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**MONTEREY, CALIFORNIA**

**THESIS**

**NO EMERGENCY INCIDENT RECOGNIZES BORDERS**

by

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March 2011

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**NO EMERGENCY INCIDENT RECOGNIZES BORDERS**

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Submitted in partial fulfillment of the  
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## **ABSTRACT**

The state of Arizona and the bordering towns of northern Mexico acknowledge the need for capability planning. They recognize the benefits of bi-national response and collaborative sharing of resources in times of disaster. Municipalities in southern Arizona and northern Mexico are taking a preventive approach and have created the Bi-National Arizona Emergency Response Task Force (BAERTF). The goal of the BAERTF is to deliver a timely, supportive response and automatic, mutual-aid capability to any jurisdiction in the state of Arizona or northern Mexico that experiences a disaster, terrorist-based or otherwise, that overwhelms the local response on either side of the border. Consequently, the expertise and application of the task force will be all-hazard (natural disasters, man-made disasters, and terrorist acts), adhering to the U.S. federal vision of comprehensive emergency management achieved through integrated emergency management systems both in the United States and Mexico. The intent is to address a perennial problem faced by small jurisdictions in both countries when dealing with disasters: events of any magnitude may quickly outstrip the ability of the jurisdiction and its local mutual aid to respond effectively while waiting for federal response.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

|        |   |
|--------|---|
| BAERTF | Bi-national Arizona Emergency Response Task Force |
| CBRNE  | Chemical, Biological, Radiological and Nuclear    |
| DHS    | Department of Homeland Security                   |
| EMS    | Emergency Management System                       |
| EPA    | Environmental Protection Agency                   |
| EMT    | Emergency Medical Technician                      |
| FEMA   | Federal Emergency Management Agency               |
| GNEB   | Good Neighbor Environmental Board                 |
| HazMat | Hazardous Materials                               |
| IAFF   | International Association of Fire Fighters        |
| NAFTA  | North American Free Trade Agreement               |
| NIMS   | National Incident Management System               |
| PPE    | Personal Protective Equipment                     |
| RSF    | Registration Survey Form                          |
| WMD    | Weapons of Mass Destruction                       |

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## **I. INTRODUCTION**

### **A. PROBLEM STATEMENT**

The attacks of September 11, 2001, caused all segments of government to examine their response capabilities between the United States and Mexico. The primary challenge is to balance an effective border security system with adequate emergency responses. The Tucson border sector covers 262 miles of unsecured area between the United States and Mexico. Although 262 miles seems minimal in comparison to the nearly 7,000 miles of border between Canada and the United States, the Tucson sector experiences the highest level of illegal activity on our border (United States Census Bureau [Census Bureau] 2000). Arizona and Mexico lack a comprehensive bi-national emergency response plan, instead relying on the assets of major metropolitan areas on either side of the border to respond to any event.

This reliance on current assets has significant shortcomings: most jurisdictions and emergency first-responder units are already short staffed, which puts them at a disadvantage during normal activity that is compounded in a natural disaster or terrorist attack. Second, structural rescue, especially in a hazardous atmosphere, requires special equipment and training that the majority of the departments, especially in Mexico, do not have. Due to the potential scale of either a terrorist attack or a natural disaster, no single department can provide the resources to correctly staff and equip an effective response team. Because the threat to public safety now includes weapons that are potentially available to terrorists, many threat scenarios require effective first-response communications among not only law enforcement, fire, and emergency medical services, but also public works, transportation, critical infrastructure, and military organizations (Miller et al., 2005, p.13).

There is a great need for a bi-national partnership to increase emergency-response capacity through knowledge exchange events designed to enhance cooperation, strengthen bi-national contingency plans at the local, state, regional, and national levels, and reduce the risk of emergencies and disasters throughout the Arizona border region.

As Paul Ganster, GNEB Chair, stated in *Seven Years Later: Is the U.S.-Mexico Border Prepared for Environmental Disaster*, “On the emergency response front, unequal levels of training, funding and technological access are key considerations. In order to properly protect U.S. citizens, we need to make sure that Mexican communities have excellent training and equipment to deal with emergencies like chemical spills.” At its extreme, some Mexican first responders are virtually without resources. Firemen were among the municipal employees who reportedly did not receive paychecks for at least two months this fall in the border town of Palomas, Chihuahua. Apart from funding, Ganster has said that responding to environmental emergencies in a border region presents other challenges, such as obtaining visas for response personnel or moving equipment across political borders (Paterson, 2008).

The region’s vulnerability can be discerned locally on both sides of the United States/Mexico border; an incident on either side rapidly becomes an international incident and the threat of a chemical or biological release into the atmosphere, whether accidental or with criminal intent, knows no administrative boundaries. It becomes a shared responsibility to protect and provide security to both portions of the population in this area. Some emergencies may exceed the response capability of both parties, which would then require intergovernmental cooperation, as well as immediate access to or establishment of procedures for the use of foreign resources in order to facilitate a quick and effective response, especially in cases where the resources of the affected party are inadequate to meet the emergency.

## **B. RESEARCH QUESTION**

What can we learn from the Arizona-Mexico Bi-National Training and Response Program, and how might similar programs improve bilateral preparedness and response?

In order to respond to this primary research question, this thesis will also seek to answer the following subsidiary questions:

1. How do we deliver a timely supportive response to any jurisdiction on either side of the United States–Mexico border that experiences disaster,

whether it is terrorist-based or otherwise overwhelms the local ability to respond before federal response arrives?

2. How can sharing resources among all United States and Mexican municipalities provide automatic and mutual-aid capability?
3. How can an appropriate communication linkage and information sharing system between border municipalities be established in order to provide for better interoperability?

### **C. LITERATURE REVIEW**

The ability to predict and prevent crime and terrorism is enhanced by understanding the connections that reach beyond state and national borders, rather than simply reacting to such incidents. Such understanding also helps to narrow the gaps between potential threats and the ability to address those threats. Underlying themes of sharing information and local agency efforts to collect, evaluate, and save relevant data into multiple computer systems that are unable to share information are determining organizational components in the effectiveness of any government's functioning. They lack compatible programming software exchange capability. The Department of Homeland Security (DHS) understands that barriers to interoperable communications are both technical and operational.

In most government systems, relationships are defined bureaucratically, rather than by interactions among agents and other networking agencies. In order to be able to accomplish strategic homeland security goals, collaborative interactions should involve interagency efforts to solve problems and a system of interoperability based on the establishment of trust. There is a need to remove impediments to information sharing in the community and to establish policies that reflect the need to share (versus the need to know) for all intelligence information and agencies involved.

Effectiveness in critical situations results from the ability to quickly access relevant, targeted information. The ability to receive and understanding this information identifies critical infrastructure or key resources for threat and vulnerability.

No government agency could manage a large-scale catastrophe on its own. Each of the various local, state, and federal agencies tasked with emergency management has only part of the resources or knowledge needed to address a wide-ranging disaster along the borders, a disaster that might affect businesses, transportation nodes, utility infrastructures, water and food supplies, law enforcement, hospitals and medical services, communications networks, and other crucial services (Himberger, 2007).

Experience offers important lessons for anyone responsible for managing the response to an emergency. Many leaders understand that their success depends on their ability to work with a multitude of government, business, and civil-sector organizations with have shared interests (Himberger, 2007, p. 3).

The most effective way to manage this is by creating partnerships and alliances across organizations, without compromising each organization's imperatives and legal responsibilities (Himberger, 2007, p. 4).

Preparation for a catastrophic event is the key to a rapid, effective response. A successful response in the immediate aftermath of a disaster is the linchpin in a sound, long-term recovery. So, for example, although we cannot control the weather, we can manage and mitigate the impact of dangerous weather throughout our state (Kettl, 2003, p. 5). The most effective response is one that starts at the local level and grows with the support of surrounding communities, state agencies, and, if necessary, the federal government. The bottom-up approach yields the best and quickest results — saving lives, protecting property, and getting life back to normal as rapidly as possible. This approach also recognizes that government alone cannot effectively respond to a disaster, nor can government afford to maintain a full-time cavalry of emergency-response workers capable of managing a wide range of potential catastrophic events (Mouton, n.d.).

The emergency-management community benefits from the scale offered by coordinating regional and national efforts. The approach of emergency planners to creating a community that will experience minimal losses following a disaster must take into consideration many factors. Among those considerations lies the need to recognize how some factors impact others. This insight is essential to developing a plan that will

employ a multifaceted approach. Three such factors to be considered include earth, human, and constructed systems. All three of these elements exist in every community and are dependent on one another to maintain a stable society. Each of these factors requires the emergency planner to take a focused approach. Earth systems are unique to each region and will basically dictate safe locations for the planning of residential and commercial projects. The human system is more diverse by nature because it requires education and must cross cultural boundaries. Finally, constructed systems are those factors that drive the construction of buildings in a particular area based on risk potential. Diverse organizations can share information; track resources and supplies in real time; establish mobile command centers; collaborate on preparation, training, relief, and recovery operations; and avoid working at cross-purposes (Gerenscer, 2006).

After the attacks of September 11, 2001, for example, the U.S. government placed an explicit emphasis on interoperability, information sharing, and cross-agency collaboration. Billions of dollars went into planning activities, training, exercises, and communications systems. But four years later, officials at the Federal Emergency Management Agency (FEMA) were unprepared for an event of the scale and complexity of Hurricane Katrina. They had not taken sufficient steps to prevent or minimize the hurricane's damage; they were not prepared to evacuate citizens; they could not marshal the enormous reservoir of public- and private-sector resources required for timely relief; and today, they are not demonstrating the national capacity to help the region recover (Gerenscer, 2006, p. 8). This approach requires that major actors explicitly reexamine the traditional boundaries defining their roles and responsibilities and that government agencies look beyond themselves to the private sector and civil groups for important resources, leadership, and activities. For public officials, this means opening up the planning process, making others full partners in decision making, and curbing the desire to unilaterally prescribe solutions to achieve their goals through collaboration among full partners.

Capabilities-based planning is a form of all-hazards planning. It addresses the growing uncertainty in the threat environment by using a wide range of possible scenarios to bound requirements and thereby reduce the tendency to fixate on any one

threat, hazard, or set of conditions. Target levels of capability will balance the potential threat and magnitude of terrorist attacks, major disasters, and other emergencies with the resources required to prevent, respond to, and recover from them (Bush 2003, p. 1).

The cornerstone of homeland security is coordination—plugging the gaps between programs to minimize problems. In part, it is a problem of ensuring that key personnel, with the best training and equipment available, are involved at the scene of any incident—and preventing any confusion that occurs. In part, it is a problem of strengthening mutual aid among communities and taking a preventive attitude in the future. There should be strong coordination among functions and communities—and strong incentives to ensure that this will happen. This is especially true in the case of public health, which the state case studies demonstrate is a weak link in the homeland security chain (Kettl, 2003, p.13).

Homeland security depends fundamentally on strengthening the ability of local first responders—such as firefighters, police officers, emergency technicians, and public health workers—to cope with rare and abnormal events. Officials in all the states concur that an “all-hazard” approach—strengthening the capacity of local governments to deal with a wide variety of dangers, including terrorism—is the foundation for a successful strategy. Determining just how much preparedness and protection to invest in is, inevitably, a daunting problem. No amount of investment can provide complete certainty. Little investment might seem to be a reasonable risk because the odds of an attack, especially outside the nation’s major population centers, could indeed be low (Kettl, 2003, p. 14).

The September 11 attacks made clear the central role that state and local governments play in homeland security. Any attack is, first and foremost, an attack on a city and a state. The first workers to arrive on the scene are local firefighters, police officers, emergency technicians, and public health experts. The federal government has been developing a homeland defense strategy and has created a new department to execute it. None of that will matter, however, unless state and local governments are a strong and effective part of the plan. On that awful September morning, some of the nation’s best local forces struggled to deal with the challenges of the attacks. In the

aftermath, state and local officials around the country looked at their own capacity to face such events and discovered they had a long way to go. State and local governments have complained that they cannot improve their preparedness without more money (Kettl, 2003, p. 7).

As the federal, state, and local governments frame this new strategy, the Century Foundation reports underscore the need for immediate investment in three areas: However, state and local governments have done relatively little to prevent or deter attacks. For that, they are looking to the federal government. But most state and local governments complain that the federal government has done little more than tell them to increase their readiness without providing a clear message of what to look out for or where to be most ready. In addition, the reports present powerful evidence that:

The system now has substantial gaps in coordination. More money is needed to plug those gaps. But simply putting more money into the system is not likely to close the gaps unless the system fundamentally changes. The state governments must become key players in enhancing local preparedness. Building the system we need requires a new strategy for federal grants for homeland security. (Kettl, 2003, p. 7)

Some of the features required include:

- 1) an enhanced public health capacity, closely integrated into the nation's frontline first-response system, to improve protection against biological and radiological threats;
- 2) a personnel policy matched to the problem, since many state and local governments know what they need to do but lack the staff to do it; and
- 3) communication capacity to ensure that first responders can communicate with one another in the event of an emergency. (Kettl, 2003)

Substantial aid must undoubtedly be targeted to where the needs are greatest, but state and local governments across the country need investment in these long-neglected and critically important areas. Many emergency-management officials across the country are frustrated by the federal government's new grant rules and procedures. They are also

concerned that the difficulty of bringing the vast array of federal agencies into a new Department of Homeland Security is making it difficult for the federal government to bring a unified voice to its partnership with state and local governments (Kettl, 2003, p. 7).

Improving information sharing with trusted collaborative partnerships among local, state, and federal law enforcement, and the military, as well as fire services, the private sector, and tribal governments requires collaboration in integrating human and technological components across disciplines and levels of government and a statewide focus, with particular emphasis upon critical infrastructure, weapons of mass destruction (WMD/CBRNE), and homeland security. The commitment to detect, prevent, disrupt, preempt, and mitigate the effects of terrorism against the United States is a national goal of the United States.

The Final Report of the National Commission on Terrorist Attacks upon the United States (9/11 Commission Report) offered suggestions for the creation of a director of national intelligence and various forms of reorganization aimed at nurturing an environment of information sharing in order to produce enhanced tracking and forewarning of future attacks. The dialogue regarding intelligence cooperation and sharing ultimately led to the concept of fusion centers. Some of the other suggestions included the need to enable the outside intelligence community (such as police, correction officers, and border patrol officers) with valuable counterterrorism information in order to contribute to the national counterterrorism effort and the creation of an information sharing environment in which access to terrorism information is matched to the roles, responsibilities, and missions of all organizations engaged in countering terrorism and is timely, accessible, and relevant to their needs (Townsend & Henke, 2009). It was also recommended that impediments to information sharing in the community be removed and that policies be established that reflect the need to share (versus the need to know) for all data, thereby removing the “ownership” by agency of intelligence information. (Townsend & Henke, 2009).

In the article “Complexity Leadership Theory: An Interactive Perspective in Complex Adaptive Systems,” the authors state, “In such systems, relationships are not

primarily defined hierarchically, as they are in bureaucratic systems, but rather by interactions among heterogeneous agents and across network agents” (Lichtenstein et al., 2006, p. 3). In order to accomplish strategic homeland security goals, these interactions should involve interagency collaborative efforts to solve problems and a system of interoperability based on the establishment of trust.

The government entities of several states agree that they do not have enough resources to meet the homeland security challenge, and they place the blame squarely on the federal government. They not only contend that homeland security presents new problems that demand additional money, but they also worry that any new money would replace existing programs and leave gaps elsewhere in their emergency response systems. Below the surface, however, is the predictable struggle between local governments for money. Wisconsin, for example, has a large number of local governments, and homeland security has created a new arena in which they are competing for cash. No state has successfully asked—or answered—the question about how best to target any new money to ensure that new resources would produce better security (Kettl, 2003, p. 12).

Part of the challenge for homeland defense and homeland security organizations lies in the uncertainty about what to adapt to—a threat being too ambiguous and diverse to easily identify (Kettl, 2003, p. 3). Because terrorist threat actors are both cunning and adaptive, relying on surprise to overcome security measures, military and security planners must embrace a more flexible, comprehensive, and comprehensible approach to contingency planning – a method based on neither threats nor scenarios exclusively, but rather on integrating these two approaches into a planning process based on capabilities.

After 9/11, many homeland security planners tried a different approach to contingency planning by using a “scenario-based” planning process that focused on what events could happen. This approach was based on “what if” drills. The process of this scenario-based approach was best seen at the Salt Lake City Olympics, which demonstrates the advantages of this method of planning: it is simple to execute and modifiable based on the scenarios selected. These “what if” contingency plans have the additional benefit of not requiring a detailed threat assessment, as issues and questions concerning the threat can be mitigated by making assumptions to fit the scenario. Though

conceptually simple, and therefore attractive for initial planning efforts, this approach does have weaknesses because effective “scenario-based” planning requires certainty about possible scenarios and a limited number of scenarios to plan against (Kettl, 2003, p. 4).

This effort has run into resistance from homeland security planners who claim that “one size does *not* fit all.” The scenario-based approach claims flexibility with “ways that allow them to be adapted to local conditions,” but it offers a framework of set tasks and agency roles that cannot be easily modified. City planners and decision makers are quick to point out that each city is in fact unique in its infrastructure, assets, resources, and vulnerability. The challenge for any scenario-based approach is to be able to anticipate with certainty that the scenarios developed will be the scenarios faced. That certainty is a rare and perishable commodity in the diverse planning community that addresses the multifaceted and ambiguous threats to the U.S. homeland. Therefore, neither “threat-based” nor “scenario-based” planning will work effectively for homeland defense or homeland security planning because the asymmetric threat cannot be used as a template. Advocates of capabilities-based planning assert that it is this strong potential for the threat to achieve surprise by asymmetric means that makes both threat-based and scenario-based planning a poor match for the needs of emerging planning challenges like homeland defense and homeland security (Goss, 2005, p. 7)

A new conceptual approach that combines the strengths of threat-based and scenario-based thinking needs to be found to structure and assess threats in homeland security and homeland defense contingency planning. A solution to this challenge can be found in the concepts of “lines of operation” and “capabilities” as dynamics to define and explain potential and likely interactions. As opposed to the spatial or temporal divisions of the battle space by borders, or domains like air and seas, and phasing like build-up, defense, and offense, homeland defense campaigns are shaped by a reactive concept to threat actions and the division of the threat into potential lines of operation. “Lines of operation” is defined by the Department of Defense as “lines that define the directional orientation of the force in time and space in relation to the enemy.” For homeland defense and homeland security operations, these lines of operation can be modified to address

distinct and related methods of both attack and defense, such as “maritime attacks” or “attacks on continuity of government.” These lines of operation for the threat can then be defined and depicted in terms of specific capabilities. The Department of Defense dictionary defines a “capability” as “the ability to execute a specific course of action (a capability may or may not be accompanied by an intention).” Having a capability implies the ability to perform a set of tasks required to accomplish the mission requiring the capability. This definition, intentionally very broad, covers both capabilities involved in strategic organizational issues (like force sizing and procurement) and operational issues (such as tactics and weapon performance). For this article, a capability is defined as the ability to perform a specified task within the conditions and performance standards accepted for that mission set. Therefore, the capability to conduct a “swarm boat attack” includes the ability to plan and execute multiple simultaneous attacks on maritime targets using small boats, with an expectation of causing significant damage to the targets. However, it is important to highlight that this does not imply that the group with this capability has the plan or the intent to use this specific capability in its next attack (Goss, 2005, p. 7).

#### **D. CASE STUDY**

The Arizona-Mexico Bi-National Training and Response Program (the Bi-National program) was established in 2004 in an effort to address the disparity of resources available to small communities and emergency response personnel in a highly tenuous region. This program encompassed the participation of first responders of the shared regional boundaries between the state of Arizona and the United Mexican States. The program developed it’s a curriculum, resulting in a multiagency plan to organize and ensure effective prevention and corrective efforts of on-scene first responders, emergency managers, critical stakeholders, and political leaders along the United States–Mexico border. This plan required the collective efforts of many organizations and global parties working toward the shared goals of international border security and local community safety.

## **1. NAFTA**

The implementation of the North American Free Trade Agreement (NAFTA) increased movement and traffic dramatically on both sides of the United States–Mexico border but did not provide the appropriate protection to many citizens who were adversely affected by this change. Mexico has historically had limited emergency management training, and much of the equipment its local departments use has been donated from Arizona organizations such as the Tucson Fire Department.

The threat of a chemical or biological release into the atmosphere, whether accidental or with criminal intent, knows no artificial international boundaries; thus the concentration in the bi-national program was on insuring that both sides obtained the correct training and equipment in order to fully understand the fundamentals of dealing with the pressures of a hazardous material (HazMat) situation. The development and implementation of such a program was also seen as a true test because of its unprecedented and innovative nature, one that would require extensive planning and preparation and careful, multilayered collaboration.

In July 2004, two southern Arizona senior firefighters were watching a television broadcast of a first-responder Hazmat situation and rescue taking place in Mexico. They began to discuss the manner in which these first responders were handling the situation; the responders had good intentions of rescuing the victim, but because of lack of training, lack of proper equipment, and appropriate measures that were not taken, the responders risked becoming victims themselves. Of course, every rescue starts with good intentions, but with lack of training a first responder can easily become a victim. After a long discussion, these two firefighters, John and Chris, came to the realization that the lack of training experienced by those involved in rescue attempts on the border was an issue worth pursuing. Most border cities are undersized and greatly lack the training and resources necessary for the proper prevention of potential breaches or disasters, as well as the execution of imperative security and effective emergency response time. A majority of these cities and towns often rely on appropriate support and expertise from neighboring departments that are suitably equipped to address vital crisis issues; however, it can often take a long time before help arrives.

After much discussion, these firefighters began a bottoms-up, grassroots effort to generate a cooperative effort among other firefighters and various elected officials representing the jurisdictions involved, including key staff from the local offices of emergency management and homeland security. A detailed plan with a funding source was presented to the Arizona Governor's Office of Homeland Security. All parties agreed that the plan was vital, and it was put into place without hesitation. It was anticipated that the training would be conducted on both sides of the border, in Mexico and the United States.

In addition to the governor's office, stakeholders included all emergency managers on both sides of the border and U.S. Customs and Border Protection. The governor's office worked with various agencies, such as political officials of the target area, for buy-in and to give credibility to the effort. The project initiators worked on the curriculum and provided training instructors, who needed to be certified in the instructional methodologies and also bilingual in English and Spanish. The plan was also presented to the International Association of Fire Fighters (IAFF) for their support: the overwhelming response of that organization also included an agreement to provide funding and lodging for the instructors.

In the preliminary stages of planning the training, there were concerns about carrying training materials across the border, including possible problems during border inspection. However, the joint effort of the program was realized, and the transportation of all training materials proceeded smoothly thanks to the supportive staff at the border.

## **2. Training**

It was agreed that the training to be provided would include hazardous materials, first-responder operations, confined-space rescue, and weapons of mass destruction. This instruction is identical to the type that first responders receive in major metropolitan areas across the United States. The program adopted the IAFF HazMat/WMD training department's mission "to educate emergency responders about strategies to safeguard their health and safety, and reduce occupational deaths and injuries related to hazardous materials and weapons of mass destruction response, so they can better protect the

communities they serve.” Portions of the IAFF curriculum were also adopted for the training. Supplemental components were also added to the program so that it would be entirely comprehensive.

The course training provides the tools needed to protect responder health and safety, while covering basic defensive actions, personal protective equipment, hazard recognition and identification, pre-incident planning, and scene management. This training facilitated group activities and real-life case studies. The specialized training utilized a modular format in which a first-responder agency can analyze its current level of competency and choose course modules that will provide the skills needed by its hazardous materials team. Training includes procedures for mitigation of hazardous materials spills, leaks, and exposures. Topics include chemistry, detection devices, advanced recognition and identification, pre-incident planning, incident management, scene evaluation and termination, terrorism, toxicology, medical surveillance, emergency care, PPE usage and limitations, and decontamination. In addition, the training takes a risk-based personal scene safety and health approach to incidents of terrorism involving chemical and biological agents, nuclear, radioactive, and explosive devices, and their impact on first responders. This course encouraged participation through a variety of team activities, class discussions, and case studies, as well as a practical exercise. The interactive, problem-solving approach to hazardous materials included refresher information throughout each unit, reinforcing basic response protocols.

The curriculum encompassed five days of training, eight hours a day. With hands-on drills and chemical release simulations, each city or town could evaluate and perform a community needs assessment of potential WMD targets (abortion clinics, churches, etc.).

In October of 2004, the initial offering of courses began. A interested response was tremendous response, and it was decided that no one would be turned away. As a result, the class sessions carried out by this program were open and attended by a myriad of various public safety and law enforcement personnel, as well as U.S. Border and Customs agents. The classes had to be extended, and a second session was offered at later dates in the bigger cities so that everyone interested could attend.

The first training session took place just outside of Yuma, Arizona, in the small border community of San Luis. The students were issued day visas to the United States for the training. As soon as that first seminar was complete, word spread extensively and quickly about this unique training opportunity. There were continuous challenges encountered involving lack of equipment, outdated equipment, and a fundamentally deficient understanding regarding certain equipment, but these obstacles were tackled with enthusiasm: eventually the program was able to assist with training not only in the use, but even the maintenance and contribution, of such equipment.

The second training session was conducted in Douglas, Arizona, in November and December of 2004. It was very humbling to see the equipment that the student firefighters and first responders had to work with, not realizing danger they put themselves in on an everyday basis. The instructors assisted in repairing the equipment to make it effective and functional.

When the third training session was made available in Nogales, Arizona, in February through April 2005, it garnered widespread local and national media attention since this particular assembly entailed a drill involving a successful chemical leak in Mexico that included active participation and communication from the U.S. side. After departing Nogales, coordinators from both nations drafted and approved a mutual aid agreement that allowed for the Nogales (Arizona) Fire Department to enter Mexico up to a certain restricted boundary and to provide assistance when needed, especially in the form of special attention and training regarding the *maquilladoras* and military situations. (Periodic continued education was requested until 2007.)

This crucial instructional course began in 2004 and was completely finished by early 2007. Altogether, more than 300 first responders (40–50 per class) from both sides of the border were trained at no additional cost to the state of Arizona or Mexico and its citizens, representing a completely collaborative effort on the part of many organizations, governments, and individuals at all levels. Through 2007 the instructors were continually asked to return periodically for refresher courses, as well as for additional training in deficient areas. Safety personnel realized and understood the dangers they are confronted with, and they can now correctly utilize the necessary tools and procedures to help avert

threats while protecting themselves, their communities, and their borders. The training also provided the reassurance that two sides along international boundaries can come together, recognize universal necessities, and establish a formal working agreement directed toward the achievement of common goals.

The large number of responders who participated in the program demonstrates the great interest and need for emergency response training. The program itself, although not unique, provided an individualized experience in which law enforcement, public health, and public and private agencies came together to train in emergency response and perceived roles. As people were introduced and peers interacted, response roles and responsibilities were described, understood, and respected.

### **3. Evaluation**

To properly prepare for and respond to a hazard, bioterrorism, or other urgent public threats or emergencies, first-responder agencies must work together in well-coordinated efforts to address the preparedness needs of their communities and the nation. The need for preparedness has brought key emergency response partners together into new working partnerships to achieve common training objectives. The evaluation instrument was a pre- and post-test comparison of actual class impacts against the agreed training to gauge the knowledge base of these topics. This device gave the instructors the ability to measure the purpose, strengths, and weaknesses of the training.

The following were the questions asked in the pre- and post-test instrument:

1. What is your gender?
  - A) Male
  - B) Female
  
2. What is your ethnic background?
  - A) African American
  - B) Asian/Pacific Islander
  - C) Caucasian
  - D) Hispanic
  - E) Native American

3. Select highest level completed.
  - A) Grade School
  - B) High School
  - C) Some College
  - D) Associate Degree
  - E) Bachelor's Degree
  - F) Post Bachelor's Degree
  - G) Master's Degree
  - H) Post Master's Degree
  
4. Which of the following describes your present employer?
  - A) Fire Service
  - B) Law Enforcement
  - C) Industrial Fire Brigade
  - D) Private Industry/Consultant
  - E) Private EMS
  - F) Public Safety
  - G) Emergency Management
  - H) Public EMS
  - I) Other
  
5. How many years have you have been involved in the Fire/Rescue service?
  - A) Not applicable
  - B) Less than one year
  - C) 1 - 5 years
  - D) 6 - 10 years
  - E) 11 - 15 years
  - F) 16 - 20 years
  - G) Over 20 years
  
6. Please mark the choice that BEST describes your current position.
  - A) Probationary Firefighter (Recruit, Trainee)
  - B) EMS Provider (Paramedic, EMT or First Responder)
  - C) Driver/Operator
  - D) Company Officer (Lieutenant, Captain or Sergeant)
  - E) Chief Officer (Battalion, Assistant, Deputy, etc.)
  - F) HazMat Team Member
  - G) Fire Service Trainer
  - H) Private Consultant
  - I) Law Enforcement
  - J) Other

7. Years of experience in CURRENT position (as listed in question number 6)
  - A) Less than 1 year
  - B) 1–5 years
  - C) 6–10 years
  - D) 11–15 years
  - E) 16–20 years
  - F) Over 20 years
  
8. If you are a firefighter, mark the answer that BEST describes your primary service.
  - A) Career
  - B) Volunteer
  - C) Not applicable
  
9. What is the total number of personnel in your department/place of employment?
  - A) 50 or fewer personnel
  - B) 51–100 personnel
  - C) 101–250 personnel
  - D) 251–500 personnel
  - E) 501–1000 personnel
  - F) Over 1000 personnel
  
10. How many calls do you typically respond to each month?
  - A) Not applicable
  - B) Fewer than 10 calls
  - C) 11–30 calls
  - D) 31–40 calls
  - E) Over 40 calls
  
11. Have you previously taken training courses in hazardous materials emergency response?
  - A) Yes
  - B) No

12. If so, what training courses have you completed? (Mark all that apply.)
- A) First Responder Awareness
  - B) WMD Awareness
  - C) First Responder Operations
  - D) WMD Operations
  - E) HazMat Incident Management
  - F) HazMat EMS
  - G) HazMat Instructor
  - H) Confined Space Operations
  - I) Confined Space Rescue
  - J) HazMat Technician
  - K) HazMat Specialist
  - L) No previous HazMat Emergency Response courses
13. When was the last time your employer provided you with a medical exam?
- A) Not applicable
  - B) Within the last 6 months
  - C) 6 months–1 year
  - D) 1–2 years
  - E) 2 or more years
  - F) Never
14. Was the exam provided because of hazardous materials exposure?
- A) Yes
  - B) No
  - C) Not applicable/no exam
15. Does your department have standard operating procedures or guidelines for responding to hazardous materials incidents?
- A) Yes
  - B) No
  - C) Not applicable
16. Have you preplanned sites or transportation routes where hazardous materials are likely to be found?
- A) Yes
  - B) No
17. If yes, how many times within the past year?
- A) 0 times
  - B) 1 time
  - C) 2–5 times
  - D) 6–10 times
  - E) More than 10 times
  - F) Not involved in preplanning

18. Have you been involved in a drill at a hazardous materials site?  
A) Yes  
B) No
19. If yes, how many times within the past year?  
A) 0 times  
B) 1–10 times  
C) More than 10 times
20. Have you ever been involved in a practice drill at a Department of Energy nuclear complex?  
A) Yes  
B) No  
C) Don't know
21. Have you ever been involved in a practice drill at an Environmental Protection Agency Superfund site?  
A) Yes  
B) No  
C) Don't know

### **Reactions to Course**

We need your reaction to the material offered in this course. Your responses will improve the quality of the course. Be assured that once the results from the class are tabulated, all personal identifiers will be dropped to ensure confidentiality.

Using the scale “A–E” below, provide your response to each of the following statements.

- Fill in the appropriate circles of the Registration Survey Form.
- A) Strongly agree  
B) Agree  
C) Neutral  
D) Disagree  
E) Strongly disagree
22. The sections of the course were well organized.
23. The Power Points, videotapes, and handouts enhanced the program.
24. There were many opportunities for me to participate.

25. The training will be valuable in helping me to do my job in a safer manner.
26. There was adequate time to cover each topic.
27. The course content was clear to me.
28. The quality of instruction was good.
29. The overall quality of the course was good.

#### **4. Results**

In the pretest given to all individuals who attended the training, less than 10% had a minimal passing score. The majority of the students failed.

In the post-test the majority of the students passed, met, or exceeded a 70% passing score.

Follow-up tests were given a year later. Instructors traveled to each town where training was conducted and provided continuing education; they also conducted an annual post-test to evaluate material to maintain skills had been retained. The majority of the information had been retained, and thereby decreased the amount of continuing education that was needed. Instructors also sent out training materials for further continuing education.

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## **II. THE ARIZONA/MEXICO BI-NATIONAL RAPID RESPONSE PLAN**

### **A. INTRODUCTION**

The process of managing disasters presents a distinct set of challenges for any responder. How those challenges are met requires a distinct set of competencies to be identified and training to be developed to assure the delivery of those services following a disaster. For the emergency manager the process of creating training that is a true reflection of what will be necessary begins in the planning phases. The foundation lies in the identification of hazards and the associated risks of mitigating those hazards during the response phase. This being said, the development of disaster training takes on a customized approach that reflects the resources available, the hazards to be trained for, and the partnerships involved (Alexander, 2002).

Unexpected security challenges have been identified due to the border between the United States and Mexico. The primary challenge is to balance an effective security system with adequate emergency responses. Arizona and Mexico currently lack a comprehensive international emergency response plan, instead relying on the current assets of major metropolitan areas on either side of the border to respond to any event and acknowledging the need for sister-city planning. The value of establishing a homeland security program along the Arizona-Mexico border is that it creates a simultaneous pursuit of differentiation in first-response services by designing a bi-national framework that recognizes border issues in order to better leverage first response and decimation processes between all jurisdictions in the event of a major incident that could potentially overwhelm local resources. The program aims to collaborate and eliminate duplication of services in order to create a more cost effective collaboration between the jurisdictions of Arizona and Mexico in times of local disasters and to take measures to reduce risks and mitigate incidents.

The goal is to design a framework and task force, the Bi-National Arizona Emergency Response Task Force (BAERTF) to 1) establish a statewide resource to assist jurisdictions in both the United States and northern Mexico in responding to major

incidents that either have or could potentially overwhelm local resources; 2) deliver a timely, supportive response to any jurisdiction on either side of the Arizona-Mexico border that experiences a disaster, terrorist based or otherwise, that overwhelms the local response; 3) provide automatic/mutual aid capability and 4) establish an appropriate communications linkage between both countries.

## **B. IDENTIFICATION OF THE PROBLEM**

On September 11, 2001, 2,996 lives were lost in the terrorist attacks on the World Trade Center and the Pentagon. Resources were deployed from across the nation to assist in the response and recovery operations. This event reminded us that we all share responsibility for homeland security. All levels of government across the nation need to prepare together, with private-sector support as appropriate, for major events that exceed the capabilities of any single entity. The American structure of overlapping federal, state, local, and tribal governance provides unique opportunities and challenges. Opportunities arise from the flexibility to explore differences and to share best practices across the nation. The challenge is to develop an interconnected and complementary “national” system that balances the need for flexibility with the need for accountability (United States Department of Homeland Security [Bush, 2003, p. 1]).

Unexpected security challenges have been identified between the United States and Mexico. The primary challenge is to balance an effective security system with adequate emergency responses. The Tucson border sector covers 262 miles of unsecured area between the United States and Mexico. Although 262 miles seems minimal in comparison to the nearly 7,000 miles of border between Canada and the United States, the Tucson sector experiences the highest level of illegal activity on the nation’s borders, (United States Census Bureau 2000). Arizona and Mexico currently lack a comprehensive international emergency response plan, instead relying on the current assets of major metropolitan areas on either side of the border to respond to any event.

This reliance on current assets has significant shortcomings. Most jurisdictions and emergency first-responders units are already short staffed. This puts them at a disadvantage during normal activity, and this disadvantage could be compounded in a

natural disaster or terrorist attack. Second, structural rescue, especially in a hazardous atmosphere, requires special equipment and training that the majority of the departments lack, especially in Mexico. Due to the potential scale of either a terrorist attack or a natural disaster, no single department can provide the resources to correctly staff and equip an effective response team.

The Bi-National Arizona Emergency Response Task Force will include the participation of first responders of the shared regional boundaries between the state of Arizona and Mexico. The purpose and focus of the BAERTF is rooted in the fact that the vast majority of border cities are undersized and lack the training and resources necessary for the proper prevention of potential border breaches, relying instead on neighboring departments and jurisdictions for appropriate support and expertise because those jurisdictions are more suitably equipped to address vital critical issues. The downside is that many of these areas have waited for long periods of time for assistance. Furthermore, the implementation of the North American Free Trade Agreement (NAFTA) increased movement and traffic dramatically on both sides of the border, particularly through our railroad system, but did not provide appropriate protection to the many citizens adversely affected by this change.

Mexico has historically had limited emergency management training, and much of the equipment used by its jurisdictions has been donated from Arizona organizations such as the Tucson Fire Department. Furthermore, the threat of a chemical or biological release into the atmosphere, whether accidental or with criminal intent, knows no artificial international boundaries.

### **C. CAPABILITIES-BASED PLANNING FRAMEWORK**

Capabilities-based planning is a form of all-hazards planning. It addresses the growing uncertainty in the threat environment by using a wide range of possible scenarios to unify requirements and thereby reduce the tendency to fixate on any one threat, hazard, or set of conditions as discussed by the Department of Homeland Security in its Capabilities Based Planning Overview. “Target levels of capability will balance the potential threat and magnitude of terrorist attacks, major disasters, and other emergencies

with the resources required to prevent, respond to, and recover from them” (Bush, 2003). The challenge for homeland defense and homeland security organizations lies in the uncertainty about what to adapt to, with a threat that is too ambiguous and diverse to easily identify. Because terrorist threat actors are both cunning and adaptive, relying on surprise to overcome security measures, military and security planners must embrace a more flexible, comprehensive, and comprehensible approach to contingency planning – a method based on neither threats nor scenarios exclusively, but rather on integrating these two approaches into a planning process based on capabilities (Bush, 2003, p. 3).

#### **D. PURPOSE AND SCOPE**

The goal of the Bi-National Arizona Emergency Response Task Force is to deliver a timely, supportive response and automatic/mutual-aid capability to any jurisdiction in the state of Arizona or northern Mexico that experiences a disaster, terrorist-based or otherwise, that overwhelms the local response on either side of the border. Consequently, the expertise and application of the task force will be all-hazard (natural disasters, man-made disasters and terrorist acts), adhering to the U.S. federal vision of comprehensive emergency management achieved through integrated emergency management systems both in the United States and Mexico. The intent is to address a perennial problem faced by small jurisdictions in both countries when dealing with disasters: events of any magnitude may quickly outstrip the ability of the jurisdiction and its local mutual aid to respond effectively.

##### **1. Strategic Plan**

This strategy involves streamlining a capabilities-based framework to assist with an emergency response system and a multidisciplinary task force that will respond to breaches along our Arizona borders that will notify and help with communication efforts. The BAERTF members would cooperate with all levels of emergency response jurisdictions and personnel. Along with the reducing risks associated with hazardous materials, potential breaches, and disasters, the plan will incorporate necessary training in emergency response. The BAERTF will conduct and participate in emergency response “real life” exercises to ensure comprehensive and cohesive emergency response on both

sides of the border. This initiative will bring agency representatives together to form a collective allegiance. The training curriculum for this program includes Hazardous Materials First-Responder Operations, Confined Space Rescue, and Weapons of Mass Destruction. The instruction is similar to the type that first responders receive in major metropolitan areas across the United States; however supplemental components will be added to our strategic plan to account for international laws and safety regulations.

This plan calls for increased communication, coordination, and cooperation in response to an “all-hazard” incident in the Arizona-Mexico border area. The term “all-hazards” refers to incidents that may involve hazardous materials, acts of terrorism, natural disasters, or other disasters that require the mobilization of a bi-national first-response team.

The overall plan is to provide a tool that facilitates more effective and efficient use of resources in the border area to prevent and respond to emergency situations in order to protect public health, safety, and the environment.

It is not the intent of this plan to supersede any existing local, state, regional, or federal authorities or to plan when a disaster or emergency has been declared in the border area. Rather, the purpose is to complement existing local, state, regional, or federal plans and to better serve the local community by creating an infrastructure for responding to emergencies.

## **2. Bi-National Response Capacity Building**

Proactive preparation is critical to ensuring an efficient incident response. This is especially true for bi-national border incidents that may encounter the additional challenges of resource scarcity, inclement weather, law enforcement and immigration concerns, and language barriers. This plan should be exercised to ensure that it is cohesive and accurate for current response activities.

The jurisdictions involved include members from first-responder stakeholders on both sides of the border; they routinely conduct task force meetings, training, and exercises to help for future preparedness. Local agencies and first responders should

ensure that their own training and exercises are held regularly and include all bi-national participants. Such training and exercises are important to the stakeholders involved. They not only facilitate response capability building also but foster first-responder relationships that will be vital during responses to incidents. Planning, training, exercises, and other activities have been and will continue to be an integral part of building the border capacity for first responders to deal with bi-national incidents.

From west to east, there are six ports of entry along the Arizona-Sonora border:

- San Luis, Arizona–San Luis Rio Colorado, Sonora
- Lukeville, Arizona–Sonora, Sonora
- Sasabe, Arizona–Sasabe, Sonora
- Nogales, Arizona–Nogales, Sonora (East and West Gate)
- Naco, Arizona–Naco, Sonora
- Douglas, Arizona–Aqua Prieta, Sonora.

### **3. Response Area Hazard Analysis**

Analysis of both the hazards posed in the plan area and measures to reduce the risks from these hazards is critical to emergency response and preparedness. This section identifies the hazards vulnerable to human and environmental resources and associated risks. This section also addresses the jurisdictions' commitment to reduce risks from these hazards. An all-hazards approach identifies all potential natural or manmade disasters that may impact the area. Such an approach allows the first responder to use the basic response skills hazard analysis and response protocols for any type of hazard.

Vulnerability assessment is the process used to analyze all hazards and to narrow the focus based on history and likelihood. A full vulnerability assessment was not conducted as a part of the development of this plan. The assessment done by the state will be applied to the plan area.

The following hazards and vulnerabilities were evaluated for the plan area:

- Natural disasters;
- Hazmat incidents;
- Sensitive populations and vulnerable areas;
- Population distribution;
- Drinking water supplies and wastewater treatment;
- Public health;
- Counterterrorism.

#### **4. Joint Response Efforts**

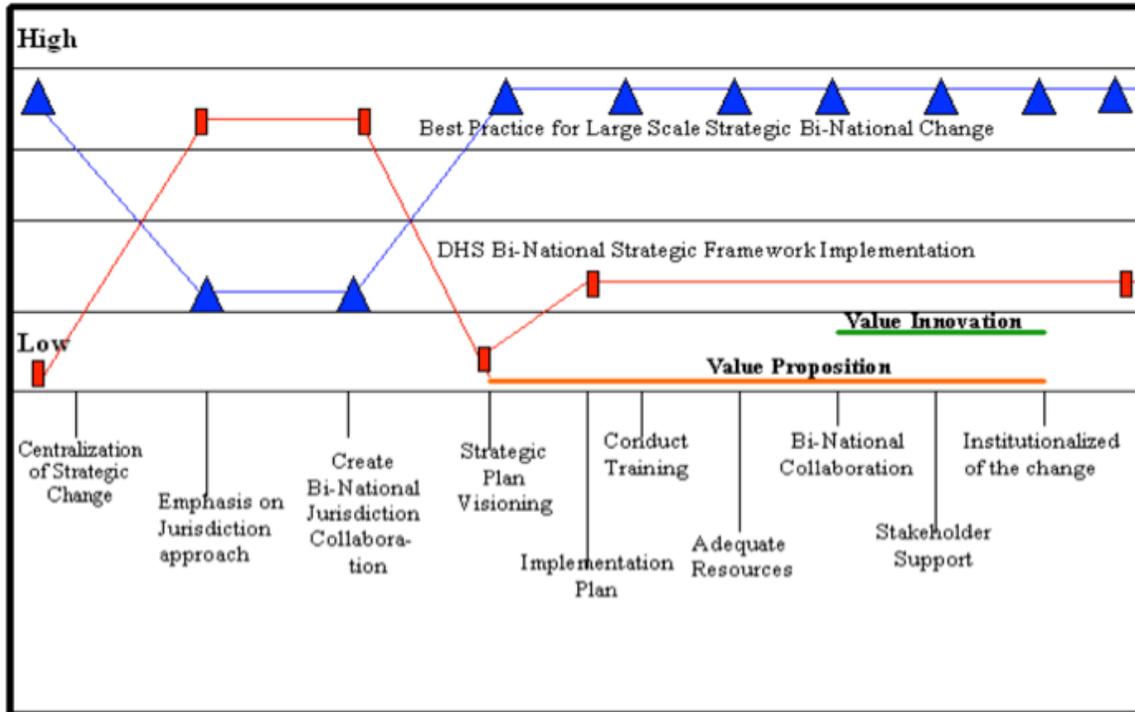
When the magnitude of an incident exceeds local and state response capabilities, or when the response involves more than one state jurisdiction or federal land, the federal government will coordinate the response operation and provide assistance as necessary. When the United States and Mexico need to initiate a joint response to an incident, the function and responsibilities of joint response efforts should include:

- Advising other jurisdictions about measures needed to respond to the incident and the resources that are available to carry out those measures;
- Evaluating and making recommendations concerning the measures taken by yhr first-responding team;
- Coordinating and using as appropriate the resources that agencies or persons from the United States or Mexico or a third party can contribute;
- Assisting in preparing information releases for the public as needed;
- Participating in the termination of the response.

In a nonemergency mode, the BAERTF coordinates U.S.-Mexico border area planning and training activities.

Under the National Incident Management System (NIMS), U.S. federal assistance can be provided to the state and local jurisdictions through various mechanisms and

authorities. If a presidential declaration of a major disaster or emergency takes place, DHS will coordinate with all other U.S federal departments and act as the lead support management for the incident.



**Figure 1. Strategy Canvas: DHS Homeland Bi-National First Response Program**

The application of best practice for large-scale strategic bi-national change will reconstruct the U.S.-Mexico boundaries while redefining jurisdictional collaboration. By adapting the bi-national framework goals, the focus can be placed on the big picture and on reaching beyond the demand while integrating with federal border policies. This preventive measure will overcome organizational hurdles by effectively working with a strategic jurisdictional collaboration to implement and institutionalize first-response efforts at the border.

**ER<sup>2</sup>C Grid: DHS Homeland Bi-National First Response**

|  |  |
|--|--|
| <p style="text-align: center;"><b><u>Eliminate</u></b></p> <p>Inadequate emergency response</p>                                    | <p style="text-align: center;"><b><u>Raise</u></b></p> <p>Training for First Responders<br/>A Vision for Change<br/>Plan for Implementation<br/>Adequate Resources</p> |
| <p style="text-align: center;"><b><u>Reduce</u></b></p> <p>Jurisdiction -Based Focus<br/>Reliance on other local jurisdictions</p> | <p style="text-align: center;"><b><u>Create</u></b></p> <p>Executive Bi-National Plan<br/>Bi National Jurisdiction Support</p>   |

**Figure 2. ER<sup>2</sup>C Grid: DHS Homeland Bi-National First Response**

**E. GOALS AND OBJECTIVES**

**1. Strategic Goal # 1: Collaboration**

This goal is to create a bi-national jurisdictional collaboration with all stakeholders involved to strengthen relationships while developing mitigation plans for the coordination of services with bi-national sister-city communities.

1. Contact collaborating stakeholders and jurisdictions in the bi-national affected area;
2. Prepare an inventory of natural and androgenic dangers existing in the area and identify cross-border threats;
3. Develop bi-national response plans that support emergency response operations;
4. Prepare an inventory of first responders, response equipment, and training received by a newly created bi-national collaboration task force;
5. Share and exchange emergency preparedness information among the U.S.-Mexico jurisdictions.

## **2. Strategic Goal #2: Training**

This goal focuses on the training and continued education necessary for BAERTF to develop and strengthen its expertise in delivering a timely, supportive response and automatic/mutual-aid capability to any jurisdiction in the state of Arizona or northern Mexico. BAERTF will implement the following:

1. Establish training for the border areas. Training should be bi-national and bilingual and should include joint risk and emergency communications between Arizona and Mexico. Establish a bi-national training team; trainers should come from both Mexico and the United States;
2. Conduct a risk-based analysis to determine training needs. Implement a course in preparedness response for all personnel, jurisdictions, and first responders. Must bring training to all sectors;
3. Establish a bi-national, web-based continuing education calendar. Design, develop, and conduct bi-national exercises and simulations to evaluate training and disaster preparedness. There must be bi-national proficiency disaster drills every six months. Drill training will involve situations such as chemical leak drills, natural disasters and terrorist attacks in both the United States and Mexico.

## **3. Strategic Goal #3: Communications**

This goal focuses on strengthening communications and information sharing with BAERTF stakeholders and establishing communications linkage between both countries. BAERTF will implement the following:

1. Create and distribute contact lists and integrate a directory of key stakeholders along the border. The directory should include individual positions and responsibilities, and be updated in a timely manner by the BAERTF, at a minimum of every three months;
2. Translate materials to avoid language barriers. Communications should include Internet, satellite telephones, cellular phones, internal radio communications, and videoconferences. Form a local workgroup or

committee with professionals from both countries to determine the communication channels and joint operations for a communication network;

3. Share access to radio frequencies and ensure radio compatibility. Establish and allow for bi-national communications at the local level, including civil protection, fire departments, medical doctors, epidemiologists, federal and state police, and federal and local representatives of risk communication. Rapid-response plans should be distributed to all emergency response personnel and health officials.

#### **4. Strategic Goal #4: Chain of Command**

This goal focuses on strengthening collaborative efforts and creating a chain of command system by incorporating NIMS in responding to major incidents such as an emergency or natural disaster. BAERTF will implement the following:

1. Develop protocols and a communications plan for public distribution of information, including panic control. Conduct joint media briefings. The public information staff should be bilingual;
2. Risk communications in both countries should be through one spokesperson and include a backup. Subject matter experts should support spokespersons. Establish a bi-national point of contact for each emergency response team on either side of the border. Determine channels of communication, both internally and externally;
3. Incorporate the use of the National Incident Management System (NIMS).

NIMS unifies and institutionalizes a system of preparedness and response across the state and the nation. This system is the nationally accepted framework for preparing for and responding to hazards, regardless of size or complexity. NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. NIMS allows local officials in jurisdictions across the nation to use common terminology and command structures and to share resources when responding to a hazard. NIMS is made up of several components,

including command and management, preparedness, resource management, communications and information management, supporting technologies, and ongoing management and maintenance. NIMS incorporates common systems for incident command, multiagency coordination, and public information (Perry, 2005–2010).

**F. ADVANTAGES AND DISADVANTAGES OF THE PROPOSED STRATEGIC PLAN**

In the aftermath of 9/11, many homeland security planners tried different approaches to contingency planning by using a “scenario-based” planning process that focused on what events could happen. This approach was based on “what if” drills as discussed by Goss (2005, p. 4):

‘These ‘what if’ contingency plans have the additional benefit of not requiring a detailed threat assessment, as issues and questions concerning the threat can be mitigated by making assumptions to fit the scenario. This effort has run into resistance from homeland security planners who claim that “one size does *not* fit all.’ The scenario-based approach makes claims of flexibility with “ways that allow them to be adapted to local conditions,” but offers a framework of set tasks and agency roles that cannot be easily modified. City planners and decision-makers are quick to point out that each city is in fact unique in its infrastructure, assets, resources, and vulnerability. The challenge for any scenario-based approach is to be able to plan with certainty that the scenarios developed will be the scenarios faced. Therefore, neither “threat-based” nor “scenario-based” planning will work effectively for homeland defense or homeland security planning because the asymmetric threat cannot be used as a template. Advocates of capabilities-based planning assert that it is this strong potential for the threat to achieve surprise by asymmetric means that makes threat-based and scenario-based planning a poor match for the needs of emerging planning challenges like homeland defense and homeland security.

With safety personnel armed with newly developed response protocols, and the necessary tools to avert threats, the United States and Mexico will share a renewed confidence in their ability to protect their communities, their families, and their borders. This BAERTF-proposed plan also provides the reassurance that two sides along international boundaries can come together, recognize universal necessities, and establish a formal working agreement toward the achievement of common goals.

The first disadvantage that will be met will be the lack of equipment, outdated equipment, and a fundamental deficiency of understanding regarding certain response capabilities. The second disadvantage will be the need for continuous training exercises to maintain proficiency and maintenance of such equipment. Finally, responding to the aftermath caused by weapons of mass destructions is an unfamiliar process, and continued education for the BAERTF could encounter funding problems, especially since we are dealing with national and federal issues and jurisdictions that are already short staffed and short of financial resources.

## **G. CONCLUSION**

The purpose of the Bi-National Arizona Emergency Response Task Force (BAERTF) and strategic plan is to launch a statewide, bi-national resource team to assist border jurisdictions in both the United States and northern Mexico to respond to major incidents that could potentially overwhelm local resources. The ultimate goal is to deliver a timely, supportive response to any jurisdiction on either side of the Arizona-Mexico border that experiences a disaster, terrorist-based or otherwise, that overwhelms the local response and to provide automatic, mutual-aid capability and establish appropriate communications linkage between both countries.

With the BAERTF armed with effective rapid response protocols, and the necessary tools to avert threats, both the United States and Mexico will continue to share a renewed confidence in their ability to protect their communities, their families, and their borders. This plan if implemented can provide reassurance along both sides of the international boundary. The coming together of both nations will bring attention to universal necessities and establish a formal working agreement directed toward the achievement of common goals.

The growing importance and role of homeland security in the bi-national public sector cannot be overstated in a contemporary context, particularly with the increasingly pervasive danger of potentially life-threatening disasters in our everyday lives.

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