.

Findings from the study indicated that PWDs do not seem ready for individual responsibilities of self-safeguard in time of disasters, while for emergency managers, preparing for disasters is up to the individual and/or family to protect themselves and assist family members with incapacities at the time of calamities. PDWs using special equipment and their caregivers believed they might not survive to major disaster, as the

emergency preparedness teams handle all disabilities alike. Further, based on the data engendered in this study, PDWs and their related caregivers as well as other personnel directly working with/ for PWDs, do not recall any designated shelter they can go to in case of disaster and are not registered, as county do not have registry system. This lack of PWDs identification and needs awareness by county services was accentuated by most participants, showing that PDWs, their caregivers, and related advocacy personnel do not believe in taking individual responsibilities of self-safeguard in time of disasters, according to disaster preparedness teams sensitivities to their needs, especially those using specialized devices. Again, participants are expecting emergency managers to have a more visible presence in the community. Hence, in using the crosscomparing data analysis technique with the two selected counties of Orange and Riverside in California, the study's themes were isolated to highlight commonalities in answering to the research questions. Both counties participants mentioned the need of PWDs community are not properly addressed, as emergency preparedness teams handle all disabilities alike.

While service providers and benefit receivers mentioned their lack of trust of each other and disappointment in the level of the service, both groups composed of emergency managers and PWDs community believe there was room for improvement. Overall, while emergency managers are promoting individual responsibility to self-evacuate in case of calamity, PDWs and caregivers who contributed in this study believed emergency managers should know PWDs in their community and understand the vulnerability they feel more deeply. This could be considered an important finding

in this study. For study participants, the act of being present demonstrates that the emergency specialists are inclined to interrelate and communicate with the local residents, including PWD groups.

Thus, emergency managers should admit needing to be more informed and experienced regarding PDW integration in the various populations they served.

Participants' responses reflected the perception that the necessities of the PWDs cannot be determined through the "one-size fits all" method, and that emergency manager's focus during disaster preparedness should not be generalized but more directed towards the needs of the PWDs. Respondents pointed out that they depend on others for assistance, especially emergency response teams in times of calamity, emphasizing the need for individualized plans to reduce confusion when disaster strikes. The experiences of the participants add to the body of literature on the topic of PWD integration in preparedness plan and activities, enhancing disaster responsiveness.

Hence, the within-case and cross-cases analyses techniques helped to pinpoint emerging patterns of perceptions and connect the data. Also the availability of administrative procedures, policies, and drills practices records, showed the reality of disaster preparedness plans, putting emphasis on the suitability of the disaster implementation programs in the selected counties. However, the rationale for giving the same chance of survival to People with disabilities (PWD) as to general public when disaster happen remained ambiguous. Concurrently, the commendations of the emergency specialists and PWDs community can be better achieved by developing trust, improving the efficiency of the services provided by emergency professionals,

and further enhancing connections between emergency managers and community members including PWDs.

# **Implications to Social Change**

The study effects social change by linking existing disaster preparedness plans and people with disability. The study is about inspiring community engagement and awareness on the imperative that people with disabilities be granted the same chance as the general public to survive disasters. The study is also about improving local emergency preparedness plans and policy implementation practices in warning, evacuating, and rescuing people with disabilities. By implying that PWDs needed to undertake extra personal responsibility to avoid the consequences of disasters, emergency preparedness management and first responders are circumventing social responsibility of disaster planning and covering up local government's answerability for functioning disaster preparedness required by the Department of Justice (DOJ)'s ADA guide.

Participants to the study revealed inconsistencies in preparedness planning, and exposed communities' disaster vulnerability as well as PWD as group. The study highlighted that PWD lives were threatened not because of their own limitations but because of the inappropriateness of warning system, the inadequacy of evacuation plans (Bethel, Foreman, and Burke, 2011), and the vulnerability of facilities unfriendly to PWD, or again the uncoordinated actions of rescue staff. As the inhabitants of the United States grow and becoming more diverse, it is vital that emergency managers become mindful of the susceptibilities of the group of people they serve.

When implementing the framework of the principal-agent theory in coordinating political intent and PWDs expectations, the models of intergovernmental relations with the excess of the federal top-down commands and less local freedom of action and the normative political theories based on the Jacksonian approaches to disaster policy, allow emergency specialists to considerably enhance disaster response and recovery efforts not only to PWDs community but other diverse minority communities as well. The study's ambition is to minimize happenings such as a recent wildfire in California where PWD unable to self-evacuate were left behind and responders were not able to rescue them.

Yet, whereas the all-community approach in giving equal chance to each person at survival (Taurek, 1977) is a trend, the approach prioritizing the needs of PWD as compared to the general publics without enhancing the levels of need (Barnes, 2013) is privileged in the study. This study stipulated that there is moral value in giving each person an equal chance of survival in situations where there is a choice to save one person or another, but the chances of success are different.

### Recommendations

This study wrought three recommendations for future researches. The first suggestion is that future researchers should consider exploring archives and records not to identify that preparedness plan and activities exit but to determine statistics of PWDs who have been systematically reported following disasters or during emergency responses. As well, future investigators and researchers could take account of not only the negative information but also positive cases on how emergency officers expressed

their determination to interconnect and build relationships within the community including PWDs, regardless of the type of disabilities. By doing so, both viewpoints of emergency specialists and PWDs, are expressed, and ultimately backed up with proven interview documents.

The second recommendation advocates future researchers to study other population groups to identify whether promoting individual and family responsibility to protect themselves and assist family members with disabilities at the time of disasters, for different minority groups, yields constant or conflicting perceptions related to disaster preparedness as planned by emergency specialists.

The third recommendation is that future researchers gather a larger sample of participants. The researcher can enlarge the sample by including prior disasters sites areas and thus increase the sample amount. By doing so, future scholars will have more opportunity to identify consistencies and dissimilarities within other minority groups.

This research project has several strengths and limitations. It is the first attempt to establish a baseline, and as such, makes clear the need for additional attention and research in this area by other stakeholders. This report should encourage additional efforts to assess and evaluate preparedness across the USA and among people experiencing disabilities.

### **Summary**

This chapter presented and discussed the findings of this study based on the related literature and including the conclusions and recommendations. Emergency

managers and the PWD community who contributed in this study sustained opposite views with regard to their perceptions of emergency managers' preparedness plan and activities. This divergence in perception was featured to be the key finding of the study, while it was deemed workable through the implementation of the framework of the principal-agent theory; the models of intergovernmental relations; and on the normative political theories based on the Jacksonian approaches to disaster policy and management. Both the emergency professionals and PWDs community had comparable beliefs on how disaster preparedness can be perfected by enhancing the integration of PWDs, suggesting that goal of properly integrating PWDs in preparedness plan and activity is attainable.

### References

- Abramowicz, M., & Colby, T. B. (2009). Notice-and-comment judicial decision making. *The University of Chicago Law Review* 965-1036.
- Act, S. (1988). Robert T. Stafford Disaster Relief and Emergency Assistance Act. *Public Law*.
- Adger, W. N., Kelly, P. M., & Ninh, N. H. (Eds.). (2012). Living with environmental change: Social vulnerability, adaptation and resilience in Vietnam. New York, NY: Routledge.
- Ahronheim, J. C., Arquilla, M. B., & Greene, R. G. (2009). Elderly populations in disasters: Hospital guidelines for geriatric preparedness. Retrieved from http://www.nyc.gov/html/doh/downloads/pdf/bhpp/hepp-geriatrictoolkit-nov2009.pdf
- Alexander, D. E. (2008). A brief survey of GIS in mass-movement studies, with reflections on theory and methods. *Geomorphology*, *94*(3), 261-267.
- American Red Cross (2013, October 29), Thousands look to Red Cross for shelter from Sandy. *Red Cross News*. Retrieved from http://www.redcross.org/
- American Red Cross. (n.d.). Disaster preparedness for people with disabilities. Retrieved from http://www.redcross.org/www-files/Documents/Preparing/A4497.pdf
- Americans with Disabilities Act of 1990 ADA 42 U.S. Code Chapter 126. Retrieved from http://finduslaw.com/americans-disabilities-act-1990-ada-42-us-code-chapter-126

- Americans with Disabilities Act of 1990 ADA 42 U.S.C. §§ 12101-17 (Supp. IV 1992)
- Anzalone, C. A. (1963). *Encyclopedia of Supreme Court quotations*. Armonk, NY: M.E. Shape, Inc.
- Bagrow, J. P., Wang, D., & Barabasi, A. L. (2011). Collective response of human populations to large-scale emergencies. *PloS One*, *6*(3), e17680.
- Baier, V. E., March, J. G., & Saetren, H. (1986). Implementation and ambiguity. Scandinavian Journal of Management Studies, 2(3), 197-212.
- Baker, L., & Cormier, L. (2014). *Disasters and vulnerable populations: Evidence-based practice for the helping professions*. New York, NY: Springer Publishing Company, LLC.
- Baker, P. M., Hanson, J. & Myhill, W. N. (2009). The promise of municipal WiFi and failed policies of inclusion: The disability divide. *Information Polity, 14*(Issue # 47–59). doi:10.3233/IP-2009-0171
- Banks, L. (2013). Caring for elderly adults during disasters: improving health outcomes and recovery. *Southern Medical Journal*, *106*(1), 94-8. doi: 10.1097/SMJ.0b013e31827c5157.
- Barnes, J. (2013). North Carolina's hurricane history: Updated with a decade of new storms from Isabel to Sandy. Los Angeles, CA: UNC Press Books.
- Barnes, J. M. (2011). Assisting students with special needs during an emergency.
- Barrett, S. M. (2004). Implementation studies: time for a revival? Personal reflections on 20 years of implementation studies. *Public Administration*, 82(2), 249-262.

- Bascetta, C. (2006). Disaster preparedness: Preliminary observations on the evacuation of vulnerable populations due to hurricanes and other disasters. Retrieved from <a href="http://www.gao.gov/new.items/d06790t.pdf">http://www.gao.gov/new.items/d06790t.pdf</a>
- Battle, D. E. (2014). Persons with communication disabilities in natural disasters, war, and/or conflict. *Communication Disorders Quarterly*, 1525740114545980.
- Baynton, D. C. (2013). Disability and the justification of inequality in American history. *The Disability Studies Reader*, 17, 33-57.
- Bazan, E. B. (2004, December). Intelligence Reform and Terrorism Prevention Act of 2004: Lone Wolf Amendment to the Foreign Intelligence Surveillance Act.

  LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Bea, K. (2007). Federal emergency management policy changes after Hurricane Katrina:

  A summary of statutory provisions *Congressional Research Service*
- Bea, K. (2010, March). Federal Stafford Act Disaster Assistance: Presidential

  Declarations, Eligible Activities, and Funding. LIBRARY OF CONGRESS

  WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Bea, K., Halchin, E., Hogue, H., Kaiser, F., Love, N., McCarthy, F. X., ... & Schwemle,
   B. (2006, December). Federal emergency management policy changes after
   Hurricane Katrina: A summary of statutory provisions. LIBRARY OF
   CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Bea, K., Krouse, W., Morgan, D., Morrissey, W., & Redhead, C. S. (2003, June).

  Emergency Preparedness and Response Directorate of the Department of

- Homeland Security. LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Bean, H. (2009). Exploring the relationship between Homeland Security information sharing & local emergency preparedness. *Homeland Security Affairs*, 5. Retrieved from https://www.hsaj.org/articles/104
- Beatley, T. (2009). Planning for coastal resilience: Best practices for calamitous times, Island Press, Washington, DC.
- Berke, P. R., & Campanella, T. J. (2006). Planning for postdisaster resiliency. *Annals of the American Academy of Social and Political Science*, 604(1), 192–207.
- Berke, P., & Smith, G. (2010). Hazard mitigation, planning, and disaster resiliency:

  Challenges and strategic choices for the 21st century. Sustainable development and disaster resiliency, U. Fra, ed., IOS Press, Amsterdam, The Netherlands, 1–23.
- Berke, P., Smith, G., & Lyles, W. (2012). Planning for resiliency: Evaluation of state hazard mitigation plans under the disaster mitigation act. *Natural Hazards*\*Review, 13(2), 139-149.
- Bethel, J. W., Foreman, A. N., & Burke, S. C. (2011). Disaster preparedness among medically vulnerable populations. *American journal of preventive medicine*, 40(2), 139-143.
- Birkland, T. A. (2009). Disasters, Catastrophes, and Policy Failure in the Homeland Security Era1. *Review of Policy Research*, *26*(4), 423-438.

- Birkland, T. A., &Waterman, S. (2008). Is federalism the reason for policy failure in hurricane Katrina? *Publius*, *38*(4), 692–714.
- Birkmann, J., Buckle, P., Jaeger, J., Pelling, M., Setiadi, N., Garschagen, M. & Kropp, J. (2010). Extreme events and disasters: a window of opportunity for change?

  Analysis of organizational, institutional and political changes, formal and informal responses after mega-disasters. *Natural Hazards*, *55*(3), 637-655.
- Bissonnette, R. S. (2009). Reasonably accommodating nonmitigating plaintiffs after the ADA Amendments Act of 2008. *BCL Rev.*, *50*, 859.
- Black, R., Arnell, N. W., Adger, W. N., Thomas, D., & Geddes, A. (2013). Migration, immobility and displacement outcomes following extreme events. *Environmental Science & Policy*, 27, S32-S43.
- Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (2014). *At Risk II-: Natural Hazards, People's Vulnerability and Disasters*. New York, NY: Routledge.
- Bodenhamer, D. J. (2007, November 28). Federalism and democracy. Retrieved from http://iipdigital.usembassy.gov/st/english/article/2007/11/20071128094357abretn uh0.8318903.html#axzz30UaGBNf
- Boon, H. (2013) Preparedness and vulnerability: an issue of equity in Australian disaster situations. Australian Journal of Emergency Management 01/2013; 28(3).

  Retrieved
  - from:http://www.researchgate.net/publication/264707974\_Preparedness\_and\_vulnerability\_an\_issue\_of\_equity\_in\_Australian\_disaster\_situations

- Boon, H. J., Pagliano, P., Brown, L., & Tsey, K. (2012). An assessment of policies guiding school emergency disaster management for students with disabilities in Australia. *Journal of Policy and Practice in Intellectual Disabilities*, 9(1), 17-26.
- Boon, H. J.; Brown, L. H.; Tsey, K.; Speare, R.; Pagliano, P.; Usher, K.; Clark, B.
  (2011). School disaster planning for children with disabilities: A critical review of the literature. *International Journal of Special Education*, 26(3), 223-237. 2011.
  Retrieved from: http://eric.ed.gov/?id=EJ959015
- Borden, K., Schmidtlein, M. C., Emrich, C. T., Piegorsch, W., & Susan, L. Cutter. 2006.

  Vulnerability of US cities to environmental hazards. *Journal of Homeland*Security and Emergency Management, 4(2), 1-21.
- Bowers, J. R. (1989). Agency responsiveness to the legislative oversight of administrative rulemaking: A case study of rules review in the Illinois General Assembly. *The American Review of Public Administration*, 19(3), 217–231.
- Boyce, M. (2014). Assessment of Instructional Presentation for Emergency Evacuation

  Assistive Technology (Doctoral dissertation, University of Central Florida

  Orlando, Florida).
- Bradley, D. T., McFarland, M., & Clarke, M. (2014). The effectiveness of disaster risk communication: a systematic review of intervention studies. *PLoS currents*, 6.
- Brault, M. W. (2012). *Americans with disabilities: 2010* (pp. P70-P131). US Department of Commerce, Economics and Statistics Administration, US Census Bureau.
- Bricout, J. C. & Baker, P. M. A. (2010) Leveraging online social networks for people with disabilities in emergency communications and recovery. *Inderscience*

- *Publishers. International Journal of Emergency Management, 7(1).* doi: 10.1504/IJEM.2010.03204499999.
- Brito, J. & De Rugy, V. (2009). Midnight regulations and regulatory review.

  \*Administrative Law Review, 61(1), 163–197.
- Brodkin, E. Z. (1990). Implementation as policy politics. *Implementation and the policy* process: Opening up the black box, 107-118.
- Bucci, S. P., Inserra, D., Lesser, J., Mayer, M. A., Slattery, B., Spencer, J., & Tubb, K. (2013). After Hurricane Sandy: Time to learn and implement the lessons in preparedness, response, and resilience. *The Heritage Foundation*, *144*.
- Burby, R. J. (2006). Hurricane Katrina and the paradoxes of government disaster policy: Bringing about wise governmental decisions for hazardous areas. *The Annals of the American Academy of Political and Social Science*, 604(1), 171–191.
- Burkhauser, R. V., & Daly, M. C. (2012). Social Security Disability Insurance: time for fundamental change. *Journal of Policy Analysis and Management*, *31*(2), 454-461.
- BUSH, G. (2004). EXECUTIVE ORDER 13347--INDIVIDUALS WITH

  DISABILITIES IN EMERGENCY PREPAREDNESS. WEEKLY

  COMPILATION OF PRESIDENTIAL DOCUMENTS, 40(30), 1361-1362.
- Busha, C. H., & Harter, S. P. (1980). Research methods in librarianship, techniques and interpretation. New York, NY: Academic Press.
- Byzek, J., & Gilmer, T. (2001) Unsafe refuge: Why did so many wheelchair users

- die on Sept. 11 New Mobility Magazine. Retrieved from

  http://www.newmobility.comCalifornia Emergency Management Agency (2011)

  retrieved from: www.calema.ca.gov / Laws and Regulations
- California State Independent Living Council. (2004). The impact of southern California wildfires on people with disabilities. Retrieved from:

  www.calsilc.org/impactCAWildfires.pdf.
- Camara, J. (2009). ADA Compliance and reasonable accommodation in crisis management: a suggested action plan for employers. *Journal of Employment and Labor Law*, 11, 1-3.
- Carey, M. P. (2013). *The Federal Rulemaking Process: An Overview*. Congressional Research Service 7-5700 RL32240. Retrieved from: http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL32240.pdf
- Carey, M. P. (2014). Counting Regulations: An Overview of Rulemaking, Types of Federal Regulations, and Pages in the *Federal Register*. Report for Congress.Congressional Research Service.
- Caruson, K., & MacManus, S. A. (2011). Gauging Disaster Vulnerabilities at the Local Level: Divergence and Convergence in an "All-Hazards" System. *Administration & Society*, 0095399711400049.
- Caruson, K., & MacManus, S. A. (2011). Interlocal emergency management collaboration: vertical and horizontal roadblocks. *Publius: The Journal of Federalism*, pjr024.

- Cashen, K. M. (2006). A compilation of necessary elements for a local government continuity of operations plan (Doctoral dissertation, Monterey California. Naval Postgraduate School).
- Cerna, L. (2013). The nature of policy change and implementation: a review of different theoretical approaches.
- Chiaramonte, P. (2012, August 7). Angry New Yorkers Say Obama Pledge to Cut Red

  Tape Ignored by FEMA. *Fox News*. Retrieved from http://www.foxnews.com/us/
- Christensen, K. M., Blair, M., & Holt, J. M. (2007). The built environment, evacuations, and individuals with disabilities. *Journal of Disability Policy Studies*, *17*(4), 249–254.
- Christensen, K. M., Collins, S. D., & Holt, J. M., N. (2006). The relationship between the design of the build environment and the ability of egress to individuals with disabilities. *Review of Disability Studies*, *2*(3), 24–34.
- Christensen, K. M., Collins, S. D., Holt, J. M., & Phillips, C. N. (2014). The relationship between the design of the built environment and the ability to egress of individuals with disabilities. *The Review of Disability Studies: An International Journal*, *2*(3).
- City, State: Name of Publisher
- Comfort, L. K., Oh, N., Ertan, G., & Scheinert, S. (2010). Designing adaptive systems for disaster mitigation and response. *Designing resilience: Preparing for extreme events*, 39-40.

- Congress, U. S. (1988). The Robert T. Stafford Disaster Relief and Emergency
  Assistance Amendments of 1988.
- Congress, U. S. (2007). Implementing recommendations of the 9/11 commission act of 2007. In 110th Congress. August (Vol. 3).
- Cook, T. M. (1977). Nondiscrimination in employment under the Rehabilitation Act of 1973. *Am. UL Rev.*, 27, 31.
- Cook, T. M., & Laski, F. J. (1980). Beyond Davis: Equality of opportunity for higher education for disabled students under the Rehabilitation Act of 1973. *Harv. CR-CLL Rev.*, *15*, 415.
- Cooper, R. G. (2001). Winning at new products: Accelerating the process from idea to launch. Basic Books.
- Coppola, D. P., & Maloney, E. K. (2009). Communicating emergency preparedness:

  Strategies for creating a disaster resilient public. CRC Press.
- Council on Disability, Washington, DC, July 7, 2006.
- Counseling, Vol. 45, No. 1, Spring 2014
- County of Los Angeles. (n.d.). Emergency preparedness: Taking responsibility for your safety Tips for people with disabilities and activity limitations. *Emergency Survival Program (ESP) Special Publications*. Retrieved from http://lacoa.org/esppub.htm#Spec
- Cox, J. (2010). Crossroads and Signposts: The ADA Amendments Act of 2008. *Indiana Law Journal*, 85, 187.

- Crawford Media "Interviewing Techniques" Center for Research Support at Walden University. RSCH 8300
- Creswell, J. W. (2012). Qualitative inquiry and research design: Choosing among five approaches. Sage.
- Creswell, J.W. (2013). *Qualitative inquiry & research design: Choosing among the five approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Cullingworth, B. J., Cullingworth, J. B., & Caves, R. (2013). *Planning in the USA:* policies, issues, and processes. Routledge.
- Curtius, M. (2005, October 20). Chertoff puts the onus on FEMA: The Homeland Security secretary tells a House panel that local and state officials were not at fault for government lapses in addressing Katrina. *Los Angeles Times*, A14.
- Cutter, S. L. (2006). *Hazards, vulnerability and environmental justice*. Department for International Development. (2000). *Disability, poverty and development*. London: Author.
- Cutter, S. L., Emrich, C. T., Webb, J. J., & Morath, D. (2009). Social vulnerability to climate variability hazards: A review of the literature. *Final Report to Oxfam America*, 5.
- Cutter, S., Boruff, B. J., & Shirley, W. L. (2006). Social Vulnerability to Environmental Hazards. *Hazards, Vulnerability, and Environmental Justice*, 115-132.
- Davis, E. A., Hansen, R., & Mincin, J. (2011). Vulnerable populations and public health disaster preparedness. *Health Care Emergency Management: Principles and Practice*, *371*.

- Davis, E., & Mincin, J. (2005) Nobody left behind: Incorporating special needs populations into emergency planning and exercises. Research and Training Center on Independent Living
- Davis, E., & Phillips, B. (2009). Effective Emergency Management: Making

  Improvements for Communities and People with Disabilities. *National Council on Disability*.
- Dawalt Jr, P. R. (2013). Examining theories of public-private sector collaboration:

  Health care for people with disabilities in emergency management (Doctoral dissertation, UNIVERSITY OF BALTIMORE).
- DBTAC (2008) New England ADA Center, the Institute for Human Centered Design,
  Fall 2008: Vol. 12, No. 2, retrieved from:
  http://www.newenglandada.org/sites/default/files/Access 2008 Fall.pdf
- Denzin, N. K., & Lincoln, Y. S. (2005). Paradigms and perspectives in contention. *The Sage handbook of qualitative research*, 183-190.
- Department of Health and Human Services. (2005). *Hurricane Katrina Bulletin: HIPAA*privacy and disclosures in emergency situations. Retrieved from

  http://privacyruleandresearch.nih.gov/pdf/HurricaneKatrina.pdf.
- Department of Homeland Security, Office of the Inspector General. (2006). *A*performance review of FEMA's disaster management activities in response to

  Hurricane Katrina. Washington, DC: Department of Homeland Security.

  Retrieved December 27, 2008, from

  http://www.dhs.gov/xoig/assets/mgmtrpts/OIG\_06-32\_Mar06.pdf

- Department of Homeland Security. (2005). *Individuals with disabilities in emergency*preparedness: Executive Order 13347 Annual Report, July 2005. Retrieved

  November 1, 2008. Retrieved from:

  www.icdr.us/documents/AnnualReport05.pdf.
- Department of Homeland Security. (2007). Lessons learned information sharing newsletter Retrieved from www.llis.gov/displayContent?contentID=23748.
- Department of Homeland Security. (2007). Report to Congress on the *Department of Homeland Security t*he Office for Civil Rights and Civil Liberties Retrieved from https://www.dhs.gov/xlibrary/assets/crcl-fy07annualreport.pdf
- Department of Homeland Security. (2013). National Preparedness Report (NPR).

  Retrieved from: http://www.fema.gov/media-library/assets/documents/32509
- Department of Justice (2010) *ADA Guide*. Retrieved from http://www.usdoj.gov/crt/ada/emergencyprep.htm
- Deyle, R., and Smith, C. (1998). "Local government compliance with state planning mandates: The effects of state implementation in Florida." J. Am. Plann. Assoc., 64(4), 457–461
- Disability Rights Advocates. (2011). City Of Los Angeles Ordered To Hire Experts to

  Revise Emergency Plans to Address Needs of People with Disabilities: Case No.

  Cv-09-0287 CBM (RZx). Retrieved from:

  http://www.dralegal.org/pressroom/press-releases/city-of-los-angeles-ordered-to-hire-experts-to-revise-emergency-plans-to

- Dovers, S. & Handmer, J. (2010) *The Handbook of Disaster and Emergency Policies and Institutions*. International Institute for Environment and Development ISBN-13: 978-1-84407-359-7
- Dovers, S. & Handmer, J. (2013) *Handbook of Disaster Policies and Institutions Improving Emergency Management and Climate Change Adaptation*. Earthscan from Routledge 224 pages. ISBN: 9781849713511
- During and After Hurricanes Katrina and Rita: Position Paper and Recommendations.

  National Council on Disability, Washington, DC, July 7, 2006.
- Eguasa, O., & Nicolai, B. (2012, June). Advancing disaster response systems:

  Implementing biometric technologies as demographic identifiers. In *ICCGI 2012*,

  The Seventh International Multi-Conference on Computing in the Global

  Information Technology (pp. 70-75).
- Eisenman, D. P., Zhou, Q., Ong, M., Asch, S., Glik, D., & Long, A. (2009). Variations in disaster preparedness by mental health, perceived general health, and disability status. *Disaster Medicine and Public Health Preparedness*, *3*(01), 33-41.
- Elmore, R. F. (1978). Organizational models of social program implementation. *PublicPolicy*, 26(2), 185-228.
- Emens, E. F. (2012). Disabling Attitudes: US Disability Law and the ADA Amendments Act. *American Journal of Comparative Law*, 60(1), 205-234.
- Fahy, R. F. (2013). Overview of major studies on the evacuation of World Trade Center Buildings 1 and 2 on 9/11. *Fire technology*, 49(3), 643-655.

- Federal Emergency Management Agency (FEMA). (2009). Are you ready? An in-depth guide to citizen preparedness. Retrieved from http://www.fema.gov/areyouready/index.shtm
- Federal Emergency Management Agency. (2010). Perspective on preparedness: FEMA

  Has Made Limited Progress in Efforts to Develop and Implement a System to

  Assess National Preparedness Capabilities. Retrieved from:

  http://www.gao.gov/assets/100/97161.html
- Federal Emergency Management Agency. (2012). Community Healthcare Planning and Response to Disasters. Los Angeles, CA: Author
- Federal Emergency Management Agency. (2013). Disaster Declarations by Year.

Retrieved from: https://www.fema.gov/disasters/grid/year

- Feldblum, C. R., Barry, K., & Benfer, E. A. (2007). The ADA Amendments Act of 2008.

  Tex. J. on CL & CR, 13, 187.
- Field, C. B. (Ed.). (2012). Managing the risks of extreme events and disasters to advance climate change adaptation: special report of the intergovernmental panel on climate change. Cambridge University Press.
- Flanagan, B. E., Gregory, E. W., Hallisey, E. J., Heitgerd, J. L., & Lewis, B. (2011). A social vulnerability index for disaster management. *Journal of Homeland Security and Emergency Management*, 8(1).
- Forman, S. G., & Burke, C. R. (2008). Best practices in selecting and implementing evidence-based school interventions. *Best practices in school psychology-V*, 799-811.

- Fox, M. H., White, G. W., Rooney, C., Rowland, J. L. (2007). Disaster Preparedness and Response for Persons With Mobility Impairments: Results From the University of Kansas Nobody Left Behind Study. *SAGE Publications Journal of Disability Policy Studies Spring 2007 vol. 17 no. 4 196-205*. doi: 10.1177/10442073070170040201
- Freedman, W. (2015) Valley Fire victim identified as 72-year-old woman with multiple sclerosis- ABC News, retreived from: http://abc7news.com/tag/valley-fire/
- Frieden (2006) The Impact of Hurricanes Katrina and Rita on People with Disabilities: A

  Look Back and Remaining Challenges. National Council on Disability. NW,

  Washington, DC. Retrieved from:

  http://www.ncd.gov/publications/2006/Aug072006
- Frieden, L. (2005) Saving Lives: Including People with Disabilities in Emergency
  Planning. Publication: National Council on Disability. Washington, DC.
  Retrieved from http://www.ncd.gov/publications/2005/04152005#disaster
  from: https://www.fema.gov/disasters/grid/year
- Fugate W. C. (2013) FEMA and Emergency Management: Looking Back, Moving

  Forward and Changing Outcomes (Part Two)

  https://www.dhs.gov/blog/2013/03/25/fema-and-emergency-management-parttwo
- Fugate, C. (2011). Understanding the power of social media as a communication tool in the aftermath of disasters. *Address to the United States Senate Committee on*

- Homeland Sec. and Gov. Affairs, ad hoc Subcommittee on Disaster Recovery and Intergovernmental.
- Fugate, C. (2011, October). Five years later: An assessment of the post katrina emergency management reform act. In *Proc. US Federal Emerg. Manag. Agency* (pp. 1-36).
- Furman M. J. (2013) Brooklyn Center for Independence of the Disabled v City of New York in Case 1:11-cv-06690-JMF Document 159 Filed 11/07/13. Retrieved from http://dralegal.org/sites/dralegal.org/files/Grace/159\_opinion\_and\_order.pdf
- Gajduschek, G. (2003). Bureaucracy: Is it efficient? Is it not? Is that the question?:

  Uncertainty reduction: An ignored element of bureaucratic rationality.

  Administration & Society, 34(6), 700–723.
- Gasper, J. T., & Reeves, A. (2010). Gubernatorial opportunism and partisanship:

  Evidence from disaster aid requests. In American Political Science Association

  2010 Annual Meeting Paper (August 27, 2010).
- Gasper, J., & Reeves, A. (2010, August). Governors as opportunists: evidence from disaster declaration requests. In *APSA 2010 Annual Meeting Paper*.
- Gerber, B. J. (2007). Disaster Management in the United States: Examining Key Political and Policy Challenges. *Policy Studies Journal* 35(2): 227-238.
- Gerber, B. J., Norwood, F., & Zakour, M. (2010). Disasters, Evacuations and Persons with Disabilities: An Assessment of Key Issues Facing Individuals and Households. Retrieved from http://www.inclusionresearch.org/

- Gerber, B. J., Cohen, D. B., Cannon, B., Patterson, D. & Stewart, K. (2005). On the Front Line: American Cities and the Challenge of Homeland Security Preparedness.

  \*Urban Affairs Review 41(2): 182-210.\*\*
- Gershon, R.R.M., Kraus, L.E., Raveis, V.H., Sherman, M.F., and Kailes, J.I. (2013).

  Emergency Preparedness in a Sample of Persons with Disabilities. *American Journal of Disaster Medicine*, 8(1), pp.35-47.
- Giblin, M. J.; Schafer, J. A.; Burruss, G. W. (2009). Homeland Security in the HeartlandRisk, Preparedness, and Organizational Capacity. Criminal Justice Policy Review September 2009 vol. 20 no. 3 274-289. doi: 10.1177/0887403408323762
- Gibson, M. (2014). Seniors, Disaster Mortality, and End-of-Life Care. In *Disaster Preparedness for Seniors* (pp. 73-87). New York, NY: Springer.
- Godschalk, D., Rose, A., Mittler, E., Porter, K., and Taylor, C. W. (2009). Estimating the value of foresight: Aggregate analysis of natural hazard mitigation benefits and costs. *Journal of Environmental Planning Management*, *52*(6), 739–756.
- Goggin, M. L. (1990). *Implementation theory and practice: Toward a third generation*.

  Ann Arbor, MI: Scott Foresman & Co.
- Gomez, B. T., & Wilson, M. (2008). Political sophistication and attributions of blame in the wake of Hurricane Katrina. *Publius: The Journal of Federalism Forthcoming*, 38(4), 633–650.
- Goodin, R. E., Moran, M., & Rein, M. (Eds.). (2006). *The Oxford handbook of public policy* (pp. 3-35). Oxford: Oxford University Press.

- Gostin, L. O., & Hanfling, D. (2009). National preparedness for a catastrophic emergency: crisis standards of care. *JAMA*, 302(21), 2365-2366
- Great Neck Publishing (2009). The Constitution of the United States 1787, *Great Neck Publishing*, 18.
- Haddow, G. & Bullock, J. (2005) The Future of Emergency Management. Institute forCrisis, Disaster and Risk Management. George Washington University,Washington, DC
- Haddow, G., Bullock, J., & Coppola, D. P. (2013). *Introduction to emergency management*. Butterworth-Heinemann.
- Ham, C., & Hill, M. (1984). The Policy Process in the Modern Capitalist State (Harvester Wheatsheaf, Hemel Hempstead, Herts).
- Hamilton, A., Madison, J., & Jay, J. (2007). Die Federalist Papers. CH Beck.
- Harrington, C. B., & Carter, L. H. (2009). *Administrative law and politics: Cases and comments* (4th ed.). Washington, DC: CQ Press.
- Heltberg, R., Siegel, P. B., & Jorgensen, S. L. (2009). Addressing human vulnerability to climate change: toward a 'no-regrets' approach. *Global Environmental Change*, *19*(1), 89-99.
- Hemingway, L., & Priestley, M. (2014). Natural hazards, human vulnerability and disabling societies: a disaster for disabled people? *The Review of Disability Studies: An International Journal*, 2(3).

- Henstra, D. (2010). Evaluating local government emergency management programs:

  What framework should public managers adopt? *Public Administration Review*,

  70(2), 236-246.
- Hill, M. J., & Hupe, P. L. (2002). *Implementing public policy: governance in theory and practice*. London: Sage.
- Hill, M., & Hupe, P. (2003). The multi-layer problem in implementation research. *Public Management Review*, *5*(4), 471-490.
- Hjern, B., & Hull, C. (1987). *Helping small firms grow: An implementation approach*.

  London: Croom Helm.
- Hogwood, B. W., & Gunn, L. A. (1984). Policy analysis for the real worldOxford University Press. *New York*.
- Hogwood, B. W., & Gunn, L. A. (1984). *The policy orientation*. Centre for the Study of Public Policy.
- Homeland Security. *The American Review of Public Administration*, 33(3), 253-277. doi: 10.1177/0275074003254472
- House, W. (2004). Executive order 13347–individuals with disabilities in emergency preparedness. *National Archives and Record Administration*, 69(142).
- Hoyos, M. C., Morales, R. S., & Akhavan-Tabatabaei, R. (2014). OR models with stochastic components in disaster operations management: A literature survey. *Computers & Industrial Engineering*.
- John, P. (1998). *Analysing Public Policy* (Continuum) and *Local Governance in Western Europe* (Sage, 2001)

- Jones, M. (1997). And Access for All: Accommodating Individuals with Disabilities in the California Courts. *USFL Rev.*, *32*, 75.
- Jones, N. L. (2010, June). The Americans with Disabilities Act and emergency preparedness and response. LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Kailes, J. 2008. Southern California Wildfires After Action Report, prepared in partnership with the Access to Readiness Coalition, The California Foundation for Independent Living Centers, and The Center for Disability Issues and the Health Professions at Western University of Health Sciences. Retrieved from:

  http://www.jik.com/CaliforniaWildfires.pdf
- Kailes, J. and Enders, A. (2014) Emergency Registries: Research. Retrieved from: http://www.jik.com/d-rgt.html, jik@pacbell.net
- Kapucu, N. (2009). Interorganizational coordination in complex environments of disasters: The evolution of intergovernmental disaster response systems. *Journal of Homeland Security and Emergency Management*, 6(1).
- Kapucu, N., Wart, M., Sylves, R., & Yuldashev, F. (2011). US Presidents and Their
  Roles in Emergency Management and Disaster Policy 1950-2009. *Risk, Hazards*& Crisis in Public Policy, 2(3), 1-34.
- Katrina Disability Information. (2008). *Katrina disability information*. Retrieved from http://katrinadisability.info
- Kauffman, H. (2008). Ruminations on the study of American public bureaucracies. *The American Review of Public Administration*, 38(3), 256-263.

- Kendra, J. M., & Wachtendorf, T. (2003). Creativity in emergency response after the

  World Trade Center attack. Beyond September 11th: An account of post-disaster

  research. Boulder: Natural Hazards Research and Applications Information

  Center, University of Colorado
- Kernaghan, K., Borins, S. F., & Marson, B. (2000). *The new public organization* (No. 24). Institute of Public Administration of Canada.
- Kerschbaumer, K. (2006). *Broadcasters Seek Better Emergency Alert System*,

  Broadcasting and Cable, September 12, 2005. Retrieved from

  http://www.broadcastingcable.com/article/CA6255755.html
- Kerwin, C. M., Furlong, S.R., (2011). *Rulemaking: How government agencies write law and make policy* (4th ed.). Washington, DC: CQ Press.
- Kettaneh, A. A.; Slevin, J. R (2014) National Module for Helping Individuals with Physical Disabilities in Disaster Events. *Journal of Applied Rehabilitation*Counseling, Vol. 45, No. 1, Spring 2014
- Kettl, D. F. (2000). Public administration at the millennium: The state of the field. *Journal of public administration research and theory*, 10(1), 7-34.
- Kettl, D. F. (2003). Contingent coordination: Practical and Theoretical Puzzles for Homeland Security. *The American Review of Public Administration*, 33(3), 253 277. doi: 10.1177/0275074003254472
- Kilpatrick, D. G. (2000), *Definitions of Public Policy and the Law*, National Violence

  Against Women Prevention Research Center. Retrieved from:

  https://mainwebv.musc.edu/vawprevention/policy/definition.shtml

- Kohn, S., Eaton, J. P., Feroz, S., Bainbridge, A. A., Hoolachan, J., & Barnett, D. J. (2012)

  Personal Disaster Preparedness: An Integrative Review of the Literature. *Disaster Med Public Health Preparedness*, 6, 217–231. Retrieved from:

  http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8849

  223&fileId=S1935789300004432
- Kolber, M. (2009). Rulemaking without rules: An empirical study of direct final rulemaking. *Albany Law Review*, 72(1), 79–115.
- Krager, T. (2012) Skullduggery!: The True Causes of the Financial Crisis. *AuthorHouse Political Science -* 464 pages
- Krause, G. A. (2010). Legislative delegation of authority to bureaucratic agencies. na.
- Kusumasari, B., Alam, Q., & Siddiqui, K. (2010). Resource capability for local government in managing disaster. *Disaster Prevention and Management: An International Journal*, 19(4), 438-451.
- Kweit, M. G., & Kweit, R. W. (2006). A tale of two disasters. *Publius*, 36(3), 375–392.
- Lavin, R. P., Schemmel-Rettenmeier, L., & Frommelt-Kuhle, M. (2012). Reconsidering "Special Needs" Populations During a Disaster. *Annual review of nursing* research, 30(1), 125-147.
- Law, P., & Act, A. (2000). TITLE I—PREDISASTER HAZARD MITIGATION. *Public Law*, 106, 390.
- Lazar, J.& Jaeger P. T. (2011) Reducing Barriers to Online Access for People with Disabilities- *Issues in Science and Technology*,

- Lemyre, L., Gibson, S., Zlepnig, J., Meyer-Macleod, R., & Boutette, P. (2009).

  Emergency preparedness for higher risk populations: psychosocial considerations.

  Radiation protection dosimetry, 134(3-4), 207-214.
- Lester, J. P., & Goggin, M. L. (1998). Back to the future: The rediscovery of implementation studies. *Policy Currents*, 8(3), 1-9.
- Liachowitz, C. H. (2011). *Disability as a social construct: Legislative roots*. University of Pennsylvania Press.
- Liberatore, F., Pizarro, C., de Blas, C. S., Ortuño, M. T., & Vitoriano, B. (2013).
   Uncertainty in humanitarian logistics for disaster management. A review. In
   Decision Aid Models for Disaster Management and Emergencies (pp. 45-74).
   Atlantis Press.
- Lindell, M. K., & Perry, R. W. (2012). The protective action decision model: theoretical modifications and additional evidence. *Risk Analysis*, *32*(4), 616-632.
- Lindell, M. K., Tierney, K. J., & Perry, R. W. (2001). Facing the Unexpected:: Disaster

  Preparedness and Response in the United States. Joseph Henry Press.
- Lindsay B. R. (2011) Social Media and Disasters: Current Uses, Future Options, and Policy Considerations. *Congressional Research Service 7-5700*. Retrieved from: www.crs.gov R41987
- Litman, T. (2006). Lessons from Katrina and Rita: What major disasters can teach transportation planners. *Journal of Transportation Engineering*, *132*(1), 11–18.

- Loy, B., & Batiste, L. C. (2004). Evacuation preparedness: managing the safety of employees with disabilities. *Occupational Health & Safety (Waco, Tex.)*, 73(9), 112-114
- Macdonald, J. A. (2013). Congressional Power over Executive Branch Policy Making:

  Limitations on Bureaucratic Regulations, 1989-2009. *Presidential Studies*Ouarterly, 43(3), 523-537.
- Magill, M. E. (2009). Agency self-regulation. George Washington Law Review, 77
- Marion, N. & Cronin, K. (2009) Law Enforcement Responses to Homeland Security

  Initiatives: The Case of Ohio. (2009) *Southwest Journal of Criminal Justice*, Vol. 6(1). pp. 4–24.
- Mark G. Yudof, (1981) Implementation Theories and Desegregation Realities, 32 Ala. L.
- Marshall, C. B. (2011) Communities Actively Living Independent and Free, et Al. v City of Los Angeles, et Al in Case 2:09-cv-00287-CBM -RZ Document 140 Filed 02/10/11 Retrieved from:
  - http://www.dralegal.org/sites/dralegal.org/files/casefiles/order 0.pdf
- Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *Psychology*, 63.
- Matherly, D., & Mobley, J. (2011). Transportation and emergency management tool kit for communications with vulnerable populations. *Transportation Research*Record: Journal of the Transportation Research Board, 2234(1), 62-70.

- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of public administration* research and theory, 5(2), 145-174.
- May, C. (2013) *Implementation Science* 2013, Faculty of Health Sciences, University of Southampton BioMed Central Ltd. 8:18 doi:10.1186/1748-5908-8-18. Retrieved from: http://www.implementationscience.com/content/8/1/18
- May, P. J., & Jochim, A. E. (2013). Policy regime perspectives: Policies, politics, and governing. *Policy Studies Journal*, 41(3), 426-452.
- May, P. J., & Williams, W. (1986). Disaster policy implementation: Managing programs under shared governance. NewYork: Plenum Press.
- May, P. J., Jochim, A., & Sapotichne, J. (2009). Policy regimes and governance:

  Constructing homeland security. *Center for American Politics and Public Policy,*Seattle, Washington.
- Mayer, M. (2012). Hurricane Sandy: Disaster Aid Request Too Big. *The Heritage Foundation, Issue Brief*, (3803).
- Mayer, M. A.; Carafano, J. J.; & Zuckerman, J. (2011). *Homeland Security 4.0:*Overcoming Centralization, Complacency, and Politics. Special Report #97 on Homeland Security
- McConnell, A., & Drennan, L. (2006). Mission impossible? Planning and preparing for crisis. *Journal of Contingencies and Crisis Management*, 14(2), 59–70.

- McEntire, D. A. (2004). *The Status of Emergency Management Theory: Issues, Barriers,*and Recommendations for Improved Scholarship. Paper Presented at the FEMA

  Higher Education Conference, Emmitsburg, MD
- McEntire, D. A. (2009). Revolutionary and evolutionary change in emergency management. *Journal of business continuity & emergency planning*, 4(1), 69-85.
- McGlone, P. (2012) "Sandy Victims Furious as FEMA Troubles Begin to Build,"

  Retrieved from:

  http://www.nj.com/news/index.ssf/2012/11/sandy\_victims\_furious\_as\_fema.html

  (accessed August 7, 2013).
- McGuire, M., & Silvia, C. (2010). The effect of problem severity, managerial and organizational capacity, and agency structure on intergovernmental collaboration: Evidence from local emergency management. *Public Administration Review*, 70(2), 279-288.
- McInerney, M., & Simon, K. (2012). The effect of state workers' compensation program changes on the use of federal social security disability insurance. *Industrial Relations: A Journal of Economy and Society*, *51*(1), 57-88.
- McLaughlin, A. C., & Mayhorn, C. B. (2014). Designing effective risk communications for older adults. *Safety science*, *61*, 59-65.
- McLaughlin, P. A. (2010, 2012). The consequences of midnight regulations and other surges in regulatory activity Public Choice Springer Science-Business Media, LLC 2010. DOI 10.1007/s11127-010-9635-4

- McLoughlin, D. (1985). "A Framework for Integrated Emergency Management." Public Administration Review 45(Special Issue): 165-172.
- McNamara, C. (2009). *General guidelines for conducting interviews*. http://managementhelp.org/evaluatn/intrview.htm
- Meaney, M. (2014). 12 Shelter for people with disabilities. *Conflict, Disaster and Disability: Ensuring Equality*, 90.
- Michael, H., Ramesh, M., & Perl, A. (2003). Studying Public Policy: Policy cycles and policy subsystems.
- Michie, S., Johnston, M., Francis, J., Hardeman, W., & Eccles, M. (2008). From theory to intervention: Mapping theoretically derived behavioural determinants to behaviour change techniques. *Applied Psychology: An International Review*, 57(4), 660-680.
- Moore, B. L., Geller, R. J., & Clark, C. (2015). Hospital preparedness for chemical and radiological disasters. *Emergency medicine clinics of North America*, *33*(1), 37-49.
- Moss, M., Schellhamer, C., & Berman, D. A. (2009). The Stafford Act and priorities for reform. *Journal of Homeland Security and Emergency Management*, 6(1).
- Moteff, J. D. (2010). *Critical infrastructures: Background, policy, and implementation*. DIANE Publishing.
- Myers, T. A., Maibach, E. W., Roser-Renouf, C., Akerlof, K., & Leiserowitz, A. A. (2013). The relationship between personal experience and belief in the reality of global warming. *Nature Climate Change*, *3*(4), 343-347.

- National Center on Birth Defects and Developmental Disabilities (2009). Census.
  - Retrieved from: http://www.cdc.gov/ncbddd/documents/Disability\_PHPa\_1.pdf
- National Council on Disability (NCD). (2005). Saving Lives: Including People with

  Disabilities in Emergency Planning. Retrieved July 14, 2008, from

  www.ncd.gov/newsroom/publications/2005/ Saving Lives.htm
- National Council on Disability (2006). The Needs of People with Pyschiatric Disabilities
- During and After Hurricanes Katrina and Rita: Position Paper and Recommendations.

  National Council on Disability, Washington, DC, July 7, 2006.
- National Council on Disability. (2009). Effective Emergency Management: Making

  Improvements for Communities and People with Disabilities. Retrieved from

  www.ncd.gov/newsroom/publications/2009\_impact.htm
- National Council on Disability. (2011). *National Disability Policy: A Progress Report*.

  Retrieved from http://www.ncd.gov/progress\_reports/Oct312011
- National Council on Disability (NCD). (2012). *Progress report*. Retrieved from http://www.ncd.gov/progress\_reports/Aug202012
- The National Organization on Disability (NOD) (2004). NOD-Harris Survey of

  Americans with Disabilities. Retrieved from

  http://nod.org/research\_publications/surveys\_research/harris
- The National Organization on Disability (NOD) (2014). Emergency Preparedness.

  Retrieved from [COMPLETE URL INFORMATION ON THIS LINE]

  http://nod.org/disability\_resources/emergency\_preparedness\_for\_persons\_with\_disabilities

- Nelson, C., Chan, E., Chandra, A., Sorensen, P., Willis, H. H., Dulin, S., & Leuschner, K.
  (2010). Developing national standards for public health emergency preparedness
  with a limited evidence base. *Disaster Medicine and Public Health Preparedness*,
  4(4), 285-290.
- Nelson, D., & Yackee, S. W. (2012). Lobbying coalitions and government policy change: an analysis of federal agency rulemaking. *The Journal of Politics*, 74(02), 339-353.
- Nishamarie Sherry, J. D. (2011). Leveling the emergency preparedness playing field. *Journal of Emergency Management*, 9(6), 11.
- O'Toole, L. (2004). The theory-practice issue in policy implementation research. *Public Administration*, 82(2), 309–329.
- O'Toole, L. J. R. Jr. (1995). Rational choice and policy implementation. *American Review of Public Administration*, 25(1), 43-57.
- Ochi, S., Hodgson, S., Landeg, O., Mayner, L., & Murray, V. (2014). Disaster-driven evacuation and medication loss: A systematic literature review. *PLoS currents*, 6.
- Oleszek, W. J. (2010) Congressional Oversight: An Overview. CRS Report for Congress.

  Retrieved from: <a href="http://www.fas.org/sgp/crs/misc/R41079.pdf">http://www.fas.org/sgp/crs/misc/R41079.pdf</a>
- Oleszek, W. J. (2011). Congressional oversight: an overview. DIANE Publishing.
- Oleszek, W. J. (2013). *Congressional procedures and the policy process*. Thousand Oaks, CA: SAGE Publications, inc.
- Olshansky, R. B. (2006). Planning after Hurricane Katrina. *Journal of the American Planning Association*, 72(2), 147–153.

- Ostrander, I., & Sievert, J. (2014, September). Presidential Signing Statements and the Durability of the Law. *Congress & the Presidency* (Vol. 41, No. 3, pp. 362-383). Routledge.
- O'Toole Jr, L. J. (2000). Research on policy implementation: Assessment and prospects. *Journal of public administration research and theory*, 10(2), 263-288.
- O'Toole Jr, L. J., & Montjoy, R. S. (1984). Interorganizational policy implementation: A theoretical perspective. *Public Administration Review*, 491-503.
- Paradis, L. (2003). Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act: Making Programs, Services, and Activities Accessible to All. *Stan. L. & Pol'y Rev.*, *14*, 389.
- Parr, A. (1987). Disasters and disabled persons: An examination of the safety needs of a neglected minority. *Disasters*, 11(2), 148–159.
- Parsons, W., & Parsons, W. D. (1995). *Public policy: an introduction to the theory and practice of policy analysis* (p. 224). Cheltenham, STATE?: Edward Elgar.
- Patterson, O., Weil, F., & Patel, K. (2010). The role of community in disaster response: conceptual models. *Population Research and Policy Review*, 29(2), 127-141.
- Patton, M. Q. (1990). *Qualitative evaluation methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications, inc.
- Patton, M. Q. (2001). Evaluation, knowledge management, best practices, and high quality lessons learned. *American Journal of Evaluation*, 22(3), 329-336.

- Paudel, N. R. (2009). A critical account of policy implementation theories: status and reconsideration. *Nepalese Journal of Public Policy and Governance*, 25(2), 36-54.
- Peek, L., & Stough, L. M. (2010). Children with disabilities in the context of disaster: A social vulnerability perspective. *Child Development*, *81*(4), 1260-1270.
- Peerbolte, S. L., & Collins, M. L. (2013). Disaster management and the critical thinking skills of local emergency managers: correlations with age, gender, education, and years in occupation. *Disasters*, *37*(1), 48-60.
- Perry, R. W., & Lindell, M. K. (2003). Preparedness for emergency response: guidelines for the emergency planning process. *Disasters*, *27*(4), 336-350.
- Physical Disabilities in Disaster Events. Journal of Applied Rehabilitation
- Potter, R. A., & Shipan, C. R. (2013). Separation of Powers and Agency Rulemaking.

  Working paper, University of Michigan Ann Arbor.
- Pressman, Jeffrey L. & Wildavsky, A. (1984, 1973), *Implementation:* 3rd ed. Berkeley: University of California Press.
- Prosser, B., & Peters, C. (2010). *Directions in disaster resilience policy* (Doctoral dissertation, Emergency Management Australia).
- Raghavan, T. M. (2003). In fear of cyberterrorism: An analysis of the congressional response.
- Rawls, C. G., & Turnquist, M. A. (2010). Pre-positioning of emergency supplies for disaster response. *Transportation research part B: Methodological*, 44(4), 521-

- 534. *Recommendations for Improved Scholarship*. Paper Presented at the FEMA Higher
- Redlener, I., & Reilly, M. J. (2012). Lessons from Sandy—preparing health systems for future disasters. *New England Journal of Medicine*, *367*(24), 2269-2271.
- Relief, R. T. S. D., & Act, E. A. (2000). as amended by Public Law 106-390, October 30, 2000. *Washington, DC: Federal Emergency Management Agency*.
- Response to Disasters. Los Angeles, CA: Author.
- Rev. 441 (1981), Retrieved from:: http://scholarship.law.berkeley.edu/facpubs/2215
- Rhodes, J. D., & Carafano, J. J. (2006). *State and Regional Response to Disasters:*Solving the 72-hour Problem. Heritage Foundation.
- Roberts, P. S. (2005). Shifting priorities: Congressional incentives and the Homeland Security granting process. *Review of Policy Research*, *22*(4), 437–449.
- Robichau, R. W., & Lynn Jr, L. E. (2009). The implementation of public policy: Still the missing link. *Policy Studies Journal*, *37*(1), 21-36.
- Rooney, C., & White, G. W. (2007). Consumer perspective narrative analysis of a disaster preparedness and emergency response survey from persons with mobility impairments. *Journal of Disability Policy Studies*, 17(4), 206-215.
- Ross, A. D. (2013). Local Disaster Resilience: Administrative and Community

  Preparedness: Administrative and Political Perspectives. Routledge.
- Rothstein, B. (1998). Just institutions matter: the moral and political logic of the universal welfare state. Cambridge University Press.

- Rudestam, K. E., & Newton, R. R. (2007). Surviving your dissertation: A comprehensive guide to content and process (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Rutter, D., & Quine, L. (2002). Social cognition models and changing health behaviours.

  In D. Rutter & L. Quine (Eds.), *Changing health behaviour: Intervention and research with social cognition models* (pp. 1-27). Maidenhead: Open University Press.
- Sabatier, P. A., & Jenkins-Smith, H. C. (Eds.). (1993). Policy change and learning: An advocacy coalition approach.
- Saetren, H. (2005). Facts and myths about research on public policy implementation:

  Out-of-Fashion, allegedly dead, but still very much alive and relevant. *Policy Studies Journal*, *33*(4), 559-582.
- Sandler, H. A., & Gates-Allen, D. (2010). Neighbor to Neighbor.
- Santora, M. & Weiser, B. (2013) Court Says New York Neglected Disabled in

  Emergencies. The New York Times. Retrieved from:

  http://www.nytimes.com/2013/11/08/nyregion/new-yorks-emergency-plans-violate-disabilities-act-judge-says.html?pagewanted=all&\_r=0
- Scavo, C., Kearney, R. C., & Kilroy, R. J. Jr. (2008). Challenges to federalism:

  Homeland Security and disaster response. *Publius*, *38*(1), 81–110.
- Schalock, R. L., & Verdugo, M. A. (2013). The transformation of disabilities organizations. *Intellectual and developmental disabilities*, *51*(4), 273-286.

- Schlesinger, A. M & Burns, R. and Jr. (1975) eds., *Congress Investigates: A Documented History, 1792-1974*, vol. 1 (New York: Chelsea House, 1975), p. xix
- Schneider, S. K. (1990). FEMA, federalism and "Frisco." *Publius*, 20(3), 97–115.
- Schneider, S. K. (2011). *Dealing with Disaster: Public Management in Crisis Situations*. ME Sharpe.
- Schofield, J., & Sausman, C. (2004). Symposium on implementing public policy: learning from theory and practice. *Public Administration*, 82(2), 235-248.
- Schofield, Jill (2001), Time for a revival? Public policy implementation: a review of the literature and an agenda for future research, *International Journal of Management Review*, volume 3, Issue 3, 245-263 pp.
- Scotch, R. K., (2001, 2009) From Good Will to Civil Rights: Transforming Federal Disability Policy. Temple University Press. ISBN 1-56639-897-5
- Security. doi: 10.1177/0275074003254472. The American Review of Public

  Administration vol. 33 no. 3 253-277
- Shakespeare, T. (1994). Cultural representation of disabled people: dustbins for disavowal? *Disability & Society*, *9*(3), 283-299.
- Shapiro, J. P. (1993). No pity. New York, NY: Times Books.
- Shapiro, J. P. (1994). No pity: People with disabilities forging a new civil rights movement. New York, NY: Three Rivers Press.
- Sharkey, C. M. (2009). Federalism Accountability: "Agency-Forcing" Measures. *Duke Law Journal*, 2125-2192.

- Shekhar, S., Yang, K., Gunturi, V. M., Manikonda, L., Oliver, D., Zhou, X. & Lu, Q. (2012). Experiences with evacuation route planning algorithms. *International Journal of Geographical Information Science*, 26(12), 2253-2265.
- Shields, T. J., Boyce, K. E., & McConnell, N. (2009). The behaviour and evacuation experiences of WTC 9/11 evacuees with self-designated mobility impairments. *Fire Safety Journal*, 44(6), 881-893.
- Shields, T. J., Smyth, B., Boyce, K. E., & Silcock, G. W. H. (1999). Towards the prediction of evacuation behaviours for people with learning disabilities. *Facilities*, *17*(9/10), 336–344.
- Shogren, K. A., & Turnbull, H. R. (2010). Public policy and outcomes for persons with intellectual disability: extending and expanding the public policy framework of AAIDD's 11th Edition of Intellectual Disability: Definition, Classification, and Systems of Support. *Intellectual and Developmental Disabilities*, 48(5), 375-386.
- Silvers, A. and Stein, M. A. (2001) "Disability, Equal Protection, and the Supreme Court:

  Standing at the Crossroads of Progressive and Retrogressive Logic in

  Constitutional Classification". *Faculty Publications*. Paper 703. Retrieved from:

  http://scholarship.law.wm.edu/facpubs/703
- Sinclair, M. (2001). Education in emergencies. *Learning for a future: Refugee education* in developing countries, 1-84.
- Smith, F., Jolley, E., & Schmidt, E. (2012). *Disability and disasters: The importance of an inclusive approach to vulnerability and social capital*. Sightsavers.

- Smith, K. (2013). *Environmental hazards: assessing risk and reducing disaster*.

  Routledge.
- Somers, S. (2009). Measuring resilience potential: an adaptive strategy for organizational crisis planning. *Journal of Contingencies and Crisis Management*, 17(1), 12-23.
- Sorensen J. and Vogt, B. 2006 Populations with special needs, Oak Ridge National Laboratory, ORNL/TM- 2006/559
- Southampton BioMed Central Ltd. 8:18 doi:10.1186/1748-5908-8-18. Retrieved from: http://www.implementationscience.com/content/8/1/18
- Stake, R. (2006). Multiple case study research.
- Stake, R. E. (2013). Multiple case study analysis. Guilford Press.
- Stake, R. E., & Savolainen, R. (1995). *The art of case study research* (Vol. 95004979). Thousand Oaks, CA: Sage publications.
- Stephen A. Rosenbaum, S. A., Boalt, J. & E. (2011) Disability Rights and Public

  Accommodations: State-by-State. University of California, Berkeley School of

  Law; Stanford Law School
- Stewart D. M. (2011) Collaboration Between Federal and Local Law Enforcement: An Examination of Texas Police Chiefs' Perceptions, *Sage Publication Inc. Police Quarterly October 4, 2011* doi: 10.1177/1098611111423744
- Stough, L. (2014). Disaster and disabilities.
- Stough, L. M., Sharp, A. N., Decker, C., & Wilker, N. (2010). Disaster case management and individuals with disabilities. *Rehabilitation psychology*, *55*(3), 211.

- Sylves, R. (2014). Disaster policy and politics: Emergency management and homeland security. CQ Press.
- Sylves, R. T. (2015) Disaster policy and politics: emergency management and homeland security. George Washigton University Second Edition. Sage publications Inc.

  Thousand Oak, CA ISBN 978-1-4833-0781-7 (pbk).
- Tady M. (2006) Disabled People Left Behind in Emergencies. *Alternative News and Information (AlterNet)*. Retrieved from:

  http://www.alternet.org/story/40443/disabled\_people\_left\_behind\_in\_
  emergencies
- Taurek, J. M., (1977). Should the numbers count? *Philosophy and Public Affairs* 6 (4):293-316
- The California Emergency Management Agency, (2011). *Report on California*\*Registries. Retrieved from http://www.calema.ca.gov/ChiefofStaff/Pages/Reporton-California-Registries.aspx
- The Constitution of the United States, (1787). Retrieved from

  http://www.archives.gov/exhibits/charters/charters\_of\_freedom\_14.html

  The Homeland Security Act (HSA) (2002). Retrieved from: http://www.dhs.gov/index.shtm
- The National Organization on Disability (NOD) (2004). NOD-Harris Survey of

  Americans with Disabilities. Retrieved from

  http://nod.org/research\_publications/surveys\_research/harris
- The National Organization on Disability (NOD) (2014). Emergency Preparedness.

  Retrieved from [COMPLETE URL INFORMATION ON THIS LINE]

- http://nod.org/disability\_resources/emergency\_preparedness\_for\_persons\_with\_disabilities
- Thessin, J. (2003). Department of Homeland Security.
- Tierney, K. J. (2005). *The red pill*. Social Science Research Council. Retrieved November 12, 2006, fromhttp://understandingkatrina.ssrc.org/Tierney/
- Turnbull, R., & Stowe, M. J. (2014). Elaborating the AAIDD Public Policy Framework. *Mental Retardation*, 52(1), 1-12.
- Turner, D. S., Evans, W. A., Kumlachew, M., Wolshon, B., Dixit, V., Sisiopiku, V. P., Islam, S. & Anderson, M. D. (2010). Issues, practices, and needs for communicating evacuation information to vulnerable populations. *Transportation Research Record: Journal of the Transportation Research Board*, 2196(1), 159-167.
- Twigg, J. (2014). Attitude before method: disability in vulnerability and capacity assessment. *Disasters*, *38*(3), 465-482.
- Twigg, J., Kett, M., Bottomley, H., Tan, L. T., & Nasreddin, H. (2011). Disability and public shelter in emergencies. *Environmental Hazards*, *10*(3-4), 248-261.
- United Nations Office for Disaster Risk Reduction (UNISDR), (2013). UN global survey explains why so many people living with disabilities die in disasters. Retrieved from: http://www.unisdr.org/archive/35032
- United Nations, Department of Economic and Social Affairs, Population Division (2011).

  World Population Prospects: The 2010 Revision, Volume I. Retrieved from:

  http://www.un.org/disabilities/default.asp

- United States Access Board, ADA Amendments Act of 2008. Online: http://www.access-board.gov/about/laws/ada-amendments.htm.
- United States Census Bureau, (2010) Retrieved from:

  http://www.census.gov/newsroom/releases/archives/income\_wealth/cb08185.html.
- United States Government Accountability Office (GAO) (2007) "Numerous Federal Networks Used to Support Homeland Security Need to Be Better Coordinated with Key State and Local Information-Sharing Initiatives" GAO-07-455 (Washington, DC: GAO, April 2007), http://www.gao.gov/products/GAO-07-455
- Uscher-Pines, L., Hausman, A. J., Powell, S., DeMara, P., Heake, G., & Hagen, M. G. (2009). Disaster preparedness of households with special needs in southeastern Pennsylvania. *American journal of preventive medicine*, *37*(3), 227-230.
- VanWilligen, M., Edwards, T., Edwards, B., & Hessee, S. (2002). Riding out the storm: Experiences of the physically disabled during hurricanes Bonnie, Dennis, and Floyd. *Natural Hazards Review*, *3*(3), 98–106.
- Vickers, M. Z. (2010). Accommodating College Students with Learning Disabilities:

  ADD, ADHD, and Dyslexia. *John William Pope Center for Higher Education Policy (NJ1)*.
- vulnerable populations due to hurricanes and other disasters. Retrieved from
- Walden University (2012). *Literature reviews*. Retrieved from http://libraryguides.waldenu.edu/content.php?pid=359928&sid=2943481

- Walden University. (2010). *Institutional review board for ethical standards in research*.

  Retrieved from <a href="http://researchcenterirb.waldenu.edu/content.php?pid=359928&">http://researchcenterirb.waldenu.edu/content.php?pid=359928&</a>
- Waugh, W. L., Jr., & Sylves, R. T. (2002). "Organizing the War on Terrorism," Public Administration Review 62(Special Issue): 145-154
- Waugh, W. L., Jr., (2000) Living with Hazards, Dealing with Disasters: An Introduction to Emergency Management (Armonk, NY: M.E. Sharpe Publishers).
- Weber, E. U. (2010). What shapes perceptions of climate change?. Wiley Interdisciplinary Reviews: Climate Change, 1(3), 332-342.
- Wegner, J. W. (1983). The Antodiscrimination Model Reconsidered: Ensuring Equal Opportunity Without Respect to Handicap Under Section 504 of the Rehabilitation Act of 1973. *Cornell L. Rev.*, 69, 401.
- Welsh, Elaine (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process Forum: Qualitative Social Research, 3(2), Art. 26
- Wentz, B., Lazar, J., Steind, M., Gbenro, O., Holandez, E., Ramsey, A. (2014) Danger, danger! Evaluating the accessibility of Web-based emergency alert sign-ups in the northeastern United States. *Government Information Quarterly Volume 31, Issue*3, July 2014, Pages 488–497. doi:10.1016/j.giq.2014.02.010
- White, B. (2014). Disaster relief for deaf persons: Lessons from Hurricanes Katrina and Rita. *The Review of Disability Studies: An International Journal*, 2(3).
- Williamson, R. S. (1990). Reagan's federalism: his efforts to decentralize government.

  University Press of Amer.
- Wilson, L. M. (2004). Towards equality: the voices of young disabled people in Disability Rights Commission research. *Support for Learning*, *19*(4), 162-168.

- Winter, S. C. (2003), "Implementation Perspective: Status and Reconsideration",

  (Chapter 16) *In Handbook of Public Administration*, ed. BG Peter and J Pierre.

  London, Thousand Oaks, CA and New Delhi: Sage 212-222 pp.
- Winter, S. C. (2003), "Implementation", (Section 5) *In Handbook of Public Administration*, (ed.) BG Peter and J Pierre. London, Thousand Oaks, CA and New Delhi: Sage 206-211 pp.
- Wolbring, G. (2009). A culture of neglect: Climate discourse and disabled people. *M/C Journal*, *12*(4).
- Wood, N. J., Burton, C. G., & Cutter, S. L. (2010). Community variations in social vulnerability to Cascadia-related tsunamis in the US Pacific Northwest. *Natural Hazards*, *52*(2), 369-389.
- Yackee, J. W., & Yackee, S. W. (2010). Is agency rulemaking 'ossified'? Testing congressional, presidential, and judicial procedural constraints. *Journal of Public Administration Research and Theory*, 20, 261-282.
- Yamin, F., Rahman, A., & Huq, S. (2005). Vulnerability, adaptation and climate disasters: a conceptual overview. *IDS bulletin*, *36*(4), 1-14.
- Yeletaysi, S., Ozceylan, D., Fiedrich, F., Harrald, J. R., & Jefferson, T. (2009, June). A framework to integrate social vulnerability into catastrophic natural disaster preparedness planning. In *The International Emergency Management Society-TIEMS 16th Annual Conference* (pp. 9-11).
- Yin, R. K. (2012, 2013). *Case study research: Design and methods*. Sage publications, inc.

- Yin, R.K. (1991, 2003). *Case study research design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, inc.
- Young, J. (2010). Caring for special needs during disasters: What's being done for vulnerable populations before the subcommittee on emergency communications, preparedness, and response. 111th Cong. 256 (2010) (testimony of John Young PhD JD),

  http://www.ncd.gov/newsroom/testimony/2010/JonathanYoung\_HouseJudiciary\_7-22- 2010.pdf
- Yudof, M. G. (1981) *Implementation Theories and Desegregation Realities*, 32 *Ala. L. Rev.* 441 (1981), Retrieved from:

  http://scholarship.law.berkeley.edu/facpubs/2215
- Zakour, M. J. (2015). Effects of support on evacuation preparedness of persons with disabilities. *Journal of social work in disability & rehabilitation*, 14(1), 1-22.
- Zimmerman, J. F. (2009). Contemporary American federalism: The growth of national power. SUNY Press.
- Zirkel, P. A. (2009). What does the law say? new section 504 student eligibility standards. *Teaching Exceptional Children*, 41(4), 68-71.
- Zobel, C. W., & Khansa, L. (2014). Characterizing multi-event disaster resilience.

  Computers & Operations Research, 42, 83-94.

## Appendix A: Participant Consent Form

You are invited to take part in a research study about Disaster Preparedness planning. The researcher is inviting adults working for People with Disabilities (PWD) and PWDs to be in the study. I obtained your contact info via websites and /or your reply to my flyer. The researcher encourages you to review the present study information and ask questions before giving consent. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Alimata Coulibaly, who is a doctoral student at Walden University.

## **Background Information:**

The purpose of this proposed research is to examine current disaster preparedness policies and procedures, to identify whether local agencies are following existing laws and policies related to integration of Individuals with disabilities (PWD).

#### **Procedures:**

If you agree to be in this study, you will be asked to:

- Sign the present consent form
- Participants are invited to answer to a thirty (30) minutes interview over the phone.

Here are some sample questions

- Do you have an emergency plan in place that you can follow in the event you should need to evacuate your work, home or school?
- How worried are you that you and the members of your household will experience personal injury, property damage or a major disruption of your routine if there is a disaster, such as a major earthquake?

### **Voluntary Nature of the Study:**

This study is voluntary. You are free to accept or turn down the invitation. No one at your county, institutions, or agencies will treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later. You may stop at any time and for any reason. The researcher will follow up with all volunteers to let them know whether or not they were selected for the study.

## Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing.

The study's potential benefits are to the larger community. The study anticipate to provide awareness of existing emergency preparedness and response plans, improve local emergency preparedness plans, and avoid increasing risks during disasters.

# Payment:

There is a \$10 thank you gift to a coffee house. All participants will receive a gift card. Each participant will receive a gift card mailed to him or her a week after the phone interview is performed.

## Privacy:

Interviews will be over the phone. Measures are in place to provide participants with reasonable protection from loss of privacy.

The researcher have developed a coding strategy where each person participating will have an independent identification number designed in advance, that is not linked to participants' names. No

name or contact info will be maintained in the records. No name will be mentioned on the study. Reports coming out of this study will not share the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. The researcher will not use your personal information for any purpose outside of this research project. Data will be kept secure by password protection and use of codes in place of names. The interviews will be audio recorded, and audio recorded data will be securely destroyed immediately after \*transcriptions are completed.

### **Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210. Walden University's approval number for this study is <u>03-19-18-0277202</u> and it expires on **March 18**th, **2019**.

Please print or save this consent form for your records.

### **Obtaining Your Consent**

Date of consent

Participant's Signature

Researcher's Signature

If you feel you understand the study well enough to make a decision about it, please indicate your consent replying to this email with the words, "I consent."

# **Overview of the Participant Information sheet:**

The information sheet provides brief and clear information on the essential elements of the research study: what the research is about, the condition or treatment under study, the voluntary nature of involvement, what will happen during and after the research has taken place, the participants responsibilities, the potential risks, to allow the participant to decide whether the study is of interest to them and whether they wish to read and discuss it further.

## **Study Title:**

Disaster Preparedness Rescue Planning for People with Disabilities

# **Invitation paragraph**

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or would like more information. Take time to decide whether or not to take part.

# What is the purpose of the study?

The purpose of this research is to analyze the effectiveness of disaster preparedness practice integrating PWD and to examine emergency managers' approaches in coordinating local disasters actors.

# Why have you been invited?

The researcher is inviting Emergency Managers, and adult Persons With Disabilities (PWD)/caregivers who work with PWD to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

#### Do you have to take part?

Taking part in the research is entirely voluntary; it is up to you to decide. We will describe the study and go through the information sheet, which we will give to you. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason.

## What will happen to you if you take part?

If you agree to be in this study, you will be asked to participate to electronic interview questions that will take about 30 minutes to complete, and/or to the face-to-face interview will take no more than one hour. The study will involve audio-taping. Pseudonyms will be used for data analysis and reporting. The data will be stored on a password protected hard drive.

## **Expenses and payments?**

No payment is provided to participants.

# **Voluntary Nature of the Study:**

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the county of Orange/ Riverside will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

# What will you have to do?

If you agree to be in this study, you will be asked to participate to electronic interview questions that will take about 30 minutes to complete, and/or to the face-to-face interview will take no more than one hour

# What are the possible disadvantages and risks of taking part?

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing.

The study's potential benefits will go to community members including PWD. We cannot promise the study will help you but the information we get from the study will help to increase the understanding of the effectiveness of disaster preparedness take into account the needs of people with disabilities to avoid increased risks during disasters

# Will my taking part in the study be kept confidential?

All information which is collected about you during the course of the research will be kept strictly confidential, and any information about you will have your name and address removed so that you cannot be recognised.

### What if there is a problem?

You may contact the researcher via researcher's phone number 310-259-0225. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210.

### What will happen if you do not carry on with the study?

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time. If you withdraw from the study we will destroy all your identifiable tape recorded interviews, but we will need to use the data collected up to your withdrawal.

# What will happen to the results of the research study?

All information which is collected about you during the course of the research will be kept strictly confidential, and any information about you will have your name and address removed so that you cannot be recognised. Results of the study will be made available to you. You will not be identified in any report/publication unless you have given your consent.

#### Who is organising or sponsoring the research?

This study is being conducted by a researcher who is a doctoral student at Walden University. You might already know the researcher as a co-worker, but this study is separate from that role

# Further information and contact details:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher.

# FOUR STEPS TO PREPAREDNESS IN RESPONDING TO DISASTERS IN LOS ANGELES COUNTY

#### **Summary**

#### 1. HAVE A PLAN

#### INDIVIDUALS IN NEED OF SPECIAL ASSISTANCE

Be sure that your Family Emergency Plan includes the needs of all members of your household. Consider forming a neighborhood network to assist in times of emergency. Individuals in need of special support may include:

- Elderly
- Temporary or casual workers
- Pregnant women or parents with newborns
- Homebound individuals
- Non-English-speaking individuals
- Post-surgery patients
- People with physical or emotional handicaps
- Individuals with no access to transport
- People with special dietary needs

All individuals in need of special support should interpret an Evacuation Warning as an Evacuation Order and make arrangements to leave the impacted area immediately.

#### 2. KEEP SUPPLIES

Evacuation Checklist
Emergency Supply Kit
Out-of-State Contact List
Cash and Credit Cards
Important Documents
Change of Clothing
Personal Hygiene Items
Baby Items
Family Photos

- Special Needs Items
   Wheelchair, Canes & Walkers
  - Medications
  - Hearing Aids (& extra batteries)

Pet Care Items

#### 3. STAY INFORMED

Broadcasters, including television, radio, cable operators, satellite television and satellite broadcast radio will transmit emergency alert messages. Area radio stations monitor emergency broadcasts from a variety of sources including the L.A. County Emergency Alert System, NOAA Weather Radio, California Law Enforcement Radio and Federal Emergency Management Agency (FEMA) Radio.

KFI	640	AM	Los Angeles
KNX	1070	AM	Los Angeles
KFWB	980	AM	Los Angeles
KROQ	106.7	FM	Los Angeles
KHTS	1220	AM	Santa Clarita
KRLA	870	AM	Los Angeles
KCBS	93.1	FM	Los Angeles
KABC	790	AM	Los Angeles
KAVL	610	AM	Antelope Valley

Setting up neighborhood networks like Neighborhood Watch before a disaster can help you get good and

reliable information after a disaster. Organize and prepare your neighborhood. When disaster strikes you and your family may be affected in several ways. This may range from injuries, physical or emotional, to damage or the loss of property. Remember not to panic and help those who need extra assistance.

#### 4. GET INVOLVED

#### **ASSESS**

Locate and notify family members of your circumstances.

#### FIND SHELTER

Find a safe haven in your home, with family or at a shelter.

#### WHEN DISASTER STRIKES

#### **BE SAFE**

Proceed cautiously and follow local safety instructions.

#### **GET HELP**

Get local service availability information or call 2-1-1 for services.

#### **BEGIN RECOVERY**

Contact insurance providers, FEMA and secure documentation.

#### AFBAmerican Foundation® for the Blind

## **Expanding Possibilities for People with Vision Loss**

#### **Emergency Preparedness**

Do you know what to do in case of fire? A massive power outage? A natural disaster? Recent events have taught all of us to be mindful of potential emergencies, and neither age nor vision problems should prevent you from preparing yourself. If you don't know who to contact in your community regarding emergency preparedness, start with your local fire department. It is usually integral to a community's disaster preparation and response and will know where to direct you.

In the meantime, here is what you can do to prepare:

- Compile an emergency kit; include a three-day supply of nonperishable food and water, a flashlight with live batteries, prescription medications, a first aid kit, hand-crank radio, extra batteries, important papers (home deed, insurance, etc.) and your low vision aids and appliances.
- Know the locations of emergency exits.
- Learn about transit systems and routes that are different from the ones you usually use.
- Prepare a list of emergency contacts and numbers.
- Practice emergency evacuation plans.
- Develop a buddy system and contacts with individuals and agencies both local (such as the local fire house or Red Cross affiliate) and out of state.
- Make sure that contacts outside your area are aware of your emergency plans.

If you have a service animal or pet, you should develop a plan for it as well. <u>Emergency Preparedness for your Service Animal or Pet</u>, compiled by the American Council of the Blind, provides a comprehensive checklist and helpful information.

If you're interested in becoming involved with emergency preparedness plans in your community, you can contact local authorities and vision loss agencies about developing emergency response systems (including transportation) for individuals who are blind or visually impaired.

For More Information

• Hadley School for the Blind: <u>Safety in the Home</u>. This course gives you the information you need to protect yourself, your family, and your home in case of

- emergency. Hadley Courses are available free of charge in cassette, large print, and braille versions.
- National Fire Protection Association: <u>Emergency Evacuation Planning Guide for People with Disabilities</u>. This brochure, while aimed primarily at employers and building managers, contains important information for anyone with a visual impairment or other disability on evacuation procedures.
- Northeast Texas Public Health District: <u>18 Emergency Preparedness Topics</u>, formatted to be friendly to deaf, blind, and limited sight populations. The information is in video and downloadable document format for public use. There is no charge for use of the materials posted on this website.

Directory of Services Find Local Services: Browse Services

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## Appendix E: Accessories for Rescue Alert's Response

This device could be used to connect an individual who is unable to evacuate to rescue services.

In case of emergency, Rescue Alert's Response Center doesn't just call the police, but also the family members on the list (family, friend, or emergency services). This system ensures the safety of individuals at risk and alerts loved ones and medical professionals of the incident so that they can respond quickly and effectively.

## Example of Accessories



With the RA 911 emergency cell phone, you will receive convenient, quick, and reliable access to 911 services whenever and wherever you need them. The small cell device is only 3.5 x 2 x 1 inch, which makes it convenient to take it with you on-the-go, and the two-way voice RA 911 allows you to communicate with 911 services in an emergency with just a push of a button.

RA911



RA Minder calls are made by a Rescue Alert care attendant to the customer. These reminders can be scheduled to remind the customer to take medication, and other common reminders. RA Minder service is only \$8.00/Month and \$0.20/call.

**RA Minders** 



Organize and manage medication intake with the Medication Dispenser. The MedReady medication device is easy to operate and can be used up to 28 days before needing a refill. The MedReady, when used in conjunction with a Rescue Alert medical alert system, can also be used to notify caregivers of missed doses.

Med Ready



A spare key can be stored securely in the lockbox, allowing responders and emergency services access to the home when help is needed. Rescue Alert stores the combination to the lockbox in a secure database

## . Lock Box/Key Safe



The conversion kit gives you the ability to switch from the necklace personal help button (PHB) to a wrist PHB, or vice-versa.

## Bracelet/Necklace Conversion Kit



The RJ31X-Kit allows the Rescue Alert medical alarm to call for help when activated even when another telephone extension is offhook in the house.

## RJ31X Telephone Jack Kit



The line grabber allows the Rescue Alert medical alarm to call for help when activated even when another telephone extension is offhook in the house.

Line Grabber



The Rescue Alert medical alarm system is one of the only Medical Alerts in the industry that is compatible with DSL (Digital Subscriber Line) connection in your home.



## Do You Know Where Your Evacuspot Is?

In 2013, the City of New Orleans and <u>evacuteer.org</u> unveiled new artwork to mark the 17 designated City evacution pick-up points where citizens may go during a mandatory evacuation.

### **How Mandatory Evacuations Works**

In the case of a dangerous or severe storm, generally Category 3 hurricane or higher, the City will call a mandatory evacuation. During a mandatory evacuation all citizens must leave the City of New Orleans until officials have designated the city safe for re-entry.

#### **How To Leave Town**

The City provides transportation assistance for Orleans Parish residents and/or tourists who cannot self-evacuate during a mandatory city-wide evacuation. Citizens who can leave town in their own transportation should leave as early as possible, and be aware that roads will change to contraflow, with all roads flowing out of town.

If you have medical or mobility needs and cannot get to your closest evacuspot, you must call 311 or go to ready.nola.gov to sign up for the Special Needs Registry.

#### **Register for City-Assisted Evacuation**

All citizens must register for City-Assisted Evacuation in order to leave town using City resources. After registering, citizens must go to one of 17 evacuspots, designated City evacuation pick-up points marked by evacuspot artwork. From their evacuspot, citizens will be transported to Union Pacific Terminal bus station, for outbound transportation to State and Federal shelters. Find the closest evacuspot here.

#### **Contact Us**

Office of Homeland Security and Emergency Preparedness 1300 Perdido St, 9W03 New Orleans, LA 70122

### **Hours of Operation**

Monday-Friday 8:00am-5:00pm

Phone

**Non-emergency** 

**Emergency 911** 

#### **Departmental Website**

Office of Homeland Security and Emergency Preparedness

**Connect to Emergency Preparedness** 

#### **Mandatory Evacuations**

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## Appendix G: Scheme of Emergency Managers' Interviews Protocol and Question

#### 1/ Interviews Protocol

Perceptions of County's Disaster Preparedness Development

Time of electronic interview questions:

Date:

Interviewer:

Interviewee:

Position of Interviewee:

Twenty-four participants will be selected to receive electronic interview questions. Thus, I am anticipating that related questionnaires will be collected from the 24 southern County Emergency Managers to understand more about their perceived attitudinal influence on local preparedness planning and practice integrating PWD.

The purpose of this qualitative study is to analyze current policies and procedures put into practice in county-level disaster preparedness for integrating PWD and to examine emergency managers /planners' approaches in coordinating local disasters actors. Pseudonyms will be used for data analysis and reporting. The data will be stored on a password protected hard drive. Electronic interview questions will take about 30 minutes to complete. The face-to-face interview will take no more than one hour.

## 2/ Sample of Guiding Questionnaires

Guiding questionnaires were inspired by the following Disaster Preparedness Sources of Ouestionnaires to State of California Emergency Management Officer (EMO)

# Scheme of Guiding Interviews Questions for Counties' Public and PWD' Participants

[Have interviewee read and sign the consent form first.]

#### **Questions**:

- 1) Does your county currently has working disaster plan(s)? Please describe.
- 2) How long has your disaster plan(s) been in existence? How often is it updated?

3)	How do you describe local preparedness planning and practice in your county? How are PWD
	integrated in the following processes:
	Notification; Evacuation; Sheltering; Other (please explain)
4)	How effective would you rate PWD participation in disaster operations mentioned above?
5)	Has the disaster plan been utilized in an emergency? If yes, please comment (when, process for
	utilizing in case of an earthquake, fire, flood, or other disaster.).

- 6) Approximately what % of PWD participated in the 3 most recent emergency drills?
- 7) Does your county currently use the registry system to record PWD' locations? How many PWD are registered on the registry? Has the registry been utilized in an emergency? If yes, please comment (when, process for utilizing, department/section responsible, etc.).
- 8) How do you describe your decision making approach? Are your approach based on your expertise and professional knowledge? Are your approach based on consultations with local officials and community? Are your approach based on your naturally good intermediary skills?
- 9) Do you feel that the instructions you issue are properly carried by community participants? That disaster policy are properly implemented? That PWDs disaster–related needs are properly addressed?

## Disaster Preparedness Sources of Questionnaires to State of California Emergency Management Officer (EMO)

Source	Data Used	Website
The California Emergency Management Agency, (2011 Report).	Disaster preparedness questions	http://www.calema.ca.gov/ChiefofStaff/Pages/Report-on-California-Registries.aspx
Public Policy Institute of California Statewide Survey, March 2006	Disaster preparedness questions	http://www.ppic.org/content/pubs/jtf/JTF_DisasterPreparednessJTF.pdf

Appendix H: Scheme of Caregivers and PWDs' Interviews Protocol and Questions

#### 1/ Interviews Protocol

Perceptions of County's Disaster Preparedness Development

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee:

Eighteen interview participants will be selected to share their perceived effectiveness of the county disaster preparedness plans taking into account PWD needs to avoid increased risks during disasters – the emergency managers servicing Riverside and Orange county, two executive members of the Regional Centers (RC) for people with disabilities serving Orange and Riverside counties, five (5) community-based organizers or disability advocacy personnel of activist organizations that work with people with disabilities, five (5) individuals among caregivers personnel for PWD, and four (4) actual PWD.

The purpose of this qualitative study is to analyze current policies and procedures put into practice in county-level disaster preparedness for integrating PWD and to examine emergency managers /planners' approaches in coordinating local disasters actors. Pseudonyms will be used for data analysis and reporting. The data will be stored on a password protected hard drive. Electronic interview questions will take about 30 minutes to complete. The face-to-face interview will take no more than one hour.

#### 2/ Sample of Guiding Interviews Questions

Guiding questions were inspired by the following Disaster Preparedness Interview Questionnaires Sources, and Recommended Items to Include in a Basic Emergency Supply Kit.

### Scheme of Guiding Interviews Questions for Counties' Public and PWD' Participants

[Have interviewee read and sign the consent form. Turn on the audio recorder and test it.]

#### Ouestion 1:

Do you have an emergency plan in place that you can follow in the event you should need to evacuate your work, home or school?

#### Question 2:

Have you practiced your emergency plan? Describe your participation in the County's disaster drills, if any; So, are you ready to execute related plan and drills when disaster strikes?

#### Question 3:

Have you identified the designated shelters in your area where you might be required to evacuate?

#### Question 4:

Do you have as recommended, supply kit in your home which includes items related to basic emergency things like food, water, a first aid kit, batteries, a flashlight, and other tools you may need in the event of a disaster?

#### Question 5:

Are you informed about the types of potential disasters that could affect your area, and the actions you should take for each of these during a calamity?

#### Question 6:

Do you have the ability to self-evacuation when disaster strike? Do you have any disability that may prevent you from self-evacuating when disaster strikes; in the case do you have any alternatives? Are you registered on the County's registry system?

#### Question 7:

Describe how you think the County could better meet PWD'needs; What barriers prevent the district's emergency management team from meeting PWD' needs?

[Thank the interviewee for their participation.]

#### **Disaster Preparedness Interview Questionnaires Sources**

Source	Data Used	Website
Centers for Disease Control and		
Prevention, Behavioral Risk	General Preparedness	
Factor Surveillance System	Demographic Questions	
Questionnaire, 2010		
Federal Emergency Management		
Agency (FEMA), Ready: Prepare.	Disaster preparedness questions	
Plan. Stay Informed.	• •	
Public Policy Institute of		
California Statewide Survey,	Disaster preparedness questions	
March 2006	• •	

#### Recommended Items to Include in a Basic Emergency Supply Kit

Water, one gallon of water per person per day for at least 3 days, for drinking and sanitation

Food, at least a 3-day supply of non-perishable food

Battery-power or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-inplace

Moist towlettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Can opener for food (if kit contains canned food)

Local maps

Cell phone with chargers

## **Additional Items to Consider Adding**

Prescription medications and glasses

Infant formula and diapers (if necessary)

Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container

Cash or traveler's checks

Sleeping bag or warm blanket for each person

Additional clothing including a long sleeved shirt, pants and sturdy shoes

Household unscented chlorine bleach and medicine dropper

Fire extinguisher

Matches in a waterproof container

Feminine supplies and personal hygiene items

Mess kits, paper cups, plates and plastic utensils, paper towels

Paper and pencil

Books, games, puzzles or other activities for children

Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed., Emergency Supply List

## Flyer for Inviting Research Participants

# PARTICIPANTS NEEDED FOR RESEARCH IN DISASTER PREPAREDNESS PLANNING

I am looking for volunteers to take part in a study about: Integration of individuals with disabilities in disaster preparedness

As a participant in this study: You will be invited to sign a consent form, and answer to a thirty (30) minutes interview over the phone.

In appreciation for your time, you will receive \$10 thank you gift to a coffee house

For more information about this study, or to volunteer for this study, please contact:

A. Coulibaly PhD Student PPA Department

at

Walden University Email: Alimata.coulibaly@waldenu.edu

The study has been reviewed and approved by the Institutional Review Board for Ethical Standards in Research, Walden University.

## Appendix J: Major Themes and Subthemes

### Major themes and subthemes derived from questionnaires transcripts

#### 1/ Major Theme 1

Do emergency managers include PWDs in preparedness plans and activities to better serve their needs and avoid increased risks during disasters in the Riverside and Orange counties of California: Theme and Subthemes

Theme/Subtheme	Number of occurrences Percentage of occurrences	
	( <i>n</i> =7)	(n=7)
Major Theme 1: PWDs inclusion in preparedness with little to no involvement in preparedness activities	4	57%
Subtheme 1: Evolving PWDs participation in drills and preparedness activities	2	29%
Subtheme 2: Lack of PWDs representatives in the field	1	14%

*Note*. Subthemes 2 received one occurrence (14% of the population) and were included in the table for the sole purpose of showing the comprehensive review of the findings of the study.

#### 2/ Major Theme 2

Emergency Managers' Perception of Their Decision Making Approach in Local Preparedness Planning and Practice Integrating PWD (n=7)

Theme/Subtheme	Number of occurrences (n=7)	% of occurrences (n=7)
Major Theme 2: Decision making approach essentially based on expertise and professional knowledge	4	57%
Subtheme 1: Prioritizing consultations with local agents and community, including PWDs	2	29%
Subtheme 2: Not in the position to answer the question	1 14%	

*Note:* Subthemes 2 received one occurrence (14% of the population) and were included in the table for the sole purpose of showing the comprehensive review of the findings of the study

## 3/ Major Theme 3

Suggestions of Emergency Managers for Community Including PWDs to Help Them Become More Aware of Preparedness planning and practice integrating PWD (n=7)

Theme/Subtheme	Number of occurrences (n=7)	% of occurrences (n=7)
Major Theme 3: Focus should be more directed on awareness and proper carried out of instructions concerning the needs of PWDs	5	71%
Subtheme 1: More concern should be showed and practiced for the recent agenda pushing for the inclusion of PWDs	1	14%
Subtheme 2: N/A or Not in the position to answer the question	1	14%

Note: Subthemes 1 and 2 received one occurrence each (14% of the population) and were included in the table for the sole purpose of showing the comprehensive review of the findings of the study

#### 4/ Major Theme 4

Do PDWs, Their Caregivers and Related Advocacy Personnel Believe in Taking Individual Responsibilities of Self-safeguard in Time of Disasters, According to Disaster Preparedness Teams Sensitivities to Their Needs? (n=11)

Theme/Subtheme	Number of occurrences (n=11)	% of occurrences (n=11)
Major Theme 4: Preparedness teams not addressing /not sensitive to PWs needs in taking Individual Responsibilities of Self-safeguard	9	82%
Sub-Theme 1: Preparedness teams lack of understanding on the needs of the PWDs Sub-Theme 2:	1	9%
Not in the position to answer the question	1	9%

*Note*: Subthemes 1 and 2 received one occurrence each (9% of the population) and was included here for the sole purpose of showing the comprehensive review of the findings of the study.

#### 5/ Major Theme 5

Back-up Plans Need to be Included in Preparedness Strategies with Respect to PWD Necessitating Essential Assistance (n=11)

Theme/Subtheme	Number of occurrences (n=11)	% of occurrences (n=11)
Major Theme 5: Focus should not be generalized but more targeted on the needs of the PWDs for backup plan	8	73%
Subtheme 1:	2	18%
More compassion should be showed and practiced to determine the needs of the PWDs for backup plan		
Subtheme 2:	1	9%
Not in the position to answer the question		

Note: Subtheme 1 received one occurrence (9% of the population) and was included in the table for the sole purpose of showing the comprehensive review of the findings of the study

#### 6/ Major Theme 6

Building Trust between preparedness team and community including PWD necessitating essential assistance (n=12)

		% of occurrences
Theme	# of occurrences	

Major Theme 6: Building Trust between the emergency managers and the PWDs community	8	72%
Sub-Theme 1: PWDs Strong connection needed	2	18%
Sub-Theme 2: No idea if confident in government for response to disaster	1	9%

Note: Subtheme 2 received one occurrence (9% of the population) and were included in the table for the sole purpose of showing the comprehensive review of the findings of the study