IMPROVING CROSS-BORDER DISASTER RESPONSE BY
ENHANCING COLLABORATION AND COOPERATION BETWEEN
THE UNITED STATES AND MEXICO THROUGH UNIVERSITIES

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Improving Cross-Border Disaster Response by Enhancing Collaboration and
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DEDICATION

This thesis is dedicated to my parents Antonia and Eliezer Ramirez, and my sister Marilu, who have always supported my educational, professional and personal goals. They have guided me and encouraged me to believe in my dreams. Thank you!
The key to a successful response to a disaster is in your training and your education. That way people know what to do and when to do it.

—Cheri Barry, Mayor of the City of Meridian, Mississippi
ABSTRACT OF THE THESIS

Improving Cross-Border Disaster Response by Enhancing Collaboration and Cooperation between the United States and Mexico through Universities

by

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The spread of information due to the availability of technology throughout most regions of the world has enabled global collaboration on natural disasters. As mass media has made disasters more prominent we have seen that no corner of the earth is immune to such catastrophes. For that reason we must learn to prepare for and to be resilient when a disaster strikes.

An integral part of Homeland Security is preparing for and responding to disasters within our borders. To successfully do this we have created the National Response Framework, which outlines the structure of how to function before, during and after a disaster. However, in order to efficiently serve the people we must take into account that disasters do not respect borders. With that in mind, it is essential to cooperate and collaborate with our neighbor south of the border to improve disaster response. Building relationships with Mexico regarding common concerns and interests, like disaster response, is vital to the emergency response structure. To avoid conflicts during a disaster, it is key to develop a relationship between the neighboring nations; where each country has knowledge of and understands the function of the other country’s response protocols and apparatus.

Though Mexico and the United States have strong connections and mutual interests, politics in the forms of procedures and protocols in respect to disasters obstruct speedy and efficient response to disasters affecting both countries. For that reason, to effectively develop a more comprehensive relationship and reach domestic and trans-border efficiency, we must find a way to engage with each other without obstacles in the form of politics and protocols. The way to do this is by having the federal government and/or state department leverage universities with funding and project parameters to research and establish formal engagement strategies with counterparts in the other country.
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CHAPTER 1

INTRODUCTION

In this globalized world, societies and individuals are more interconnected due to their effortless access to information. In this context, globalization refers to “spreading various objects and experiences to people at all corners of the earth” (Ghasemi 3). The spread of information is mostly due to Internet and/or cellular technology being available in most regions of the world. New modes of communication improve our ability to understand and react to various events around the world. News travels faster and increases decision and reaction speed. This can facilitate globalization as it allows individuals to connect, collaborate, and/or share experiences instantaneously from opposite sides of the planet. Among the topics on which global collaboration has been productive are natural disaster response and multi-national relief efforts. People not only appear to be genuinely interested in the subject of natural disasters, they want to help. This connectedness via new media and this empowerment through technology have motivated and enabled many more individuals and organizations to help when a natural disaster strikes.

As mass media has made disasters more prominent we have come to realize that no region, nation, or community is immune to such catastrophes. We have seen the emotional, physical and costly effects that disasters like earthquakes, hurricanes, tsunamis and man-made disasters have on people. They are inevitable. They are seen all over the world occurring unexpectedly in various forms. Thus, it is highly important to be prepared to withstand disasters. This includes readiness to take action in responding to a disaster and resiliency to bounce back or ultimately “bounce forward” and recover to a more optimal state. Resiliency defines the ability of communities “not to bounce back but ‘bounce forward’ to a new state where weaknesses underlined by the disaster are acknowledged and acted on” (Ride and Bretherton 6). Resilience in regards to disasters refers to “the capacity of a community to cope with the emergency, to rebuild, and to learn from the experience, such that the new physical, social, and political structures are better adapted to the environment” (7). Preparation begins at the individual level and proves to be useful during a disaster. It is
crucial to have plans and procedures in place before a disaster to avoid complications during such event.

In this thesis I will focus on national disaster preparedness and response as well as international response cooperation, specifically with Mexico. I will describe both response structures, compare and contrast, and analyze gaps that need to be addressed between the two countries. In addition, I will recommend various solutions to develop a better relationship with Mexico regarding disaster response that can promote proper engagement strategies. Ultimately, I promote the idea of using universities as a neutral ground for foreign engagements on disaster cooperation.

Therefore, if we take into account or contemplate a hypothetical disaster that affects the United States as well as Mexico, how would or should we approach a disaster occurring in both countries at once? What if the epicenter of a disaster is on the border? Logically thinking, both countries will act for the safety of their people but how will they work together? Each country follows their own set of protocols and guidelines in order to properly respond. However, because each country has different guidelines and objectives in responding to a disaster, it is inevitable that there may be clashes of approach and action. In order to avoid conflicts during a disaster, it is essential to develop a relationship between neighboring nations; where each country has knowledge of and understands the function of the other country’s response protocols and apparatus. In addition, having the knowledge regarding the origin of the disaster response plan of the neighboring country will help understand the reason for certain actions. Communication is vital to appropriately execute plans that are in place to mitigate a disaster.

The focus of this thesis is to introduce a disaster response relationship between the United States and Mexican governments. Although Mexico and the United States have strong bonds and connections, there are still politics in the forms of procedures and protocols in respect to disasters that hinder speedy and efficient response to catastrophes that can affect both countries. So, in order to form a more comprehensive relationship to reach domestic and trans-border efficiency, we must find a way to engage with each other without the impediments of politics and protocols. How do we do this? The federal government and/or state department, along with other departments, should leverage universities with funding and project parameters to research and establish formal engagement strategies with
counterparts in other countries; like Mexico. Before I begin to explain solutions for a better engagement relationship between Mexico and the United States, I believe it is important to describe the different disaster response apparatus for each country and to point out similarities and differences. First, I will begin with some history of Mexico’s disaster response and continue on to the United States.
CHAPTER 2

THE DEVELOPMENT OF MEXICO’S EMERGENCY RESPONSE APPARATUS

Lamentables experiencias ocurridas a lo largo de nuestra historia nos han dejado grandes lecciones respecto a los peligros a los que estamos expuestos.

—Secretaria de Gobernanacion (SEGOB), Mensaje

Unfortunate experiences that have occurred throughout our history have left us great lessons about the dangers to which we are exposed.

—Secretaria de Gobernanacion (SEBOB), Mensaje

Mexico’s current strategy for disaster response came about after the poor response to the September 19, 1985, earthquake. At 7:19 a.m., an earthquake of 8.1 on the Richter scale shook Mexico for about three minutes (Ride and Bretherton 1). This earthquake proved the inefficient and ineffective capability for proper reaction to disasters. It showed the fragile state of their emergency response strategy as well as their inability to aid and give their citizens hope for a better tomorrow. In addition, it highlighted the incompetence of elected leaders to develop a resilient plan for response. It only displayed a poor or nonexistent disaster response framework.

As a result of this earthquake 9,500 people were killed, around 30,000 were injured, more than 100,000 people were left homeless and a great amount of damage was caused in Mexico City and throughout states in central Mexico (USGS par. 1) According to the United States Geological Survey (USGS) the death toll from this earthquake was 35,000 people (USGS par. 1). It is estimated that the earthquake affected an area of roughly 825,000 square kilometers, caused between three and four billion U.S. dollars of damage, and was felt by twenty million people (USGS par. 1). Another statistic confirms that four hundred and twelve buildings collapsed and another 3,124 were greatly damaged in Mexico City (USGS par. 1). In Ciudad Guzman, Jalisco about sixty percent of the buildings were destroyed (USGS par. 1). In addition to Jalisco, other states like Colima, Guerrero, Mexico, Michoacán, Morelos, and parts of Veracruz, were also damaged (USGS par. 1).
Maria Lorena Alpizar Marin, from Comision Economicapara America Latina y el Caribe (Economic Commission for Latin America and the Caribbean), wrote a report describing the response to the 1985 earthquake in Mexico. She concluded that the earthquake brought to light the lack of an organized system to respond to the effects of the disaster. Marin states:

Los eventos sísmicos ocurridos en 1985 evidenciaron la imposibilidad del Estado para dar una respuesta efectiva y coordinada de auxilio a la población afectada, razón por la cual tuvo que solicitar cooperación a organismos sociales y privados, nacionales e internacionales. En el proceso se mostraron problemas de capacidad suficiente para coordinar este tipo de ayuda. (11)

In translation, Marin asserts that the devastating quake in 1985 revealed the impossibility of the Mexican government to effectively react and coordinate assistance to the affected population, reason why the government had to seek and request cooperation from social, private as well as from national and international organizations. During the process, problems surfaced due to the insufficient capacity to coordinate this assistance.

As a result of this failed response to the disaster, the Mexican government realized that it needed to create a system that would have the proper tools to respond to a disaster. Consequently, the Sistema Nacional de Proteccion Civil (SINAPROC), or National System for Civil Protection, was created and established May 6, 1986 (Marin 12). SINAPROC was developed with a clear set of goals and functions that would appropriately respond to disasters.

El nacimiento del SINAPROC se ubica oficialmente el 6 de Mayo de 1986, fecha en la cual se public las “Bases para el Establecimiento del Sistema Nacional de Protección Civil,” denominándolo como “un conjunto organic y articulado de estructuras y relaciones funcionales, métodos y procedimientos que establecen las dependencias y entidades del sector público entre sí y con las organizaciones de los estados y municipios, a fin de efectuar acciones de común acuerdo destinadas a la protección de los ciudadanos contra los peligros que se presentan en la eventualidad de un desastre.” (qtd. in Marin 12)

The above quotation states that the creation of SINAPROC took place May 6, 1986, on the same date in which the “Bases para el Establecimiento del Sistema Nacional de Protección Civil” (Bases for the Establishment of the National System of Civil Protection) was published. This new entity and document came together to form a joint effort filled with structures and functional relations, methods and procedures that established the relationships between entities in the public sector and with the various organizations within the states and
municipalities. The purpose was to execute a common action plan and an agreement intended to protect the citizens against the dangers in a disaster.

According to Civil Protection, the creation of SINAPROC involved economic and technical assistance from Japan.

Para su creación se contó con el apoyo económico y técnico del Gobierno de Japón, quien contribuyó en la construcción y el equipamiento de las instalaciones; de igual forma proporciono capacitación a los especialistas nacionales, a fin de mejorar los conocimientos y la organización en lo relativo a los desastres sísmicos. (Proteccion Civil Municipal, par. 2)

Japan assisted Mexico in creating SINAPROC by providing economic and technical support for equipping various installations. In addition, it facilitated training for national specialists to enhance the knowledge already acquired and organization relative to earthquake disasters.

Along with Japan, the National Autonomous University of Mexico contributed to the development of this new institution.

Simultáneamente, la Universidad Nacional Autónoma de México aportó el terreno en que se construiría dicha institución, proporcionó al personal académico y técnico especializado, e impulsó decididamente los estudios relacionados con la reducción de desastres en el país. (Proteccion Civil Municipal, par. 3)

The university offered the land used to build the institution, provided the specialized academic and technical staff, and vigorously pushed for studies related to disaster reduction in the country.

The creation of SINAPROC gave Mexico a sense of security. It allowed for better preparation to respond to a disaster as well as improved cooperation between entities. Figure 1 demonstrates the structure for SINAPROC.
CHAPTER 3

SINAPROC IN PRACTICE

SINAPROC was created for the purpose of serving the people in a time a need. It was designed to better assist the population by providing an organized structure. Their mission is to: “Integrar, coordinar y supervisar el Sistema Nacional de Protección Civil para ofrecer prevención, auxilio y recuperación ante los desastres a toda la población, sus bienes y el entorno, a través de programas y acciones” (SEGOB, Organizacion par. 5). In translation, SINAPROC endeavors to integrate, coordinate and monitor the National System for Civil Protection to provide prevention, relief and disaster recovery to all people, property and the environment, through programs and actions. It follows Manual de Organizacion y Operacion del SINAPROC or Manual of Organization and Operation for Civil Protection. The document describes the guidelines for disaster response duties and activities.

Una adecuada organización en materia de protección civil permite disminuir los riesgos a que está expuesta la población. Por ello, en el presente Manual se describen . . . cuáles son las actividades que deben realizarse en la prevención, en el auxilio y en la recuperación de un desastre. (SEGOB, Organizacion, par. 6)

The above quote states that Mexico believes that preparation is the key to effective disaster response; therefore, their manual defends that proper organization in civil protection reduces the risks to which the population is exposed. This manual provides a structure for appropriate actions. Abiding by the manual alleviates pressure to adequately respond by outlining effective strategies for execution.

For emergency response, SINAPROC’s goal is to function as a single well-organized unit to aid the population as efficiently and effectively as possible. Emergency aid for the people is priority for civil protection, so coordinating bodies must act jointly and orderly (SEGOB, Organizacion).

Similar to the United States, Mexico believes that the first responder should in fact aid the affected population immediately as well as notify the proper specialized entities. They believe that “la primera autoridad que tome conocimiento de ésta, deberá proceder a la inmediata prestación de ayuda e informar tan pronto como sea posible a las instancias
especializadas de protección civil” (SEGOB, *Organización*, par. 5). Subsequently, the next responding entity should be the municipality or city and therefore work its way up to federal aid when and if local responders are overwhelmed.

La primera instancia de actuación especializada, corresponde a la autoridad municipal o delegación al que conozca de la situación de emergencia. En caso de que ésta supere su capacidad de respuesta, acudirá a la instancia estatal correspondiente. Si ésta resulta insuficiente, se procederá a informar a las instancias federales correspondientes, quienes actuarán de acuerdo con los programas establecidos al efecto. (SEGOB, *Organización*, par. 6)

In Figure 2 I have identified the process of emergency response starting with local response and moving up to State and Federal support if needed.
The first authority notes the emergency situation provides immediate assistance to the population and informs specialized civil protection authorities.

Municipal authority or civil protection (primarily specialized action) helps the population according to their plan.

If municipal authority or civil protection is surpassed its responsiveness to the instance support calls State or Government of the Federal District, as appropriate.

State or Federal District supports the municipality in aid to the population according to their plans.

If the state or the Government of the Federal District is overwhelmed it asks the federal government for support.

Federal entity support to states, municipalities and delegations in the assistance to the population, according to the programs and plans established for the purpose.

The President, directly or through the Secretary of the Interior may issue a call for international assistance through the Department of International Relations or media.

Applies to Health Protection, through the Ministry of Foreign Affairs, the criteria for determining compliance with international agreements on civil protection and cooperation protocols.

CHAPTER 4

PLAN DN-III-E: MILITARY STRATEGY IN MEXICO

Before the 1985 earthquake, Mexico relied solely on the Secretaria de Defensa Nacional (SEDENA), Department of National Defense, Plan DN-III-E under the Ley General de Ejercito y Fuerza Aerea Mexicanos, for disaster response; as of now this plan is still effective (Fassnacht). The Mexican military is better prepared and equipped to respond to a disaster. The plan outlines guidelines of how to assist the population in case of a disaster. The Mexican military is highly concentrated in assisting in internal issues and providing homeland security rather than using the armed forces for defense purposes. In contrast to the United States vision of military responsibilities, the Mexican military is mostly used for domestic affairs. On the other hand, the United States has strict rules on internal military practices.

La SDN (Secretaria de la Defensa Nacional) estableció el Plan de Auxilio a la Población Civil en Casos de Desastre, denominado PLAN DN-III-E, instrumento operativo militar que establece los lineamientos generales a los organismos del Ejército y Fuerza Aérea Mexicanos, para realizar actividades de auxilio a la población civil afectada por cualquier tipo de desastre. (SEDENA, ¿Que Es el Plan? par. 1)

As the quote states above, the Department of Defense in Mexico established the plan to aid civilians in cases of disasters, known as Plan DN-III-E, as a military operational tool that provides general guidelines to agencies of the Army and Air Force for relief to the civilian population affected by any type of disaster.

Este Plan fue elaborado y aplicado a partir de 1966 como consecuencia del desbordamiento del Río Panuco, su denominación data del mismo año, a raíz de su inclusión en la Planeación de Defensa Nacional como anexo “E” y aunque en posteriors revisiones del plan de defensa, se ha presentado la disyuntiva de darle otro nombre, el Alto Mando (Secretario de la Defensa Nacional), decidió continuar designándolo como “PLAN DN-III-E,” debido a la identificación que bajo esta denominación tienen autoridades civiles, medios de comunicación y población en general. (SEDENA, ¿Que Es el Plan? par. 2)
In translation, this plan was developed and implemented as a result from the 1966 overflow of Rio Panuco. The name Plan DN-III-E dates from the same year, following its inclusion in the National Defense Plan as Exhibit “E.” Although in later revisions of the defense plan many presented the opportunity to change the name, the Secretary of Defense decided to continue designating it as “Plan DN-III-E,” due to the recognition under this name from civil authorities, media and the general public.

Plan DN-III-E is designed for three distinct phases. These phases include prevention, aid, and recovery. The first phase stresses preparation to react in a timely manner and take actions to control risk, prevent or mitigate the destructive impact of disasters on the life and property of the population, public services and the environment (SEDENA, ¿Que Es el Plan? par. 1)

Below is a list of actions implemented for prevention purposes outlined by SEDENA.

- Drills are conducted to verify the condition of work equipment and of the material available to handle an emergency situation.
- Roads considered as primary and alternate routes of evacuation are constantly checked for status.
- Risk maps are updated to identify the possible effects on the population.
- The physical conditions of the facilities designated as hostels, temporary shelters and for resource inventory are inspected.
- Liaison with State and Municipal Councils for Civil Protection System is highly important.
- Response forces remain organized in each subordinate unit.

Phase two encompasses actions for aiding affected individuals. It begins with saving the lives of as many people as possible, safeguarding their property and maintaining public services in the wake of a disaster (SEDENA, ¿Que Es el Plan? par. 1)

According to SEDENA the following are included in phase two.

- Support civil authorities in alerting the population at risk.
- Execute appropriate and specific emergency plans and establish connections with state and city authorities for coordination.
- Support state and city civil protection entities in coordinating aid to affected population and support transportation, preventive evacuations, and supervision of temporary shelters.
- Support physical damage assessment and damage to the population in terms of loss of life and in identifying potential risks.
Help with public security forces to preserve economic activity and property of the population.

Search and Rescue - relies on the organization, coordination and implementation of the work of search and rescue.

Support the recovery of basic strategic services by providing transport equipment.

Helps the organization in charge coordinate health care and provide available human and material resources.

Supports the civil protection system in distribution of goods and commodities, and where appropriate, of humanitarian aid to the affected population.

Recovery is the focal point of phase three concentrating on reconstruction and reducing the risk of future disasters. Even though SEDENA does not have assigned duties at this stage, at the request of the civil authorities, SEDENA helps with road restoration and reestablishment of basic health services, electricity and water. Another component of Plan DN-III-E is Fuerzas de Apoyo para Casos de Desastre, Support Force in Case of Disasters. This element assists in developing immediate reports concerning the current situation in the affected area and analysis of damages (SEDENA, Fuerzas). In addition, it participates in search and rescue activities by air and land, food distribution and collaborates in the work of debris removal and restoration of roads (SEDENA, Fuerzas).

Military assistance in disaster response in Mexico is vital to recovery and restoration of the affected population and physical damage. The military is better equipped to get into the disaster zone. For that reason, military involvement is immediate. However, the military must function under the authority of SINAPROC.
CHAPTER 5

THE NATIONAL RESPONSE FRAMEWORK IN
THE UNITED STATES

Under the Department of Homeland Security (DHS) the Federal Emergency Management Agency (FEMA) is responsible for creating guidelines and plans for disaster response throughout the United States. FEMA’s mission is to undertake tasks that produce plans that identify crucial abilities needed to respond to risks as well as provide the means, assets and assistance to the authorities by combining and coordinating readiness actions (FEMA). Being prepared is the utmost essential element for effective disaster response.

Natural disasters do not respect borders. They occur whenever and everywhere in the most unexpected setting. For that reason, it is highly important to be prepared at an individual level as well as national and international. As a nation we have set guidelines and protocols in place in the shape of the National Response Framework (NRF), with the purpose of responding efficiently and effectively to a disaster. The NRF is “built upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation” (DHS 1). The guidelines and structure of the NRF enables the appropriate agencies and departments to act according to their capacities and resources. The NRF “describes specific authorities and best practices for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters” (DHS 1).

No country is exempt from suffering a natural disaster. A major adverse event that results from the natural processes of the Earth such as floods, severe weather, volcanic eruptions, earthquakes, and other geological processes can and will have an effect. An unfavorable event, however, will rise depending on the level of the disaster. If it occurs in areas with vulnerabilities, disasters can have catastrophic consequences and leave lasting damages, which may require years of repair. These events are known to cause severe loss of life or property damage. As a result the nation is usually left with a huge economic toll in which reconstruction is the main focus. The effects of the disaster are far more reaching than
the physical damages, it is an emotional and psychological impact on the people that characterizes the ability and the resilience to rebuild and re-cooperate from such catastrophe.

Such events are something we must prepare for; therefore, guidelines have been developed on how to respond to them. The term “response” refers to the immediate actions taken to save lives, protect property and the environment, and meet basic human needs. It is the execution of emergency plans and actions to support short-term recovery. These actions are described in frameworks that have been developed through years of lessons learned.

In the case of the United States, response actions are outlined in the National Response Framework (NRF). The NRF is a guide showcasing how the nation conducts all-hazards response. It was developed for “linking all levels of government, nongovernmental organizations and the private sector. It is intended to capture specific authorities and best practices for managing incidents” (DHS 1).

The purpose of this framework is to unite one emergency response structure for all levels of society. It is designed for more effective response. Most importantly it comprises the emergency response structure perfected over time from experiences gained from previous disasters (DHS 1). The NRF is intended to apply to all levels of government, including local, state, federal, and tribal.

One of the most impactful key lessons learned were from both Hurricanes Katrina and Rita. These disasters showed the uncoordinated efforts of the various disaster response entities. These ineffective efforts could have been caused by the lack of decisions made, the people in charge, or simply a combination of other problems that arose during the disasters. Therefore, the key lessons portrayed in the framework focused “particularly on how the Federal Government is organized to support communities and States in catastrophic incidents” (DHS 1).

Initially, the NRF was known as the National Response Plan, which replaced the Federal Response Plan because it was largely focused on federal responsibilities (DHS 2). The development of the NRF came about after the 9/11 attacks as an effort to “understand and implement common incident management and response principles and to develop common planning frameworks” (DHS 2). In order to make this possible, the framework was divided into chapters, including roles and responsibilities and response actions.
**ROLES AND RESPONSIBILITIES**

The most vital key point in roles and responsibilities as well as in the framework as a whole is that all disasters begin at the local level. “The responsibility for responding to incidents, both natural and manmade, begins at the local level—with individuals and public officials in the county, city, or town affected by the incident” (DHS 15). The elected leader, for example the mayor, must assist their communities prepare for, respond to, and recover from disasters. According to the NRF, responsibilities of the elected leader include:

- Forming strong working relationships between local leaders and private-sector organizations, and volunteers.
- Leading and encouraging local leaders to focus on preparedness by participating in planning, training, and exercises.
- Supporting participation in local mitigation efforts within the jurisdiction and with the private sector.
- Understanding and implementing laws and regulations that support emergency management and response.
- Ensuring that local emergency plans take into account the needs of all persons, property and structures.
- Encouraging residents to participate in volunteer organizations and training courses. (DHS 16)

When and if an event overwhelms local emergency response then the state can enhance and ease local efforts. The governor of the state can then begin to move assets. His or her responsibilities are outlined by the NRF as the following:

- Responsible for coordinating State resources and providing the strategic guidance needed to prevent, mitigate, prepare for, respond to, and recover from incidents of all types.
- In accordance with State law, may be able to make, amend, or suspend certain orders or regulations associated with response.
- Communicates to the public and helps people, businesses, and organizations cope with the consequences of any type of incident.
- Commands the State military forces (National Guard personnel not in Federal service and State militias).
- Coordinates assistance from other States through interstate mutual aid and assistance compacts, such as the Emergency Management Assistance Compact.
- Requests Federal assistance including, if appropriate, a Stafford Act Presidential declaration of an emergency or major disaster, when it becomes clear that State capabilities will be insufficient or have been exceeded.
Coordinates with impacted tribal governments within the State and initiates requests for a Stafford Act Presidential declaration of an emergency or major disaster on behalf of an impacted tribe when appropriate. (DHS 21-22)

If the disaster progresses beyond state control, then the state may ask for federal assistance. In that case, the President “leads the Federal Government response effort to ensure that the necessary coordinating structures, leadership, and resources are applied quickly and efficiently to large-scale and catastrophic incidents” (DHS 24). His main advisor is the Secretary of Homeland Security. The job of the Secretary of Homeland Security is to “provide the President with an overall architecture for domestic incident management and to coordinate the Federal response, when required, while relying upon the support of other Federal partners” (DHS 25).

**RESPONSE ACTIONS**

There are three key stages to response actions according to the NRF. Stage one is preparation followed by response and recover. The NRF contends that “responders and emergency managers are both doers and planners, which is to say that to lead response and recovery efforts effectively, they must also prepare effectively” (DHS 27)

**Stage 1: Prepare**

There are six important actions for preparation that revolve in a cycle. These actions include planning, organizing, training, equipping, exercising, and evaluating and improving. The NRF follows the preparedness cycle (Figure 3).

**Stage 2: Response**

After a disaster occurs the immediate priority is to deploy “resources to save lives, protect property and the environment, and preserve the social, economic, and political structure of the jurisdiction” (DHS 32).

According to the NRF, four key actions are vital to disaster response. The four actions are to gain and maintain situational awareness, activate and deploy key resources and capabilities, effectively coordinate response actions, and demobilize (Figure 4).
Stage 3: Recover

After response is complete and lives are no longer in danger, then it is time to shift to recover mode. The new focus shifts to assist “individuals, households, critical infrastructure, and businesses in meeting basic needs and returning to self-sufficiency” (DHS 45). This can be achieved through short- and long-term recovery. Depending on the effects of the disaster, short- or long-term recovery will take place. Short-term recovery is immediate and overlaps with response, while long-term recovery may involve some of the same actions but may continue for a number of months or years, depending on the severity and extent of the damage (DHS 45).

The National Response Framework is a well-organized unifying structure that enables our nation to respond to disasters as adequately as possible. It sets parameters with responsibilities for all levels of government.
CHAPTER 6

SIMILARITIES AND DIFFERENCES

After describing the disaster response plans and approach from both Mexico and the United States, it is crucial to analyze and comprehend the similarities and differences to identify areas of improvement. Recognizing these areas can help start engagements to gap issues that may occur during a catastrophic event. By doing this, we improve our ability to coordinate with each other and provide better assistance in a time of need.

SIMILARITIES

Finding similarities between both disaster response mechanisms opens the door to building relationships by enabling discussion on topics both countries can relate to. Therefore, improve upon those similarities and address differences to develop a common approach strategy for future engagements. John Persano, in his presentation, “Humanitarian Assistance and Disaster Management: United States and Mexico,” for San Diego State University, identified eight key components that both countries share. The following is a list of his key points for both countries:

- Function under a well-defined system of emergency preparedness and response.
- Emphasize the importance of disaster management and response at all levels of Government (Local, State, and Federal).
- Implement emergency preparedness and disaster response strategies from the local/municipal level.
- Designate important roles at all levels of government.
- Developed plans and response strategies for specific disasters.
- Prepare set guidelines and procedures for declaring disasters and specific process for monetary support.
- Establish policies and procedures regarding involvement from Non-Governmental Organizations (NGOs), Volunteer Groups and organizations in disaster preparedness and response.
- Have specific policies regarding Military assistance in disaster response.
These common points will prove to be beneficial in generating conversation for the development of common disaster strategies.

**DIFFERENCES**

The main difference between disaster response plans is the reliability that Mexico has on its military. This is a huge difference due to the fact that the United States has a strict directive regarding involvement from the armed forces. Mexico not only relies on their military for disaster, but they expect the military to react immediately. The President of Mexico, when approaching the General will not give him orders but will ask what has already been done to assist the population. The United States Armed Forces will act upon official request defined in Title 10 of the United States Code (USC).

Title 10 of the USC refers to the National Guard and its operation as Federal Armed Forces. The President of the United States gets his authority to mandate Federal Armed Forces aid for when events get out of hand through the Insurrection Act compiled of four statutes (Brinkerhoff). The following are the four Statutes described by Brinkerhoff:

- **Title 10, Section 331**- Gives the President authority to call federal service sufficient militia to subdue an uprising.

- **Title 10, Section 332**- Gives the President authority “to use the armed forces to enforce the laws or suppress a rebellion whenever, in his opinion, unlawful obstructions, combinations, or assemblages or rebellion against the authority of the United States make it impractical to enforce the laws using the course of judicial proceedings.”

- **Title 10, Section 333**- Gives the President authority “to use the armed forces or militia to respond to insurrection, domestic violence, unlawful combination, or conspiracies that prevent a state government from enforcing the laws.”

- **Title 10, Section 334**- States that the President “shall issue a proclamation calling on insurgents to disperse before using the militia or armed forces to enforce the law.” (par. 21-24)

However, in order for the President to apply his authority, he must first wait until assistance is requested. Decree clearly states that “the President may not act on warning or even at the start of an incident, but must wait until the governor or a state legislature asks for federal assistance” (Brinkerhoff, par. 25). The United States has a very clear set of statutes outlining the involvement and function of federal armed forces within the borders of the
country. In contrast to Mexico, where military plays a huge role within the nation, the U.S. prefers to stay clear of military operations inside the country.

The National Guard can also function under Title 32 of USC in cases where state civil authorities are overwhelmed by the effects of a disaster. Under Title 32 the National Guard is not under federal control, but under the authority of the governor acting as commander-in-chief of his or her respective state (Renaud 4). An Adjunct General assists the Governor. There are fifty-four National Guard organizations and the Adjunct General of the state supervises each organization (Renaud 4). Figure 5 demonstrates the chain of command.

![Figure 5. Chain of command for National Guard deployment.](image)

Most importantly, Title 32 provides an alternative to assistance during a disaster. It functions similar to Plan DN-III-E in that it supports civil authorities in responding catastrophes except it is not deployed immediately. Only under extreme cases will Title 32 take place. The National Guard “provides protection of life and property, and preserves peace, order, and public safety” (Renaud 4). In addition, the National Guard supports civil authorities through “emergency relief support during natural disasters such as floods, earthquakes, and forest fires; search and rescue operations . . . maintenance of vital public services; and counterdrug operations” (Renaud 4).
Understanding military involvement from both countries will facilitate interaction with each other during a disaster. As a result response to emergencies will prove to be speedier and effective.
CHAPTER 7

SOLUTIONS FOR IMPROVING CROSS-BORDER DISASTER RESPONSE

The core of effective and efficient cross-border disaster response is the ability to engage in relationship building. The only way to create a common agenda regarding cross-border disasters is by forming viable discussions to address areas that need improvement. In order to progress cross-border disaster response, I make the following four suggestions. First, we need to build awareness. As neighboring countries it is our duty to recognize the potential for a common disaster. We have seen individual disasters in each country, including earthquakes in Mexico and hurricanes in the United States. The threat is there, all we need to do is acknowledge that disasters can happen on the border. Second, building connections with counterparts in the respective countries will help facilitate disaster response and coordination. Identifying who is in charge of what can minimize the disaster response time and prevent issues during plan deployments. Third, participating in disaster simulation exercises can provide an insight to what can happen during a real cross border disaster. These exercises can bring out issues that can come during a disaster and allow appropriate officials to address these issues. Another benefit is using these exercises as a training ground for individuals with response duties. Fourth, as well as the core of this thesis is to have the federal government and/or state department, along with other departments, provide universities with funding and project parameters to research and establish formal engagement strategies with counterparts in Mexico to develop a more prepared and knowledgeable group of individuals in the emergency response/management arena.

Awareness is key to start working towards better disaster response strategies and relationships. Having knowledge of what disasters can accomplish will uncover limitless endeavors and positive actions in emergency preparedness among emergency professionals as well as the public and private individuals. One of these actions should be investing time partaking in disaster simulations. An example of a simulation is Exercise 24 Mexico hosted at the Immersive Visualization Center at San Diego State University.
Exercise 24 Mexico was an event hosted in February of 2012 as an effort to bring together individuals from the United States and Mexican government, non-governmental organizations and partners from the private and public sector to address disaster response collaboration and coordination. Dr. Eric Frost, director of the Immersive Visualization Center, said that Exercise 24 is “an effort to test and create more efficient disaster response methods” and give “participants the chance to build and enhance essential relationships before a real disaster strikes” (“Natural Disaster Exercise” par. 7). George Bressler, San Diego State University adjunct faculty and coordinator of this exercise, said, “X24 is an open, 'no fault' environment for nations, organizations and the global community to explore collaborative technologies and develop solutions to humanitarian assistance and disaster relief challenges” (“Natural Disaster Exercise” par. 4). Simulation exercises are the perfect opportunity to enhance disaster response collaboration and at the same time test existing mechanisms for emergency response and improve upon these mechanisms. Figure 6 shows the interaction among individuals during Exercise 24 Mexico.

**Figure 6. Participants in Exercise 24 Mexico.**

Building connections is critical to the development of cooperative engagements. During a disaster it is necessary to know whom to contact for specific information. During a cross border disaster with Mexico knowing who the counter part is will facilitate response
and support. Therefore I have created Figure 7 that identifies key governmental departments and important documents related to disaster response that perform similar functions for Mexico and the United States.

**Figure 7. Corresponding departments, agencies and documents.**

Universities are the perfect ground for disaster awareness development, emergency response exercises and training, international cooperation and collaboration because they are outside the political spectrum. Meaning that protocols and official assignments are unnecessary. They are a neutral ground where individuals from various backgrounds can come together to create an effective working ground to build relationships that can improve emergency response as well as international cooperation. Official meetings and conventions sometimes hinder the ability to generate groundbreaking developments due to the political system that dictates the gathering.

Another benefit of using universities is that federal agencies and/or departments will be able to choose the projects that they want to be addressed. They can provide the funding that will allow individuals to come together to work on these projects. Most importantly,
universities are the key ground for our future work force. Using universities will allow interested students to participate and learn as well as train with professionals for the career they are studying for by giving them the knowledge and experience they need in order to be successful in their jobs to benefit themselves as well as the employer. Not only will they have the general knowledge of emergency response and management but also they will understand the workings of the emergency response structure and implementations developed by federal agencies.

In 2011, Mexico created Escuela Nacional de Proteccion Civil, National School for Civil Protection, with the mission to teach Mexican citizens emergency response within the country. “La Secretaría de Gobernación publicó . . . el acuerdo para crear la Escuela que tundra capacidad para expedir certificados educativos y deberá coordinarse con instancias internacional es paramejorar la enseñanza de protección civil en el país” (“México Anuncia”). La Secretaria de Gobernacion in Mexico, similar to the Department of Homeland Security, released the agreement to create a school that will issue educational certificates and must coordinate with international bodies to improve the teaching of civil protection in the country. I believe that the United States can take this idea and build upon to create a similar entity or improve upon current training efforts.
CHAPTER 8

WHY IS THIS IMPORTANT?

It is wise to highlight the importance of the relationships between countries as well as imperative to understand that engaging with other countries is vital to the security of our interests. These relationships can build bridges on different spheres including establishing economic prosperity, developing trading agreements, solving security issues with cooperation such as illegal drug and human trafficking, border relations, illegal immigrant crossing, and of course for natural disaster response. There are so many ties that hold a bond between both countries that it is hard to pinpoint just one. However, regardless of what those ties may be, the relationship, the connection, is important.

When we measure the impact that these two countries have on each other’s well-being, security and prosperity, it is safe to say that there are no two countries more significant to each other than Mexico and the United States. These countries share a border that is more than 2,000 miles long, key values and a transnational community that have roots in both sides. The intensity of their economic exchange is perhaps the most obvious because of their bilateral engagements. Mexico constitutes the United States third largest trading partner and second largest buyer. The southern border is one of the most active and economically profitable borders in the world with approximately one million travelers and billion dollars of goods legally crossing the border each day (United States, Dept. of State, par. 2). A disaster on the border can significantly affect trade and quickly become a bi-national incident.

Just as these economic ties demonstrate interdependence in economics, promoting strong working relationships in a disaster response will address problems that may rise. Ultimately, this leads to creating bi-national relationships in which exercises for emergency response to simulate future disasters can help both countries develop better practices. “Without strong relationships to coordinate, communicate, and practice emergency response and recovery ideas, the ongoing efforts for economic growth will be affected by natural disasters that may occur in Mexico or the United States” (Ramirez 6).
CHAPTER 9

CONCLUSION

In conclusion, using our universities as neutral grounds for cross-border engagements on disaster response and recovery, funded by the government, will help develop bi-national strategies that can alleviate issues that may rise between Mexico and the United States. Universities provide a ground for successful interactions away from political concerns, detailed paperwork, or government approvals for individuals to speak and engage with one another. They also display an abundance of new tools, resources, technological ideas that students, who are interested in working in the areas of emergency management, have been researching, practicing, and identifying as useful or not. Individuals in the private industry, government and non-governmental agencies, and organizations can look at, try out, and decide if it’s a tool their department could benefit from. The best way to have some kind of engagement between Mexico and the United States is to use a neutral ground. Specifically, universities will be more effective in creating an impartial place for interaction. It will also make engagement more efficient. Protocols to start conversation on a federal level will not be needed in this case.

However, in order to involve universities for these types of engagements, funding is needed from outside sources. The government would benefit from funding these types of research and cross-border relationships to better prepare both countries for emergency situations that may occur. It is infinitely better to have established a working relationship, in which both entities know each other, when you are practicing from exercises or simulations than dealing with issues when a disaster actually occurs.

By having such engagements in universities, it can create a young, strong, adaptable workforce that understands the current strategies and at the same time helps innovate better practices by using rising technology, tools, and research. Students will participant in projects that can later help with the development of plans, protocols, strategies, and tabletop exercises in which both countries can participate. New technologies have enhanced the way people do emergency response and recovery and the students will have been emerged in this as they
participate and meet officials while simulations take place” (Ramirez 39). Universities are a great place to bring in new ideas and experiment with them.

The development of exercise simulations at universities can build strong working relationships in which individuals can meet and understand their counter-parts, know that they can call one another for assistance. For example, as mentioned earlier, Exercise 24, which was hosted at San Diego State University, specifically the Immersive Visualization Center (Viz Center). The exercises can test existing plans and improve upon them as the participants see fit. It is also a time where feedback can be positive in order to improve upon the simulations.

This type of educational environment has the potential to promote relationships, a young knowledgeable workforce with skills and ideas, hands-on experience, better foreign relations, ability to develop fast, efficient, and collaborative efforts required for HADR (Humanitarian Assistance and Disaster Relief), understanding of political considerations when conducting multinational operations and the capability for need/shortfalls required for successful joint operations and most importantly see how multi-agencies work together. “A stepping stone of the exercise wasn’t just to bring people together, but to have the people come up with solutions together by learning from one another and understanding each other’s capabilities” (Ramirez 39). The most important part of this is the knowledge gained and relationships established.

The government’s ability to fund such projects, exercises, and simulations at the university level where participants from local, state, federal and international level bring a far more positive popularity to the United States government. It will show how the government values relationships, education, and training to develop better practices in situations like disasters, where emergency response and recovery are important, regardless if the disaster is local, international, or on the border.

As neighboring countries, Mexico and United States need to constantly be engaged with each other. Our physical, cultural and economic connections make us strong. However, because we are extremely interdependent, we have to have discussions about possible disaster effects. What better way to do that than in universities where protocols and politics do not impede the ability to create a more far-reaching relationship where together these two
countries can improve disaster response communication and reach domestic and trans-border productivity
WORKS CITED


